Peer Interaction: Good for the Mind, Good for the Soul

- Research that Binds
- Worries about Workbooks
- The First National Survey of Former Teachers
Learning Together
By Robert E. Slavin
The author describes how to structure learning so that students will root for one another to succeed — and will help each other to do so. The results: significantly higher academic achievement!

The Powerful World of Peer Relationships
By Julius and Zelda Segal
In certain aspects of development, peer relations play a key role. Indeed, chronically poor peer interaction is one of the most potent early indices of trouble ahead.

When Research Does Not Help Teachers
By Miles Myers
What start off as potentially valuable research findings can get turned into rigidly prescribed lesson plans and instructional approaches, leaving no room for the flexibility and professional judgment that are at the heart of good teaching.

The Ubiquitous Workbook: Cause for Concern?
By Jean Osborn
Are workbook activities just meaningless “busywork”? They need not be, says the author, who shows where they’re weak and how to make them better.

Ready or Not
By Louise Bates Ames
Children who start traditional kindergarten before they are developmentally ready may get caught in an unnecessary cycle of failure.

Former Teachers in America
Many colleagues have left for other occupations. A new poll tells why they left, what they’re doing, and how to stop the exodus.

Everybody’s Talking at Me
By Aristides
If you’ve ever nodded off during a lecture — or put a student or two to sleep yourself — worry not, says the author, it may even have happened to Aristotle.
Save Class Time
Radio Shack’s Network 4 Is Introducing Data Processing Practices To Students In Yuma, Arizona

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.”

For information or the name of the full-time Educational Coordinator in your area, call Radio Shack’s Education Division at 800-433-5682, toll free. In Texas, call 800-772-8538.
"A major reason we went with the Network 4 system is that it follows many of the conventions of a mainframe."

"It's a real advantage not to have to handle floppy disks."
The idea of using drama as a method of teaching originated in ancient Greece, where being a member of the chorus of a play constituted the equivalent of a high school education. In that spirit — and with a determination to make some of the greatest stories ever told from a stage come alive for children — Annabelle Howard, a former fifth-grade teacher, has prepared a set of lively and engaging adaptations of classic plays.

The series — which includes Antigone, A Midsummer Night's Dream, Macbeth, The Bourgeois Gentleman, and others — is intended for fifth- through twelfth-grade students. Because the scripts are well grounded in the historical and social context of their times, they are suitable enrichment projects for a wide range of language arts and social science classes.

The plays can be used by teachers with little or no experience in drama. Each "Teacher's Addition" has a lengthy introduction that includes casting and staging ideas and lesson plans that permit a wide variety of presentation, ranging from a simple oral reading to a staged reading and a full production, as well as non-theatrical curricular activities. This flexibility allows a teacher to allocate anywhere from five to thirty class periods to one of the projects.

Howard has simplified the elevated formal style of the plays' original language but has remained true to their dramatic action and timeless questions. "Classic plays survived because at the center of each is a compelling issue that touches every life," says Howard. "And there's no reason to think you have to be an intellectual to enjoy these plays and grapple with the issues they raise. In Shakespeare's day, the 'groundlings' watched and threw tomatoes."

For more information, write Classic Theatre for Children, 146 York Street, New Haven, CT 06511 or call 203-624-7636.

**High School Degrees**

Percentage of seventeen-year-olds graduating from high school in the United States:

- 1870: 2%
- 1900: 6%
- 1920: 17%
- 1930: 29%
- 1940: 51%
- 1950: 59%
- 1960: 65%
- 1970: 76%
- 1980: 72%
- 1984: 70%

(Source: U.S. Department of Education, National Center for Education Statistics)

**Teach Abroad**

Now is the time to apply for the 1987-88 Fulbright Teacher Exchange Program. Trade places for the school year with your counterpart in England, Canada, France, Germany, Belgium, Denmark, Columbia, or Argentina. The program, which is open to teachers at the elementary, secondary, and postsecondary levels, also offers opportunities for shorter summer seminars. Language requirements and travel allowances vary.

Applications will be available this summer and must be returned by October 15. For more information, write: Fulbright Teacher Exchange Program, E/ASX, United States Information Agency, 301 Fourth Street, S.W., Washington, DC 20547.
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And give someone a chance to make a difference.

A mind is a terrible thing to waste.
Learning Together

Cooperative groups and peer tutoring produce significant academic gains

By Robert E. Slavin

“Class,” said Ms. James, “who remembers what part of speech the words it, you, and he are?”

Twenty hands shoot up in Ms. James’s fifth-grade class. Another ten students try to make themselves small in the hope that Ms. James won’t call on them. She calls on Eddie.

“Proverb?”

The class laughs. Ms. James says, “No, that’s not quite right.” The students (other than Eddie, who is trying to sink into the floor in embarrassment) raise their hands again. Some of them are halfway out of their seats, calling “Me! Me!” in their eagerness. Finally Ms. James calls on a student. “Elizabeth, can you help Eddie?”

Think about the scene being played out in Ms. James’s class, a common sequence of events at every level of schooling, in every subject, in all sorts of schools. Whether she is conscious of it or not, Ms. James has set up competition among the students. The students want to earn her approval, and they can only do this at the expense of their classmates. When Eddie fails, most of the class is glad; students who know the answer now have a second chance to show it, while others know that they are not alone in their ignorance. The most ironic part of the vignette occurs when Ms. James asks if Elizabeth can “help” Eddie. Does Eddie perceive Elizabeth’s correct answer as help? Does Elizabeth? Of course not.

What is wrong with the competitive situation Ms. James has established? If properly structured, competition can be a healthy, effective means of motivating individuals to perform. However, competition in the classroom is typically of a less positive nature. Consider what is going on below the surface in Ms. James’s class. Most of the class is hoping that Eddie (and also Elizabeth) will fail. Their failure makes their classmates look good. Because of this, over time, students begin to express norms or values opposed to doing too well academically. Students who try too hard are “teacher’s pets,” “nerds,” “grinds,” and so on. Students are put in a bind; their teachers reward high achievement, but their peer group rewards mediocrity. As students enter adolescence, the peer group becomes all important, and except for a few very talented students, most students...
accept their peers' beliefs that doing more than what is needed to get by is for suckers. Research on secondary schools clearly shows that academic success is not what gets students accepted by their peers.

Typical classroom competition can be detrimental for another reason. Recall the ten students who tried to make themselves invisible when Ms. James asked her question. For low achievers, a competitive situation is both a poor motivator and, for some, almost constant psychological torture. Students enter any class with widely divergent skills and knowledge. Low-achieving psychological torture. Students enter any class with widely divergent skills and knowledge. Low-achieving students may lack the prerequisites to learn new material. For example, students may have difficulty mastering long division because they never learned to subtract well. For this and other reasons, success is difficult for many students, while it comes easily for others. Success is defined on a relative basis in the competitive classroom. Even if low achievers learn a great deal, they are still at the bottom of the class if their classmates learn even more. Day in, day out, low achievers get negative feedback on their academic efforts. After a while, they learn that academic success is not within their grasp, so they choose other avenues in which they may develop a positive self-image. Many of these avenues lead to antisocial, delinquent behavior.

How can teachers avoid the problems associated with classroom competition? How can students really help one another learn and encourage one another to succeed academically? This article discusses two instructional methods that involve students working with students on learning tasks: cooperative learning and peer tutoring. Both are old ideas that have been resurrected, researched, and refined over the past fifteen years to meet the needs of education today.

THINK BACK to Ms. James's class. What if Eddie and Elizabeth and two other students had been asked to work together as a team to learn parts of speech, and the teams were rewarded on the basis of the learning of all team members? Now the only way for Eddie and Elizabeth to succeed is if they make certain that they have learned the material and that their teammates have done so. Eddie and Elizabeth are now motivated to help one another and to encourage one another to learn. Perhaps most importantly, they are rooting for one another to succeed, not to fail.

This is the essence of cooperative learning. In cooperative learning, students work together in four-member teams to master material initially presented by the teacher. For example, in a method called Student Teams-Achievement Divisions (STAD), a teacher might present a lesson on, say, map reading, and then give students time to work with maps and answer questions about them in their teams. The teams are heterogeneous, made up of high, average, and low achievers, boys and girls, and students of any ethnic groups represented in the class. After having a chance to study in their teams, students take individual quizzes on map reading. The students' quiz scores are added up. All teams whose average scores meet a high criterion receive special recognition, such as fancy certificates or having their team picture posted in the classroom.

The idea behind this form of cooperative learning is that if students want to succeed as a team, they will encourage their teammates to excel and will help them to do so. Often, students can do an outstanding job of explaining difficult ideas to one another by translating the teacher's language into "kid" language.

Research on cooperative learning methods has taken place in grades two through twelve, in urban, suburban, and rural schools, and in subjects ranging from mathematics to language arts to social studies to science. The findings are that certain forms of cooperative learning are consistently effective in increasing student achievement, usually measured on standardized tests. However, there are two elements that must be included in a cooperative learning method if it is to be instructionally effective. First, groups must be rewarded for doing well as a group. For example, members of teams that meet certain criteria may receive certificates, a little extra recess time, or recognition in a class newsletter or bulletin board. Second, the group's success must depend on the individual learning of each group member, as when team members' quiz scores are added together to form a total team score.

The reason these factors must be present in cooperative learning methods is that students need to be motivated to take their teammates' achievement seriously. Students typically have many years of experience being told to "do your own work," that helping is cheating. To overcome this past experience, some sort of incentive is needed for students to really demand excellence of one another and provide high-quality explanations and help. Basing group success on individual learning is meant to ensure that students are concerned about the learning of every member of the group. If the group produces a single project or one worksheet, there is little reason for group members to make certain that all of their group-mates understand the skills involved, since the most-able students are likely to be able to do the group's work with minimal help from the less-able ones. In contrast, if
Researchers have also found that after participating in cooperative learning activities, students have improved attitudes toward their classmates, particularly those from different ethnic backgrounds.

Weeks, while control students gained only .61 grade equivalents. A recent twelve-week study in Maryland found that students in a program called Cooperative Integrated Reading and Composition gained at least 40 percent of a grade equivalent more than control students. In a Delaware study of STAD in low-achieving high school classes, after five weeks, the STAD students scored more than 50 percent higher than the control classes on a math test. Similarly, ninth graders in Georgia who used STAD in social studies scored 30 percent higher than control students. In a Delaware study of Team Accelerated Instruction (TAI), which combines cooperative learning and individualized instruction, TAI students in grades four to six gained 1.63 grade equivalents in mathematics computations in eighteen weeks, while control students gained only .61 grade equivalents. A recent twelve-week study in Maryland found that students in a program called Cooperative Integrated Reading and Composition gained at least 40 percent of a grade equivalent more than control students on standardized reading comprehension, reading vocabulary, language expression, and spelling scales, and far exceeded control students in ratings of writing samples.

The positive effects of these cooperative learning programs are not limited to high or low achievers but benefit all students equally. The methods work equally well in elementary, middle/junior, and high schools in urban, rural, and suburban districts and are equally effective in mathematics, language arts, social studies, science, reading, writing, and foreign language.

However, increased achievement is not the only outcome of cooperative learning. Researchers have also found that after participating in cooperative learning activities, students have improved attitudes toward their classmates, particularly those from different ethnic backgrounds. Attitudes toward students who are mainstreamed have also been improved. Student self-esteem is significantly enhanced as a result of cooperative learning. Students learn how to cooperate to get a job done and come to see the value of cooperating with others. Unlike achievement, these outcomes do not depend so much on the particular form of cooperative learning used but have been found for many different cooperative methods.

There are many different cooperative learning methods in use today. In Elliott Aronson's Jigsaw Teaching, students become "experts" on subtopics relating to a larger topic the class as a whole is studying. For example, in a unit on the development of labor unions, one member of each team may become an expert on the early history of unions, another on the internal organization and functions of unions, a third on the economic and political impact of unions, and a fourth on the status of unions today. The "experts" read material on their topics, and then meet in "expert groups" composed of students from different teams. The "experts" return to their teams and take turns teaching about their topics to their teammates. Finally, all team members are quizzed, and in some forms of Jigsaw, team scores are computed and team recognition is given.

In some cooperative learning methods, such as Shlomo and Yael Sharan's Group Investigation and Spencer Kagan's Co-op-Co-op, students take on specific roles within their groups and the groups prepare projects or reports to share with the class. In others, such as David and Roger Johnson's methods, students work to complete worksheets together or engage in structured, "constructive controversy" on controversial topics. A science/mathematics program developed by Edward DeAvila and Elizabeth Cohen called Finding Out/Descubrimiento, used mostly in bilingual classes, has students engage in a series of discovery-oriented activities in small, mixed-ability groups.

The most extensively researched and consistently effective cooperative learning methods for increasing academic achievement are a family of techniques developed at Johns Hopkins University. These are Student Teams-Achievement Divisions (STAD), Teams-Games-Tournament (TGT), Team Accelerated Instruction (TAI), and Cooperative Integrated Reading and Composition (CIRC). In Student Teams-Achievement Divisions, students work in four-member teams to master material presented by the teacher and then take individual quizzes. Teams are rewarded on the basis of each member's improvement over his or her own past record. Teams-Games-Tournament, developed by
David DeVries and Keith Edwards, is the same as STAD except that instead of quizzes it uses academic tournaments in which students compete to add points to their team scores. Team Accelerated Instruction combines cooperative learning with individualized instruction to teach elementary mathematics. Students work on materials at their own level, and teammates check one another's work and help one another with questions, freeing the teacher to provide direct instruction to subgroups of students working on the same skills. TAI has had the largest achievement effects of all the cooperative learning methods. The newest cooperative method is Cooperative Integrated Reading and Composition (CIRC), which uses teams during follow-up times in reading for partner reading, vocabulary, and decoding study, story grammar activities, and reading comprehension study, and uses peer response groups to teach writing and language arts.

Practical guides exist for all the major cooperative learning methods; these are listed at the end of this article.

**GETTING STARTED WITH STAD**

STUDENT TEAMS—Achievement Divisions is among the simplest and most adaptable of the cooperative learning methods. It can be used at any grade level from two to twelve and in any subject area in which there are single right answers, such as mathematics, language arts, foreign language, science, and much of the social studies. STAD can be used all year in a given subject, but it is most often used for six- to eight-week units at various points during the school year.

Assigning students to teams. Teams in STAD have four or five members. Four is preferable; make five-member teams only if the class is not divisible by four. To assign students to teams, rank them from top to bottom on some measure of academic performance (for example, past grades, test scores) and divide the ranked list into quarters, placing any extra students in the middle quarters (for example, a class of twenty-three could be divided as follows: five, six, seven and five). Then put one student from each quarter on each team, making sure that the teams are well balanced in sex and ethnicity. Extra (middle) students may become fifth members of teams.

Determining initial base scores. In STAD, the points students contribute to their teams are based on the degree to which their quiz scores exceed their past performance. This makes it equally difficult for all students to contribute to their team scores. Each student gets a base score that represents his or her past average. If you are starting STAD after you have given at least three quizzes or tests, average these scores to determine students' base scores. Otherwise, use their past grades, as follows:

<table>
<thead>
<tr>
<th>LAST YEAR'S GRADE</th>
<th>INITIAL BASE SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90</td>
</tr>
<tr>
<td>A-/B+</td>
<td>85</td>
</tr>
<tr>
<td>B</td>
<td>80</td>
</tr>
<tr>
<td>B-/C+</td>
<td>75</td>
</tr>
<tr>
<td>C</td>
<td>70</td>
</tr>
<tr>
<td>C-/D+</td>
<td>65</td>
</tr>
<tr>
<td>D or F</td>
<td>60</td>
</tr>
</tbody>
</table>

Preparing materials. Make a worksheet and a short quiz for each unit you plan to teach.

Schedule of activities. STAD consists of a regular cycle of instructional activities, as follows (see Figure 1):

- **Teach**: Present the lesson.
- **Team study**: Students work on worksheets in their teams to master the material.
- **Test**: Students take individual quizzes.
- **Team recognition**: Team scores are computed on the basis of team members' improvement scores, and a class newsletter or bulletin board recognizes high-scoring teams.

Descriptions of these activities follow.

**Figure 1**

**Basic Schedule of Activities for STAD**

From R.E. Slavin (1983), Student Team Learning. Washington, DC: National Education Association

**Teach.** Each lesson in STAD begins with a class presentation. The lesson should take one to two class periods.

**Team study.** During team study (one to two class periods), the team members' tasks are to master the material themselves and to make sure that their teammates have done so. Students have worksheets and answer sheets they can use to practice the skill being taught and to assess themselves and their teammates. Only two copies of the worksheets and answer sheets are given to each team, which forces teammates to work together. After teaching a lesson, introduce team study to your class using the following steps:

- Read off team assignments.
- Have teammates move their desks together or move to team tables and allow students about ten minutes to decide on a team name.
- Hand out worksheets and answer sheets (two of each per team).
- Tell students on each team to work in pairs or threes. If they are working problems (as in math), each student in a pair or three should work the problem and then check with his or her partner(s). If anyone missed a question, that student's teammates have a responsibility to explain it. If students are working on short-answer questions, they may quiz each other, with partners taking turns holding the answer sheet or attempting to answer the questions.
article. However, as an illustration of how one cooperative method might be used in the classroom, the inset below provides a simplified and practical guide to the use of Student Teams-Achievement Divisions.

PeER TUTORING superficially resembles cooperative learning because it involves students working with students. However, it is really quite different. In peer tutoring, one student is a tutor, the other a "tutee"; one teaches, the other learns. This is in contrast to cooperative learning, where all students are learning at the same time and students do not have different roles in the group. Because students often resist being taught by a classmate of the same age, peer tutoring almost always involves tutors at least two years older than their "tutees." In a sense, "peer tutoring" is a misnomer in these cases; as adults, we may think of a fifth grader and second grader as peers, but the students themselves assuredly do not.

In cross-age peer tutoring programs, a time is set

• Emphasize to students that they are not finished studying until they are sure all their teammates will make 100 percent on the quiz.
• Make sure that students understand that the worksheets are for studying—not for filling out and handing in. That is why it is important for students to have the answer sheets to check themselves and their teammates as they study.
• Have students explain answers to one another instead of just checking each other against the answer sheet.
• When students have questions, have them ask a teammate before asking you.
• While students are working in teams, circulate through the class, praising teams that are working well, sitting in with each team to hear how they are doing, and so on.

Test. After students have had adequate time to study as a team (one period is usually sufficient), distribute the quiz. Do not let students work together on the quiz; at this point they must show what they have learned as individuals. Have students move their desks apart if this is possible. Either allow students to exchange papers with members of the other teams or collect the quizzes to score after class. Test scores should be figured as percent correct.

Figuring individual improvement scores. As soon as possible after each quiz, you should figure individual improvement scores and team scores and award certificates or other rewards to high-scoring teams. If at all possible, the announcement of team scores should be made in the first period after the quiz.

Students earn points for their teams based on the degree to which their quiz scores exceed their base scores, as follows:

<table>
<thead>
<tr>
<th>QUIZ SCORE</th>
<th>IMPROVEMENT POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 10 points below base score</td>
<td>0</td>
</tr>
<tr>
<td>10 points below to 1 point below base score</td>
<td>10</td>
</tr>
<tr>
<td>Base score to 10 points above base score</td>
<td>20</td>
</tr>
<tr>
<td>More than 10 points above base score</td>
<td>30</td>
</tr>
<tr>
<td>Perfect paper (regardless of base score)</td>
<td>30</td>
</tr>
</tbody>
</table>

Figuring team scores. Compute team scores by adding up the improvement points earned by the team members and dividing the sum by the number of team members present on the day of the quiz.

Recognizing team accomplishments. There are two levels of awards given based on average team scores, as follows:

<table>
<thead>
<tr>
<th>CRITERION (Average Team Score)</th>
<th>AWARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-22</td>
<td>GREATTEAM</td>
</tr>
<tr>
<td>23 or above</td>
<td>SUPERTEAM</td>
</tr>
</tbody>
</table>

Note that all teams can achieve the awards; teams are not in competition with one another. The criteria are set to make success difficult but not impossible for all teams. If the criteria turn out to be too easy or too difficult for your students, you may adjust them.

Provide some sort of recognition or reward for achieving at the GREATTEAM level and a greater or fancier award for SUPERTEAMs. For example, you might give small certificates to GREATTEAMs and larger ones for SUPERTEAMs; let SUPERTEAMs line up for lunch first, GREATTEAMs second; post photographs of SUPERTEAMs and GREATTEAMs on the bulletin board, and so on. Your own enthusiasm about team scores and a communication that you value cooperation and success as a team are as important as any other factor in the success of STAD.

Grades. Some teachers like to include students' team scores as part of students' grades. In these cases, students' grades are determined by weighting their own quiz scores 80 percent and their team scores 20 percent. The use of team scores in grading adds to the motivational impact of cooperative learning, especially in secondary schools, but if team grades count too much toward student grades, high achievers will view the system as inequitable. However, students do not feel a conflict between working for their own grades and working for the success of the team; the best way to achieve both goals is to learn the material, since high scores benefit the individual as well as the team.

Changing teams and revising base scores. After five or six weeks of STAD, reassign students to new teams. This gives students who were on low-scoring teams a new chance, allows students to work with other classmates, and keeps the program fresh. Also, revise students' base scores at this time, computing new averages using students' quiz scores from the previous five to six weeks.

—R.E.S.
WHAT GOES ON INSIDE THE GROUPS

BY DAVID W. JOHNSON AND ROGER T. JOHNSON

"WHAT WE have to do is write a report on the Boundary Waters Canoe Area."

"Let's get started."

"The book says the Boundary Waters Canoe Area [BWCA] is north of Duluth, Minnesota, and was made into a National Park in 1964. It was part of the National Wilderness Preservation Act."

"Where's Duluth?"

"Duluth must be in the northern part of Minnesota."

"I think that was the right answer because there are forests and lakes in Minnesota, especially in the northern part."

"I found an article on the BWCA in National Geographic. It said that motor boats are allowed on only 17 percent of the lakes and rivers. It's over a million acres — the largest national wilderness area east of the Rocky Mountains. And it extends for over 100 miles along the Canadian border."

"Hey, you did a good job in researching that."

"Let's make an outline."

The encouragement, the sharing of information, and the sense of joint endeavor illustrated by the above dialogue demonstrates what can happen in a cooperative learning group. But such an outcome is not automatic. Over the past ten years, we have gathered hundreds of hours' worth of data concerning what students say to each other while they learn cooperatively. These studies have included both elementary and secondary classrooms and have occurred in science, math, social studies, English, language arts, engineering, and physical education classes. Combined with the work of other researchers, we now know a great deal about the nature of the interaction that takes place within cooperative learning groups. Two major conclusions can be made from our observations.

David W. Johnson is professor of educational psychology, and Roger T. Johnson is professor of curriculum and instruction at the University of Minnesota, where they are also co-directors of the Cooperative Learning Center. They are creators of a course in cooperative learning, which is offered through the New York State United Teachers.

First, cooperative learning groups must be carefully structured by the teacher so that students (1) perceive that they "sink or swim together" (positive interdependence), (2) work to ensure that every group member learns (individual accountability), and (3) discuss the material being learned face to face.

Second, teachers have to train students in the basic interpersonal and small-group skills needed for effective collaboration. Most students have little experience in working in cooperative learning groups and, therefore, must be taught to ask relevant questions, give coherent explanations, challenge each other's thinking, provide effective leadership, resolve conflicts between ideas and conclusions, and seek to understand each other's reasoning and perspectives. Most students do not have training in how to discuss content material in ways that develop their critical thinking, ensure that they discover higher-level reasoning strategies, and integrate new learning into existing cognitive structures. And most students are not skilled in providing the basic social support needed to maximize achievement motivation and reduce the stress and anxiety experienced in school situations. Cooperative learning requires students to interact with considerable skill. Students need to be taught these skills.*

When such skills are taught, and when the groups are structured appropriately, the cooperative enterprise comes alive. Student conversation is both vigorous and productive and generally falls into five categories. First, students discuss the procedures by which they are to learn, as in the following examples: "We're only supposed to do the odd-numbered problems." "First we write an outline, then we think up topic sentences." "Wait, it is my turn. I'll go next." Students repeat instructions, give suggestions as to how the work should be approached, and clarify what order should be used in doing the work. Teachers will find that they have to repeat instructions less frequently when students work in cooperative learning groups.


Second, students share their knowledge and reasoning. They give their ideas, argue for their conclusions, and provide their factual knowledge for others to benefit from. "Here is how I got 37." "There are three reasons why I think this conclusion is best." "Here is why I choose a." are examples. Students compare, defend, and evaluate arguments in reaching a consensus as to what an answer should be. Students give explanations as to how math problems are worked, how themes can be better written, what the rules of punctuation are, and how a science experiment is conducted. Cooperative learning groups provide a context and a setting in which students can learn to provide coherent explanations of materials, elaborate orally on what they are learning, and build their shared knowledge into conceptual frameworks.

Third, students ask each other questions that encourage oral rehearsal and rethinking of what they are learning. "How did you get 14?" "Tell me how you did that." "Didn't we learn something related to this last week?" "Why do you put a comma here?" are examples. Asking such questions is helpful, because when students explain answers and relate what is being learned to previous learning, they often gain new insights and perspectives.

Fourth, students confirm each other's answers and reasoning when they are correct and disagree when they are not. "That's a good idea." "I disagree." "I get a different answer." are examples. Continuous feedback concerning the accuracy of one's knowledge, the soundness of one's conclusions, and the logic of one's reasoning is provided to each group member. Through such feedback and challenge, students' learning grows continuously.

Finally, students encourage each other to work harder and be more responsible. Common statements overheard are: "You can do it." "Just try!" "We'll help!" "Good job!" "I'll do everyone's homework!"

Surprisingly, within well-structured cooperative learning groups, students rarely make negative comments to each other or discuss topics unrelated to their task. It is no wonder that teachers frequently hear members of cooperative groups say, "This is lots of fun."
aside for the tutors and "tutees" to work together on well-specified activities. In some cases, the tutors are given special training and materials especially adapted to one-on-one tutoring. An example of a tutor's guide for such a structured program appears in Table 1.

<table>
<thead>
<tr>
<th>STEP 1</th>
<th>Tell the student that this exercise will help him or her learn to sound out new words.</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEP 2</td>
<td>Point to the first word and ask the student to <em>sound</em> it out.</td>
</tr>
<tr>
<td></td>
<td>a. If the student reads the word correctly, offer praise; then go on to the next word.</td>
</tr>
<tr>
<td></td>
<td>b. If the student is unable to read the word or reads it incorrectly, have the student make the individual sounds in the word separately and then blend the sounds.</td>
</tr>
<tr>
<td>Example:</td>
<td>Word: &quot;THIN&quot;</td>
</tr>
<tr>
<td>Tutor:</td>
<td>Place your finger over the last two letters in the word and ask, &quot;What sound does the <em>th</em> make?&quot; If the student answers correctly, offer praise and go to the next sound. If the student answers incorrectly or fails to answer, say the sound and have the student repeat it. Follow the same procedure for each sound in the word, and then show the student how to blend the separate sounds.</td>
</tr>
<tr>
<td>STEP 3</td>
<td>Follow Step 2 for each word on the sheet. Note: Acceptable performance is reading each word with no pause or break between the various sounds <em>(for example, &quot;fan,&quot; not &quot;f. . . an&quot;)</em>. Do not go to the next step until the student can read every word in an exercise without hesitation and with no breaks between the various sounds. If a student has a short attention span, do not read every word in the longer exercises in one session.</td>
</tr>
<tr>
<td>STEP 4</td>
<td>At the end of the session, praise the student.</td>
</tr>
<tr>
<td>STEP 5</td>
<td>Fill out your tutor log.</td>
</tr>
</tbody>
</table>

Research on peer tutoring has consistently supported its use. Interestingly, the achievement gains for the tutors are often as great or greater than those for the "tutees." As teachers, we often have the experience that we never understand a subject as thoroughly as after having taught it. The same applies to students who serve in a teaching role. For this reason, some schools have designed peer tutoring programs in which older low achievers tutor young children in basic skills, such as reading and mathematics. The idea is to enable the older students to review these basic skills in a situation in which they are in a high-status, responsible role, so that they will not perceive their own review of the material as "baby work." Such programs have often been found to be beneficial for the older students and are never detrimental to the achievement of the younger students.

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*Adapted from G. V. Harrison (1972), Beginning Reading I: A Professional Guide for the Lay Tutor. Provo, UT: Brigham Young University Press.*

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**Research on cooperative learning and peer tutoring has shown that programs in which students help other students to learn can enhance their achievement. Further, the social benefits and increased self-esteem of students working together are considerable, and many schools use cooperative learning and peer tutoring primarily for these reasons. Both approaches are inexpensive, relatively easy to implement, and fun for teachers as well as students. In a time of increasing expectations and diminishing resources for education, we cannot afford to ignore a powerful, free instructional resource available in any school: The students themselves!**

**PRACTICAL GUIDES**


THE POWERFUL WORLD OF PEER RELATIONSHIPS

BY JULIUS AND ZELDA SEGAL

THE BIBLICAL scene is the Palestinian desert. Abraham and Sarah have been miraculously blessed in their latter years with a son, Isaac. Living in their household is the bondwoman Hagar, and her son, Ishmael, fathered earlier by the same Abraham.

In what may be the earliest recorded recognition by a parent of the power of peers, Sarah orders her husband to “cast out this bondwoman and her son.” Ishmael, she fears, is an unwholesome influence, and despite Abraham’s protestations, Sarah insists that he be removed from the environment of young Isaac.

The episode reflects an attitude characteristic of most adults concerned about the future of the young. Countless parents and teachers have similarly observed either with satisfaction or alarm the influence of friends on the lives of children. In the last quarter century, these convictions have been validated by numerous child development researchers. Their data are convincing. Sarah was right. Peers do, indeed, exert considerable force — positive as well as negative — on the destiny of a child.

The process begins in early childhood. At first, as two-year-olds, children typically engage only in “parallel play” — that is, alongside rather than with other children. While they enjoy the company of others, they do not yet fully recognize that friends have something unique to offer. Gradually, however, usually sometime between the age of three and four, children are likely to find themselves interacting in a purposeful way with a friend or two who are now part of their everyday lives — in the yard, in the nursery, in the park. Now it is only a short psychological step to group play, group friendships, and a selection process by which the young relate especially to those peers who are most meaningful to them. From this point onward, the child’s destiny will be determined in part by the power of peers.

Indeed, in certain aspects of development, peer relationships emerge as a predominant force. As University of Minnesota psychologist Willard W. Hartup, a leading researcher on the subject of children’s friendships, puts it: “In some very critical areas, relations with co-equals is the key.” Here are four of them:

- Finding out how to deal with aggression. Parents can hardly provide a natural environment for the testing and modulation of aggressive behavior. The sometimes rough, give-and-take play experiences necessary for learning how to handle anger and hostility are incompatible with the nature of the child’s bond with the mother. Children cannot easily experiment with “letting it all hang out” toward someone on whom they are still dependent and to whom they are still securely attached. Fathers, because their play with children is often more intense, may be in a position to contribute more to the child’s learning about aggression, but it is doubtful whether they alone can effectively socialize even their male children’s aggressive impulses. How can children effectively learn everything to be known about handling aggression, asks Hartup, in a relationship where somebody is always bigger and more capable than they?

Nature, it seems, has dictated that the child’s relations with other children ultimately contribute more than adult-child relations in learning how to deal appropri-
ately with aggressive instincts. Among their peers, children can feel safe in revealing their frustrations and rebellion in a way that is impossible at home. And in the rough and tumble of play, they can learn to act out these feelings in an acceptable fashion — discovering along the way the consequences of going too far.

- Learning about sex. When we were children, our parents viewed the task of teaching us “the facts of life” as a sacred responsibility. It was inevitably one of the most awkward and poignant moments of family life when father or mother took a deep breath and attempted to discuss the “unmentionable.” Today, of course, some of the responsibility for sex education is being shared by the schools. Our parents could hardly have known that in the matter of their children’s sexual development, adults do not typically play the lead role.

“If parents were given the sole responsibility for the socialization of sexuality,” says Hartup, “homo sapiens would not survive.” No one, of course, would discount the well-intentioned efforts at sex education by adults, but as in the case of aggression, the often intense and emotional adult-child relationship is hardly well suited to serve as a conduit to the bewildering world of sex. Parental modesty, discomfort, lack of information, and explanatory ability are additional impediments.

Even when parents make a deliberate effort to educate their young in sexual matters, most children continue to get their information from one another. Playmates can be free with each other in a manner not easily accomplished in the family setting. They can describe feelings and exchange questions without the inhibitions that usually exist even in the most modern and liberated households. To be sure, peers offer each other a great deal of misinformation, too, but ultimately, their free interactions help educate them and provide an important basis for their sexual attitudes.

- Developing moral standards from within. Very young children typically behave as if they believe that society’s rules are eternal and unchanging and that the power of parents and teachers to dictate standards of behavior is inviolate and total. In order to grow into maturity and independence, however, each child must eventually turn to living by standards of behavior that arise from within rather than from outside.

For an internalized moral sense to develop, the child needs opportunities to see the rules of society not only as dictates from figures of authority but also as products that emerge from group agreement. Such opportunities are richly provided through the social give and take among friends. A peer group inherently contains the dynamic interpersonal checks and balances that significantly nurture the development of a moral sense. Children are constantly arriving at value judgments about each other — accepting, rejecting, and criticizing each other’s behavior, responding to each other’s actions, helping each other arrive at decisions about what types of behavior are wrong and what are right.

Learning to behave with empathy — to put yourself in another person’s position and to share responsibility for another’s well-being — also requires experience with friends as much as directives from the child’s elders. While it is true, of course, that altruism is often learned by modeling the altruistic behavior of adults, it is in their peer relationships that children find important

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Children who grow up enjoying solid family bonds are less likely than many parents fear to align themselves with peers who do not share parental values and standards.
opportunities to practice kindness and concern for others. Indeed, such interactions are often the key to helping transform the egocentric child into a human being with the kind of social consciousness and moral sensitivity that spring from the heart.

• **Finding emotional security.** Many parents, deeply committed to the emotional well-being of their children, are frustrated at times over their inability to provide the emotional support, encouragement, or healing that a child appears to need at moments of stress. Once again, it is important to acknowledge that often it is peers rather than adults who are best able to fulfill this role. It is in the peer group that children find others functioning at their own level of emotional development. Only with them can they interact as equals, comparing their perceptions of life and sharing their stresses and conflicts.

As a result of their interactions with friends, children come to know that, psychologically, they are not alone—that their strange feelings of isolation or fear or guilt are shared by others. It helps when you are five, for example, to discover that you are not the only little person who feels anxious about school or sad about a pet that died. Like the rest of us, children need their own “social support system.”

It is from their peers, moreover, that many children find ego-boosting strength through unqualified acceptance. Good friends typically permit each other to behave inappropriately on occasion without enduring severe criticism or losing face. Of course, children need the applause and approval of their elders, but those who are admired without reservation by their friends as well are likely to develop a special pride and self-confidence in dealing with the outside world.

**DESPITE THEIR** demonstrable value to the child, peer relationships continue to pose a distinct threat for many adults. It is not unusual for teachers as well as parents to view friendship networks with suspicion and concern. They are fearful that friends will exert an unwholesome influence, causing behavior, motivation, and school performance to deteriorate. It is as if all our careful child-rearing and educational strategies will come to naught because of those “bad apples” in the yard, the playground, or the classroom. The result can become a contest: Who will control the destiny of our children? We who gave them life, support, and training, or friends who are likely to tarnish or even destroy their future?

Such conflict is almost always unwarranted. Studies show that friends do not typically work at cross purposes with the positive influences of parents and teachers. Indeed, the relationship between the child’s standards of behavior and those of the significant adults in their lives is surprisingly high. The peer culture just does not disturb the child’s sense of identification with committed parents and teachers as much as is popularly assumed. Rather than erasing the positive values taught in the home, the friends our children make in the world outside can actually extend and expand them.

It cannot be denied, of course, that the young, especially adolescents, can be led astray by a deviant peer group—into drugs, drink, sexual promiscuity, or delinquency. But unwholesome peer influences are likely to be significant mainly for children who grow up in environments lacking sufficient stability, direction, and warmth. Youngsters who feel insecure and without moorings carry out into the world a consuming need for acceptance by others. They have few misgivings about letting their parents or teachers down since they have little to lose in the first place. Acceptance by the peer group—any peer group—is all the acceptance they feel they are going to get, so they are willing to adopt its values, including distinctly antisocial values, at any cost. In effect, what children indiscriminately grasp for in their friends is what they have failed to find at home. Those who grow up enjoying solid family bonds are less likely than many parents fear to align themselves with peers who do not share parental values and standards.

Happily, that continues to be the case for most children today, even as family ties appear to be weakening. In satisfying the needs of their friends, and in seeking to have their own needs met, children come to appreciate a good deal about the reciprocal quality of human interaction. In learning to be generous with their peers, supportive of them, angry with them, and forgiving of them, they learn critical lessons about the nature of human comradeship. It is through their friends that they discover how to accept others as well as themselves—to give love and to find love.

Experience with peers is not a superficial luxury to be enjoyed by some children and not by others but a necessity in childhood socialization. Unlike Sarah in the biblical desert, we cannot today so easily manipulate the peer relationships of our children or pick their friends for them. We may help guide children in the selection of their companions, but having done so, we must leave friendships to ripen in their own way. Given what psychology teaches us about the power of peers, a critical task for adults—both teachers and parents—is to act as enthusiastic matchmakers between children and rewarding friends. We will serve the next generation best if we accept the power of our children’s peers, recognize their presence, and work with rather than against them.

**ANYONE WHO** has interacted for a time with children soon recognizes, of course, that not all of them enjoy satisfying interactions with friends.

“He just doesn’t seem to get along with his friends.”

“She just won’t interact with other children.” Such comments are frequently made about children who have trouble forming satisfying peer relationships. The reasons vary, of course, from one child to another, but certain patterns seem to stand out.

To begin with, some children are, by temperament, simply unable to make friends easily. A group of investigators, after studying more than a hundred children from birth through elementary school, concluded that one distinct group of them can be described from the very beginning as “slow to warm up.” They are typically less upbeat than others, their responses are bland, they tend to withdraw from their first exposure to any new experience, and they take a long time to adjust to change. “A child who stands at the periphery of the group in nursery school may be anxious and insecure,” say the researchers, “but he may also be expressing his (Continued on page 45)
WHEN RESEARCH DOES NOT HELP TEACHERS

BY MILES MYERS

THE SITUATION in schools today resembles the one Paracelsus found in the medical treatments of the sixteenth century. At that time, medicine was practiced by having doctors read books and give written rules to routine workers who were the ones who actually treated the patients. Paracelsus, a Swiss physician and alchemist, challenged this approach, arguing that on-the-spot diagnosis was a critical step in medical treatment, no two patients or situations being exactly alike. Doctors must treat patients, he said, not just read books.

Today we find a similar challenge in education: Can teachers be routine workers who follow the written rules of outside experts? The answer proposed here is no. There are two reasons for this: Today the public is demanding more rigorous standards for all students. Performance expectations are being raised at the same time that the student population, in many places, is becoming more diverse than in recent decades. In California, for instance, some 250,000 new immigrants enter the state annually. Approximately 60 percent of these enter as refugees or illegals who are poorly educated and need an introduction to literacy; and 40 percent enter as permanent resident aliens who need a basic introduction to culture. Teachers who taught the same mandated lessons or who used the same teaching approach for all students may have been adequate for a lower standard of literacy or for schools with homogeneous student populations, but they are not adequate for today’s standards or today’s students.

The second reason that the model of teacher as routine worker does not work is that it violates almost everything we know about how people learn. We know, for example, that learning requires social interaction; the functional use of subjects and knowledge; and a teacher who recognizes what areas a student understands, is only beginning to understand, and what must be postponed for another day. Interaction, function, and developmental understanding — these traits of learning require that the teacher not be restricted to prescribed, preset lessons but have the authority to design his/her own lessons and to make adaptations and even major changes on the spot in the classroom.

A MAJOR obstacle to the discretion and flexibility that is at the heart of good teaching is the coordinated effort of many school administrators and some educational researchers who work together in an ad-hoc relationship to standardize teaching and thereby manage it. For school administrators, standardized teaching provides a rationale for their increased authority; and for educational researchers, standardized teaching provides a rationale for the funding of more research to mandate what teachers do.

It is important to remember that research findings are useful to teachers when teachers make decisions about adaptations in their classrooms. Teachers, because they know their students and the classroom context, can decide what research findings are relevant and how to bring them to life. Research findings are not helpful.
when they are turned into rigid directives requiring lock-step implementation. Yet, this is exactly what has happened with all too many research findings. In this article, I will discuss four examples of how well-known and potentially useful research was misapplied in practice and thus robbed of its value. The four examples are: direct instruction, time on task, Bloom's taxonomy, and sequences of reading skills.

First, Direct Instruction. In response to the claims of James Coleman and Christopher Jencks that teachers did not influence student achievement very much — at least not very much independent of a student's background and social context — the National Institute of Education (NIE) funded large-scale field correlational studies of basic skill instruction in elementary grade classrooms (Stallings and Kaskowitz; Brophy and Evertson). These studies concluded that teaching effectiveness was influenced by the teacher's method of instruction. From the data in these NIE studies, Barak Rosenshine of the University of Illinois constructed a description of what he called the most effective method of instruction — "direct instruction":

"...large groups, decision making by the teacher, limited choice of materials and activities by the students, orderliness, factual questions, limited exploration of ideas, drill, and high percentages of correct answers."

In one of the follow-up studies on direct instruction, Stallings (1980) identified the following variables as positively related to increases in achievement: focusing instruction on whole class or small groups, drill and practice, short quizzes, and limited choices for students. Some of the variables negatively associated with achievement were written assignments in class, many choices for the students, and conferencing with one student at a time. Up to this point, Stallings was doing research that could be helpful to teachers who wished to explore various ways of improving the performance of some students on standardized reading tests.

But at this point, Stallings made a critical mistake. She stopped doing research and started writing lesson plans for teachers. She did this by reorganizing her research variables into an instrument for evaluating the lessons of teachers. This instrument, called "The Stallings Observation Strategy," was promoted through the Stallings Teaching and Learning Institute of La Honda, California. With the blessing and helpful promotion of curriculum directors within the California State Department of Education, Stallings began selling her instrument to school districts and administrators as a way to tell teachers what to do.

One of the instruments (see Figure 1) provided a list of different types of classroom activities, a recommended — and very precise — percentage of time (ranging from 1 percent to 25 percent) for each activity, a column for recording the exact percentage of time a teacher spent on each activity, and a recommendation for the teacher to stay the same or have more or less of the various activities. This profile establishes the "criterion percent" — what teachers are expected to do as standard practice in the district — and then the recommendations for improvement in teacher effectiveness are based on the differences between the district standard and the teacher's "baseline percent." According to this prescription, a good teacher would, for example, spend 9 percent of class time on oral reading, 2 percent on drill and practice, 10 percent on review/discussion, and 25 percent on silent written work.

The Morgan Hill, California, Unified School District purchased this instrument and consulting time from Stallings for the purpose of training teachers to use it to observe and coach one another. Later, some principals...
The task of translating research into lessons is the teacher's area of expertise.

began using parts of it in their lexicon for evaluating teachers. Next, the State Department of Education endorsed the Stallings instruments in its workshops and conferences, providing impetus for other districts to adopt the Stallings approach. What started as research on a problem became, in some school districts, the required system for structuring classroom time, regardless of the particular situation. Lost in all this was the likelihood — indeed the certainty — that some classes would need more oral reading and less silent reading, while others would benefit from more written work and less drill and practice, and so on in endless variation.

WITH SUCH an ossified structure, it is, of course, the students who lose. Not only does the teaching approach required by the Stallings instrument disallow for student differences, it is, in many respects, the exact opposite of the model proposed by Charles Cooper and others for writing classes. Cooper emphasizes the importance of working individually with students on their writing, increasing the writing of pieces of at least 500 words, devoting much of class time to writing so that teachers can be available during the process to give help. All of these traits are negatively associated with effective teaching in Stallings' research.

Why this difference in models of effective teaching? First, direct instruction may not be equally effective in all subjects. The Stallings' model, for instance, used CTBS (Comprehensive Test of Basic Skills) scores as the measure of effectiveness, not scores on writing samples. Second, the research itself has produced what Jere Brophy has called "strikingly different results" for different classes. Evertson, Anderson, and Brophy found little support for the direct instruction model in their study of seventh- and eighth-grade English classes, and they suggested that the reason might be that these classes have instructional objectives more variable than those found in math or basic skill classes. In addition, Peterson has reported limitations on the direct instruction model in teaching problem solving. She reports that students who receive direct instruction tend to do worse on problem solving tests than do students who receive what she calls more "open teaching."

The problem here is not with Stallings' research. She reported quite clearly what her tests of effectiveness were and which students were tested. Because her methodology was clear, other researchers were able to qualify her findings, suggesting that other types of students and subjects require other teaching approaches. Good research is often qualified by subsequent studies. The problem is Stallings' effort to turn her research findings and instruments into a mandated format for all teachers and thus all students.

She was wrong for two reasons. First, the task of translating research into lessons is the teacher's area of expertise, not the researcher's. Translation is the act of making something teachable, and it is, after all, the teachers who teach the lessons, not the researchers. Second, specific lesson requirements of the type proposed by Stallings cannot be mandated for all classes. Variations of subjects, students, and many other variables will always require that the teacher make specific adaptations for the classroom. The knowledge that teachers need to design lessons may begin with research findings, but these findings must be translated into general principles and illustrated by demonstration lessons and case studies from classroom teachers.

THE RESEARCH findings popularly known as "time on task" represent another example of researchers and administrators working together to create mandates that de-professionalize teachers and undermine instruction for many students. Time on task developed out of several studies that examined what the student did, not simply teacher behavior. One group of these studies was sponsored by the California Commission on Teacher Preparation and Licensing. This commission was less than a year old when it sought funding in 1971 from NIE for research to determine what should be required of institutions preparing beginning teachers. The commission, given a mandate by the state to tell teacher preparation institutions what to do, had a problem. It found that no one had studied teaching enough to provide a knowledge base for beginning teachers, and so it decided to do a study of "research in the teaching evaluation area ... in order to establish baseline entry skill data for beginning teachers."

From 1972 until 1980, NIE funded this study. By the end of the project, B.T.E.S. (Beginning Teacher Evaluation Study), now examining only experienced teachers of reading and mathematics at grades two and five, was focused primarily on a concept it called Academic Learning Time (A.L.T.), a combination of engaged time, allocated time, and success rate. The amount of time the students spend attending to academic tasks, the engaged time, is dependent on the amount of time that the teacher assigns to such tasks, the allocated time, and the success rate is dependent on teacher diagnosis of the strengths and weaknesses of individual students, the focus of interactions between teachers and students, the development of the lesson, including an emphasis on academic goals. In all, the study had five major findings on time and nine on teacher functions.

Academic Learning Time soon ceased to be something one might learn from and instead became packaged, mandated policy. The first step in this direction was the introduction of grants from California's Department of Education during 1983-1984 for the purpose, among other things, of training school administrators and evaluators of teachers on how to record on-task and off-task behavior in classrooms. Many of the proposed grants frankly announced that the funds would be used to train administrators and others on how to evaluate teachers. At this point, a series of tentative research findings, which might have been helpful to teachers reflecting on the use of time in the classroom, were turned into an evaluation policy that de-professional-
ized teachers and trivialized the classroom.

The checklist shown in Figure 2 is one example of this time-on-task study at work in teacher evaluation. Principals who have been trained to use this instrument are expected to calculate the amount of NON-ALT and then to use this measure as an indication of teacher effectiveness. At the top of the form, the principal lists the time and the class activity. There are four time slots, making it possible for the principal to do four sweeps of the class at four different times. During a sweep, the principal marks N (on task) or F (off task) in one of the four spaces for each student. In general, the instrument keeps the principals so busy checking one thing and another that they never have time to watch the quality of interaction or even the substance of the lesson. In the world of time on task as reflected in this superficial checklist, the actual substance of the lesson is irrelevant. This, of course, makes time on task a useful rationalization for the authority of school administrators who must evaluate in subject areas they know nothing about.

DIRECT INSTRUCTION and time on task are not the only examples of the use of research to deprive teachers of professional judgment and creativity. The five-step lesson plan (anticipatory set, objectives, modelling, guided practice, and closure or application in independent practice), a policy translation of Madeline Hunter's seven-step lesson plan (Russell and Hunter), has been adopted by some districts as policy, and Benjamin Bloom's taxonomy and mastery learning have become the basis in some districts for a mandated sequence of instruction. Bloom's taxonomy divides the cognitive goals of instruction into six major categories and several subcategories, and mastery learning establishes a hierarchy for the tasks within these categories. The assumption is that the student learns one small part at a time, that the parts add up to a whole, and that students must learn individually so that each student masters one part before going on to the next.

Once again, all of these research findings are useful to teachers when teachers make decisions about adaptations in their classroom. Bloom's work has called attention to the importance of individualizing learning, but teachers know that they still have large classes and must teach to groups of students. Bloom's work has helped us understand some of the parts that students must master, but at the same time students learn things in context, by wholes. The problem starts when research like Bloom's gets turned into district mandates in which teachers are either prohibited or discouraged from making adaptations, even though the diversity of the student population requires such adaptations. Bloom's notions have become the basis for various forms of Individually Prescribed Instruction (IPI). One example is shown in Figure 3, which is a checklist used to monitor how students are progressing on various oral skills. Running down the page vertically are spaces for the class roster, and running across horizontally is a list of various oral skills students are to master. Actually, we can only show here a small part of this "skills inventory," as it measures twenty-six inches across, is printed on both sides, and lists a total of 197 individual skills that the pupil is to learn and the teacher is to keep track of, such as "identifies medial sounds in words," "develops sensitivity to rhythm," and "draws conclusions based on findings." Berkeley, California, also has a checklist of skills. For
The net effect of these systems is to turn instruction into numerous drills and to turn teachers into accountants.

any student who doesn’t master a skill, the teacher is directed to the appropriate catalogue number of pre-designed lessons. The net effect of these systems is to turn instruction into numerous drills and to turn teachers into accountants.

These examples from Los Angeles and Berkeley are similar to Oakland, California’s, program of curriculum management by objective and the Chicago Mastery Learning Reading program, which after five years and a $7.5 million investment, was dropped by the Chicago school board in August 1985. Chicago’s program, like Oakland’s, was promoted as “management by instructional units,” and the first management step was to reduce Chicago’s fourteen hundred objectives to 273 skills and 150 test points. The 150 test points reflected about one test for each week of the school year for four years, ninth through twelfth grades. In other words, the Nirvana of management is within sight — we almost have each day of the year planned.

The problem in Chicago, as elsewhere, is that the students differed from each other and from the Chicago schedule for mastery. Because all students did not attain “mastery” at the same time and because the Chicago program did not change class size or teacher load, some students had to be held back. In Chicago, the students who had passed the tests with 80 percent were directed to “mark time” and the others were re-taught once:

The successful students had to mark time. They were permitted some free reading, but they were directed to the appropriate catalogue number of pre-designed lessons. The net result in Chicago, as reported in Education Week, was “an overwhelming recordkeeping burden on teachers and principals,” “75 percent of Chicago’s ninth graders . . . reading below grade level,” a dampening of “children’s enthusiasm and ability to read by presenting reading as a set of fragmented tasks,” and “the requirement that low achievers spend double time on C.M.L.R. materials — leaving them virtually no time to engage in the reading or discussion of stories that experts agree is essential to the learning process.”

The Chicago Mastery Learning Program is an example of where one body of research (Bloom and others) was mandated, and another body of research (Goodman and others) was ignored. There is substantial research evidence suggesting that Chicago’s breakdown of reading into parts exacerbates reading problems for some students by ignoring the wholeness of structure. Instead of managed parts, many children in all grades should have available a large and varied literature, and the teacher should encourage students to select their own. (Goodman, 1970.)

This does not mean that we should now mandate a program that forbids the teaching of discrete skills. To begin to read, for example, the child needs to learn some of the letter-sound relationships. But certainly not all of them. The sooner the child starts to deal with sentences and paragraphs the better. As a child starts to read, the total context begins to provide clues as to the meaning of an unfamiliar word, thus diminishing reliance on sounding it out and dividing it into prefix, suffix, and root. It is the classroom teacher who must judge what will be the most productive approach for an individual student. Rigid, preset lessons are unworkable because there are too many variables interacting in a classroom.

This means, of course, that effective lesson planning depends upon the intellect and sensitivity of teachers. In other words, the assignment of authority in kindergarten through grade twelve teaching to researchers and school administrators has resulted in a standardization of teaching that contradicts what we know about how children learn.

A number of school administrators and researchers have begun to abandon the long-standing commitment to standardized teaching and have started calling for new kinds of school leadership and new ways to develop the teacher’s professional authority. Over the last few years, various research studies have taken a second look at the importance of a teacher’s professional authority and arrived at the conclusion that quality instruction may require teachers who have autonomy and a sense of their own efficacy, both qualities missing when there is a standardized curriculum. One example of this evidence is the Berman et al. study of one hundred Title III ESEA projects to see what factors determine the outcome of innovations and projects’ chances of being sustained and spread. “Teacher characteristics” was one set of factors investigated, and the trait that emerged as important was the teacher’s sense of efficacy:

The teacher’s sense of efficacy — a belief that the teacher can help even the most difficult or unmotivated students — shows strong positive relationship to all of the dependent variables in our analysis. Indeed, the regression coefficients of the effects of a sense of efficacy are among the strongest relationships identified in our analysis . . . . teacher sense of efficacy is positively related to the percent of project goals achieved, the amount of teacher change, improved student performance, and continuation of both project methods and materials. Teachers’ attitudes about their own professional competence, in short, appear to have major effects on what happens to projects and how effective they are.

Another example of a study showing the importance of teacher authority is one by Armor, et al. The study focused on schools in which certain reading programs were “associated with substantial and consistent gains in standardized reading test scores among minority children.” In their investigation, Armor, et al. sought to

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THE UBQUITOUS WORKBOOK: CAUSE FOR CONCERN?

BY JEAN OSBORN

DURING THE past twenty years, workbooks have appeared with increasing frequency in the classrooms of American schools.* One need only examine the catalogues of major educational publishers to see the vast variety of workbooks now available. Although it is difficult to determine what proportion of textbook expenditures is devoted to workbooks, most educational publishers would agree that workbooks constitute a significant part of their business. Workbooks are "consumables." School districts must purchase them every year, in contrast to the five- to seven-year period that typically passes between the purchasing of new textbooks.

There seems to be a workbook for every need. Some are written to accompany specific textbooks; others are designed to be used with almost any text. Workbooks are found in almost every type of classroom — structured, unstructured, mainstreamed, and pull-out. They are available to teachers of almost every academic subject and for students from kindergarten through secondary school. And, as a matter of fact, workbooks are available to parents — at grocery stores, bookstores, and through catalogues.

The elementary schools, especially the primary grades, buy the greatest number of workbooks. And the subject that is associated with the most intensive use of workbooks is reading. It is not uncommon for a basal reading program — those kindergarten through eighth-grade compendia of teachers' manuals, student readers, and any number of supplementary items — to offer two and sometimes three workbooks for students to use on a daily basis as they progress through the program. One researcher calculated that elementary school children complete an average of one thousand workbook pages a year for reading instruction alone.

Just how much school time is spent with workbooks? Quite a bit, according to both the sales figures of educational publishers and some recent studies of classroom practice. In one study of time allocation in a large number of elementary school classrooms, students were observed spending up to 70 percent of their allocated instructional time doing seatwork — work that is frequently "written tasks done without teacher supervision." In another study of first- through six-grade classrooms, observers who watched ninety reading periods in several school districts found workbooks a regular feature in every classroom. They also found that most students spent as much or more time working in their

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* I use the term workbooks in a broad sense to include skill books, practice books, skill sheets, mastery practice lessons, and most any of the pieces of paper provided by publishers for students to write on — as well as the ditto masters available for teachers to use. These items typically contain questions, exercises, and problems, and often are related to a textbook or course of study.

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workbooks as they did working directly with their teachers or reading in their textbooks. Teachers told the researchers that they used workbooks because they consider them an important part of the reading program.

Another study — this one of first-grade classrooms — estimated that students spent 40 percent to 60 percent of an average reading lesson doing seatwork. Of the students observed, about 70 percent seemed to be performing satisfactorily on seatwork and “seemed to learn the things the assignments are designed to reinforce.”

WORRIES ABOUT the use of workbooks come from a number of sources. The Commission on Reading, in its 1985 report Becoming a Nation of Readers, presented a number of concerns and cautions about workbook use and quality and recommended that the use of workbook and skill sheet tasks be pared to the minimum that will actually contribute to growth in reading. The commission suggested that, in place of some of the time allocated for workbook activities, students be engaged in independent silent reading. These recommendations are based on data that indicates that the amount of classroom time devoted to worksheets is unrelated to year-to-year gains in reading proficiency, whereas the amount of time that students spend both in and out of classrooms doing independent silent reading is significantly related to gains in reading achievement.

The commission observed that many workbook activities require only a perfunctory level of reading — and that few foster reading fluency or the use of the constructive and strategic reading processes considered essential to reading comprehension. The commission report summarized what recent research on workbooks has pointed out: that many of the exercises provide students with drill on skills that have little value in learning to read, that many have difficult-to-understand directions, and others have confusing art work, and probably most worrisome of all — that many workbooks are poorly integrated with the textbooks they are designed to accompany.

The commission is not alone in its concerns and cautions. Its warnings are echoed by the legions of elementary school reading teachers who complain about the quality of the workbooks that accompany the basal reading programs they use, and who often wonder — either to their colleagues or to themselves — about the usefulness of these materials. Even many educational publishers — for whom workbooks are clearly a profitable item — will admit privately that they believe workbooks are relied on too much.

SOMETIMES THE general public gets into the act. A commonly heard accusation from these quarters is that workbooks are “busywork” activities that serve only to keep students occupied while their teachers are doing other things.

The dismissal of all workbook activity as constituting
only busywork has always caused me some discomfort. This accusation — which comes primarily from people who don't spend full days in classrooms — seems unfair to the publishers of good reputation who develop workbooks, to all of the students who use them, and to the successful (and busy) teachers who allocate a certain amount of student time and effort to workbook activities. My observation is that well-established educational practices usually stay well established — despite the cautions and criticisms of the researchers and the interested public — because the practices serve students and teachers.

Here, for example, are some of the ways that well-designed workbook tasks can serve students:

**Practice:** Many concepts and skills require practice. Workbooks can provide that practice, and they can do it differentially, that is, with extra attention to those aspects of learning that are more difficult.

**Writing:** By requiring that students write words, sentences, and paragraphs, workbooks can provide much-needed practice in writing. Such tasks are, in a sense, a bridge between "pure reading" and "pure writing."

**Review and synthesis:** Workbooks give students an intermittent and cumulative review of what has been taught. Also, they help students learn to synthesize information and to apply what they have learned to new examples and situations.

**Independence:** Workbooks can provide students with practice in working independently — a component of learning whose importance stretches far beyond doing workbook tasks. Of course, successful independent work requires that the exercises be well constructed and clearly explained. They should also gradually prepare students for the more complex independent work that they will face in junior high and high school.

**Sense of accomplishment:** Workbooks can provide students with a sense of accomplishment, especially when the work is worthwhile, challenging but "doable," and has an occasional reward.

**Direction following and test taking:** Workbooks and experiences with a variety of test-taking formats provide students with practice in following directions.

**How do workbooks serve teachers?** In addition to the ways just listed, workbook tasks have some fairly unique functions that relate to the context of what goes on in classrooms. They provide the teacher with what is often the only clear and uncompromised feedback about what each student can do. Such unequivocal feedback about student performance is often not available to a teacher during other parts of a lesson. For example, a teacher working with a group of students during a reading period will ask one student to read a passage or to answer some questions. If that student's response is acceptable, the teacher will call on another student. The teacher must assume that the students who are not responding are able to read that passage and answer those questions. But with workbook activities, no one is passed over; no student can "sit silently" while others are answering. Completed workbook pages give teachers information about the performance of each student on a wide variety of tasks. Of course, this independent work can be used to evaluate student progress with confidence only if the workbook activities reflect important aspects of the textbook program.

Secondly, workbooks keep some students busy while the teacher works with other students. Although this aspect of workbooks is easy to ridicule, the critic should not be too quick. We know that some subjects — such as reading — are frequently taught in small groups. Students not directly engaged with the teacher need independent, productive activities, and workbooks provide one way of achieving that. Obviously, the key question here is the quality of the activity the workbooks engender.

**Are workbooks as good as they should be? What criteria should be used to evaluate their quality and effectiveness?**

Oddly enough, at least in the literature of reading education, scant attention has been given to these questions. Little investigation has taken place of such topics as the relationship of the content of workbooks to that of teachers' guides and student readers, the optimal sequences of tasks, the instructional design of tasks, the effectiveness of various types of activities, or the effects of varying amounts of massed practice and cumulative review. The lack of research about workbook content and design means that neither publishers nor teachers have a body of research-based information to draw upon.

In an effort to alleviate this situation and to provide textbook adoption committee members and teachers with criteria with which to evaluate basal reading programs, the Center for the Study of Reading is developing a series of booklets. Entitled *A Guide to Selecting Basal Reading Programs,* it includes a booklet on workbooks.* The following suggestions for what to look for — and what to guard against — are based on this booklet.

* More information about this series can be obtained by writing Adoption Guidelines Project, Center for the Study of Reading, 176 Children's Research Center, 51 Gerry Drive, Champaign, IL 61820.
Students [should not] be asked to spend time at meaningless word “analysis,” such as finding tent in attention and my in mysterious.

Task design:
In general, a well-designed task allows the student to concentrate on its important elements and to move easily from beginning to end. Also, when a task is completed, the student’s performance should be evident to the teacher. The examples below illustrate some specific aspects of task design.

- Tasks should be constructed so that students need to read all possible responses before selecting the correct answer. The following exercise is supposed to provide practice in reading two sentences that use different meanings for the same word. The students are told to put a circle around the sentence that is illustrated by the picture.

1. Flowers grow in the earth.
2. The earth moves around the sun.

The students have to read only as far as flowers in the first sentence to find the correct answer, making it unlikely that they will practice reading earth in two different contexts.

- Some tasks make unreasonable demands on students. The following example would be difficult (and tedious and boring) for even the most compulsive adult to complete, and it surely would be frustrating and self-defeating for most second-grade students. (Such tasks usually present many sentences for the students to analyze.)

Read each sentence. Decide which consonant letter is used the most. Underline it each time.
1. My most important toy is a toy train.
2. Nancy, who lives in the next house, has nine cats.
3. Will you bring your box of marbles to the party?

- Two-part tasks, in which success in completing the second part depends on doing the first part correctly, are instructionally weak and unfair to students. Consider a task in which students must first choose words that rhyme with ring from a list and then use the words they have selected in complete sentences. Only by selecting the correct words in the first part will students be able to do the second part correctly.

- Typically, workbook tasks involve filling in blanks with words, circling or underlining items, or selecting one of several choices. For example, a common workbook task asks students to underline the main idea sentence from three sentences in a multiple-choice item. Requiring students to write main ideas in their own words would be closer to the challenges of real studying. Similarly, asking students to write the sequences of ideas in a paragraph is much better preparation for reading and studying than having them show sequence by writing numbers next to an array of phrases or sentences. Students' responses in workbook tasks should be as much like “real” reading and writing as possible.

Content:
Workbook content must be suitable to paper-and-pencil practice. For example, although listening to the sound patterns of poems is part of the reading lesson, it would be difficult to have a written workbook exercise on auditory discrimination. Secondly — and it seems incredible that this should have to be said but it does — the content of workbook tasks must be accurate. Tasks must not present wrong information nor perpetuate misrules. Tasks should be examined with a critical eye to make sure that students are not told — as I have actually seen, for example — that “The sound of o in hope is short,” or “The main idea is always the first sentence of the paragraph.” Nor should students be asked to spend time at meaningless word “analysis,” such as finding tent in attention and my in mysterious.

Relationship of workbook tasks to the rest of the program:
Workbook tasks, reading selections, and other parts of the reading lesson should all relate to each other. For example, if the teacher’s manual directs the teacher to present a lesson on the sequencing of events or ideas within a story, one or more of the workbook tasks in that lesson should provide practice in sequencing. Also, in subsequent lessons, such tasks should be repeated occasionally — but with different examples.

Likewise with vocabulary. Thus, if a workbook task directs students to underline words that show feelings of hostility, mystery, bewilderment and hilarity, these concepts should have appeared in a current or previous lesson. Recent research in vocabulary points out that students need to read and write new words many times before they “own” them. New words should appear in a variety of vocabulary tasks that occur over many lessons, rather than only in one or two tasks.

Sufficient practice, review, and extra practice:
Workbooks should contain enough massed practice with important concepts so that students will benefit...
from the practice and not simply be “exposed” to concepts. Enrichment tasks that contain difficult (and often important) concepts frequently appear only once. For example, when a workbook has only one page dealing with analogies, students who might profit from repeated opportunities for practice with such an important language concept are not likely to benefit.

Workbooks should provide a systematic review of what is being taught in the program as well as supplementary tasks for students who need extra practice. Most basal programs do provide supplementary workbooks. The tasks in these books should be particularly well designed and not activities with minimal instructional value. Cutting, pasting, and coloring can keep children busy for a long time but cannot be expected to give them much practice in reading.

**Instructional language:**

Students deserve better than ambiguous, confusing, tedious, or insufficient instructions. Instructions should be clear and easy to follow, and brevity is a virtue. Experienced teachers realize that many students do not read instructions before doing tasks. When easy-to-teach students decide they do need to read them, they are usually able to follow them, even if the instructions are unclear. But, when hard-to-teach students are confronted with unclear instructions, their inability to follow them compounds the problem of performing the tasks and discourages them before they get started.

Here are some examples of poor directions:

- **Ambiguity.** Unclear uses of such words as “first,” “second,” “last,” “over,” “under,” “before,” and “after” are common.
- **Excessive wordiness.** Young children are not likely to understand directions such as these: “Use the sounds letters stand for and the sense of the other words to find out what the new word in heavy black print is.”
- **Embedded steps.** “Read the first sentence, and fill in the missing word. Read the second sentence. Find the word from the first sentence that makes sense in the second sentence and print it where it belongs. Then, do what the last sentence says. Repeat for all the other sentences.” This instruction has too many steps. By the time the student untangles them all, there will be little time left for the actual exercise.
- **Confusion.** Try to figure this one out: “Four things are named in each row. Three of the things named are part of the other thing. Put a ring around the thing that the others are part of in each row.” These awkward instructions make a simple task difficult.
- **Negation.** “Circle the word in each row that has a short vowel sound” is easier to understand than “Circle the word in each row that does not have a long vowel sound.”
- **Insufficient information.** “Underline the word with the same sound as the word that names the picture.” Because the words represented by the pictures each contain several sounds, this instruction does not contain enough information to permit the students to complete the task.
- **Consistent responses.** The way students respond should be consistent from task to task. For example, students are likely to be confused if they are directed to mark incorrect items with an “X” in one task and then mark correct items with an “X” in the very next task.

**Art:**

Pictures must be appropriate to the task. Sometimes pictures are extraneous to the content of a workbook page and serve as decoration in space that could be more profitably used. Other times, inappropriate and confusing art, no matter how nice it looks, can turn a task into a guessing game. For example, note the following auditory discrimination task from the beginning level of a program:

Circle the pictures whose names begin with the beginning sound of the word cat.

The problem with this illustration is that the cube of ice could be identified as ice instead of cube; the car could be identified as an automobile; the cap as a hat; and the crown as a king.

**Fun and functional:**

Lastly, we would suggest that some workbook tasks be fun and have an obvious reward to them. Certainly not all tasks are expected to be fun and games, but occasionally, puzzles, word games, cartoons, and other gamelike activities are probably appreciated by students. However, we caution against tasks that are fun...
but pointless.

While one person’s “fun” task may be another’s “nonfunctional” task, workbooks with large numbers of tasks that just take up space and student time should make teachers uneasy. The proportion of nonfunctional tasks in a workbook can easily be calculated by counting, and such an effort is worth pursuing. If more than a few workbook tasks are judged nonfunctional, the practice value of that workbook would have to be questioned, especially for hard-to-teach students.

**Teachers** who used the workbook evaluation booklet upon which the above criteria are based were amazed at the differences in quality from workbook to workbook and, frequently within one workbook, from task to task. But, in general, they found a number of worrisome practices.

Their experiences confirmed my own. In 1982, I analyzed a large number of workbooks and reported on that research to the Educational Division of the Association of American Publishers. Included in an article that was written from that report was this conclusion:

*My overall impression is that workbooks are the forgotten children of basal programs. Like forgotten children, they have both good points and bad points. A remedy for the bad points of forgotten children is to attend to the details of their existence. To those of you who have something to do with the development of workbooks, I urge you . . . see if any of the “forgotten children” aspects of workbooks apply to what you are doing.*

Obviously, workbooks could be considerably better than they are. Significant improvement will depend upon the efforts of three groups: (1) educational researchers involved with classroom practice and curriculum design, (2) publishers of basal reading programs, and (3) teachers using the workbooks.

**Educational researchers.** As mentioned earlier, the developers of workbooks do not have a solid, sophisticated body of research to call upon. The existence of such information would be invaluable. Some of the most basic questions remain unanswered. For example, we need to know more about the relevance of carefully developed and highly integrated workbook activities to the acquisition of reading skill. Researchers interested in the design of instruction and the kinds of materials and activities that facilitate reading acquisition are urged to carry out research that publishers can apply to the development of workbook tasks.

**Publishers of basal materials.** Many workbooks have the appearance of materials written separately from the rest of a program. Some give the impression of being afterthoughts completed at the last minute. Therefore, the first suggestion to publishers is that at the start of a new edition of a program, considerable planning time be devoted to developing strategies for the integration of the workbook tasks with the rest of the program. Often the integration of workbooks with a program is at only a surface level; a much deeper level of integration is needed.

Workbooks should be tried out before being published. By analyzing what teachers say as they present tasks and by observing students as they do the tasks (such as listening to the questions they ask about what they are supposed to be doing), workbook developers can get information about the effectiveness of tasks. By analyzing completed workbook pages and tallying all errors, workbook designers can identify weak tasks and either eliminate or remedy them. Such tryout procedures would improve workbooks enormously.

**Teachers.** The advice to teachers is for the most part obvious. Workbook tasks should be evaluated carefully before being assigned to students. Teachers should not operate from a position of faith in the printed word, but from a position of skepticism. Some tasks should be abandoned because they are confusing, not important, or nonproductive consumers of time. On the other hand, tasks that are difficult but valuable should be repeated. In addition, teachers should become aware of which tasks require additional instructions, which pictures require clarification, and which tasks most students can do independently. Teachers should also realize how counterproductive it is for students to spend a long time working on tasks on which they make many errors. Such tasks, if worthwhile, should be done when teachers have time to help students.

**Finally, teachers,** and especially members of adoption committees, should make their observations about unsatisfactory workbooks and unsatisfactory tasks known to publishers. Information from teachers to publishers will affect the quality of workbooks.

My own plea to these three groups is a personal one that derives from many years of working with students for whom learning to read was difficult: As you study, design, and use workbooks, keep the hard-to-teach students in mind. Students who are the hardest to teach probably spend the most time with workbook tasks. They work slowly, make lots of mistakes, spend extra time correcting their errors, and are often given extra tasks. These are the students who need consistency from task to task, clear and unambiguous directions, more help in learning vocabulary, and the chance to integrate and apply what they are learning.

*All* students need the best that educational researchers, program developers, and teachers can offer, but for students for whom learning is often difficult, the best can make the difference between success and failure.□
How birthdays leave some children behind

BY LOUISE BATES AMES

For years, kindergarten and primary-grade teachers have been telling us the following about their students: “Half the kids in my class don’t belong here. They’re too young. There’s nothing wrong with them except that they started school before they were ready.”

We agree with these teachers. We at the Gesell Institute believe that under our present system, all too many children do start school before they are ready. As a result, their entire school experience may be compromised. Our position is that all children should be started in school, and subsequently promoted, on the basis of their behavior age rather than on the basis of their age in years. That is, it is the child’s behavior (or developmental) age, not his birthday age, that tells us when he or she is ready to enter school and that clues us in to the curriculum he or she is ready to undertake.

This policy is simple, easy to implement, and has turned out to be almost startling in its effectiveness. Some schools that have applied this concept find that they can cut down the number of failures by as much as 50 percent.

Although most kindergarten curricula require that a child have reached at least a five-year-old level of behavior in order to perform school tasks effectively, reason tells us that not all children who have reached a birthday age of five are behaving like average five-year-olds.

The fact that birthday age gives only a general clue as to what behavior we may expect is rather fully respected in infancy. Although the “average” infant creeps when he is nine months of age, we do not require or even expect that all nine-monthers creep, since a quite normal infant may not be performing fully up to the standard or norm for his age.

We forget this when it comes to schooling. Most parents and many educators blithely assume that every five-year-old is fully average even though, if a group of five-year-olds is arranged on a normal curve, at least half will be somewhat below the theoretical midline. Birthday age and the age at which any child is actually performing by no means always coincide. Indeed, in classrooms grouped according to chronological age, the range in the developmental ages of the children can be as great as two and a half years.

That behavior age, not birthday age, should be the criterion for deciding the time of school entrance was first suggested by Dr. Arnold Gesell almost three quarters of a century ago. In 1919, he concluded that it was lack of school readiness and not lack of intelligence that was causing almost one out of every four first graders to fail. He recommended “a psychological [developmental] entrance examination for every school beginner.” Two years later he commented that “no feature of public school administration is apparently under less control than that of school entrance.”

The Gesell staff itself, through the nineteen thirties and forties, were fully aware of the need for children to be “ready” before one could expect certain achievements in eating, sleeping, toileting, and social behavior. They shared information about these behaviors with the...
public. But in spite of Dr. Gesell's earlier directive, we ourselves did not apply the concept of readiness to the matter of starting school.

It was not until the 1950s that it struck us forcibly that children who were brought to our clinic because they were failing in school nearly all had one thing in common: They had started school too soon and thus were placed in a grade ahead of the one for which they were developmentally ready.

We then asked ourselves if the tremendous amount of overplacement we were seeing held true just for a group of children in trouble enough that their parents had brought them to a clinic for help or if it might be true for the population in general. A three-year research program, supported by the Ford Foundation and carried out at the Hurlbutt School in Weston, Connecticut, demonstrated that often no more than the top third of the children in any given grade seemed fully up to their age and thus ready for the work of that grade. It also showed that to an appreciable extent it was possible to predict, in the fall of the year, on the basis of a behavior test, whether a child would successfully accomplish the work of the grade he or she had been placed in on the basis of age alone.

This research, reported in detail in our book School Readiness* (which also includes instructions for giving behavior tests and norms for evaluating such tests), supported our original contention that entering children in school on the basis of their behavior, or developmental, age would vastly increase the amount of school success and decrease the number of school failures and the need for remedial work.

Our next step was to recommend that all schools adopt what we call a developmental placement policy. This means merely that in any school district all children who are legally deemed old enough to start kindergarten in any given fall be given a careful developmental evaluation. Some will be found to be fully up to age and thus indeed ready to begin kindergarten. Others will not be up to age and thus should be placed in a pre-kindergarten class. It would be fully understood, by parents and school, that such children would need two years of kindergarten. We also recommend that school systems, when possible, provide a pre-first grade for those children who at the end of the kindergarten year still are not ready for promotion to first grade.

Such so-called developmental placement programs are now in existence in hundreds of schools throughout the country. In Ft. Lauderdale, Florida, for instance, ninety-seven of their public schools are fully "developmental."

The most conspicuous acceptance of this concept of readiness occurred in the summer of 1985 when the Oklahoma legislature passed a bill, signed by the governor, that in essence requires developmental evaluation of all children entering the public schools in that state. That is, for children in Oklahoma, maturity level and not birthday age became the criterion for determining the time of school entrance. Other states are considering this policy.

**BIRTHDAYS CORRELATE WITH FAILURE RATES**

DATA FROM the National Assessment of Educational Progress (NAEP) confirm what many experienced primary-grade teachers suspect: The youngest children in a class are far more likely to stay back a year than their somewhat older classmates. Data on 27,807 white nine-year-olds indicate that only 10 percent of those in the oldest twelfth of their class (January birthdays in a state with a December 31 cutoff) are a year behind their expected grade placement, compared to over 30 percent of those in the youngest twelfth. The effects of age are similar for black children, although somewhat less dramatic.

The academic disadvantage of the youngest children persists through eighth grade, according to the NAEP, and other studies report social and emotional difficulties as well.

If state boards of education raised the age of school entry for all, would fewer children fail? Since older first graders tend to achieve at a higher level — more mature children learn faster — such a move might do little more than change the names on the retention list: After all, no matter what the rules, someone has to be the youngest. In fact, however, the NAEP data indicate that older classes leave far fewer children behind. The difference is most dramatic among the youngest children. In states with December, January, and February cutoffs, 47 percent of the youngest boys are a year behind by the time they reach their ninth birthdays — compared to 26 percent in states with a fall cutoff.

Children who are younger than most of their classmates may also need more special education services. Cleborne Maddux of Texas Technical University analyzed the records of 374 children with learning disabilities in grades one through twelve. Almost half of these children — significantly more than one would expect by chance — were in the youngest third of their class. And the effects of relative age didn't disappear as quickly as one might imagine: Even the junior high schools classified more younger children as learning disabled. When Maddux went on to check the birthdates of 188 children selected for the "gifted" program in a large suburban school district, he found that over 60 percent were in the older half of their class.

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On the average, the older children in any class perform better than the younger children.
Our OWN ideal solution for the tremendous amount of unreadiness and overplacement seen in our schools today is simply to give all children who are legally old enough for school a behavior examination that would tell us whether they were actually ready to take on the cognitive and behavioral tasks expected of a kindergartner.

Until such a policy takes hold, however, there is another, simpler solution. That is to have all the children on the old side of five before they start kindergarten. Obviously, the older a child is, in years and months, the more likely he or she is to at least be up to the average expectation.

For many years, we have heard teachers and administrators refer to those “fall babies” who are not really ready for school. Children born in October, November, or December but who begin kindergarten in September, before they have had their fifth birthday, tend to be among those most likely to do poorly in kindergarten. It is for this reason, as well as for the fact that boys in general tend to develop more slowly than girls, that when individual developmental examining is lacking, we favor the notion that girls be required to be at least five years of age before they begin kindergarten in the fall; boys, five and a half. As noted earlier, prekindergarten settings should be available for children who do not meet these age requirements.

A modest body of research is now available that demonstrates that, on the average, the older children in any class perform better than the younger children. (See inset.) In fact, there are some who have gone beyond the concept that fall babies have more difficulty than those who are older. A book now in press by Dr. James Uphoff of Wright State University and June Gilmore of the Cincinnati public school system entitled Summer Children recommends that we protect not only fall babies but even those born in the summer months from entering school too early.

If chronological age is to be used as the criterion to decide when children should begin kindergarten, quite clearly the official state or community cut-off date is the key to the matter. Our own preference would be September at the latest, and preferably even earlier. Fortunately, states like Connecticut, where the cut-off date is December 31st, are something of an exception. According to currently available information, in at least fifteen states the date is September first or earlier; eight more have a date of October, and eight more before November first. These figures are changing rapidly and in nearly every instance in the direction of an earlier cut-off date. Missouri, for example, has changed from October to July.

This trend in the direction of an earlier cut-off date for entrance into formal kindergarten is a very healthy educational development. Indeed, in our opinion, quite possibly the most effective single thing a state legislature could do to improve the quality of our schools would be to see to it that the cut-off date for kindergarten entrance is September first or earlier. This would not only prevent an unnecessary cycle of failure for countless numbers of children but would also help ensure that teachers are not required to do the impossible: Teach children who are not developmentally ready for what is being asked of them.

Increasingly, parents themselves are becoming aware of the possibility that their child, even though legally old enough to start kindergarten, may not be ready to do so. An informed parent public is, of course, quite as important as an informed group of teachers and administrators, since a developmental program is, obviously, most successful if it has the backing of the parents. Thus far, to the best of our knowledge, most communities that begin a developmental program do continue it, since the practice results in an increasing number of children who are academically successful and a decreasing number who fail and thus require remedial help.

Word of the advantages of this approach is definitely spreading. We see it in the number of inquiries we receive from parents in communities that do not practice developmental placement. They ask us two questions with regard to readiness. First, where if anywhere in their community can they obtain a developmental evaluation. And second, if such an evaluation is not available, what clues could they themselves look for to determine whether their child is ready for kindergarten.

Fortunately, the things a parent can look for are not mysterious or particularly academic. They are easy to observe and easy to judge. The best list we know of was authored by John J. Austin and is to be found in a booklet called “Ready or Not? The School Readiness Checklist Handbook.” Space precludes a complete listing, but here are a dozen of the more significant items:

1. Will your child be five years, six months old by September?
2. Can he or she draw and color beyond a simple scribble?
3. Can he zip or button a coat?
4. Can he tell his left hand from his right?
5. Can he cross a residential street safely?
6. Can he repeat a series of four numbers without practice?
7. Can he repeat an eight-to ten-word sentence if you say it once?
8. Can he copy a square?
9. Can he tell you what his eyes (ears) are for?
10. Can he tell in what way a sweater, shoes, hat are the same?
11. Can he tell what a key is for?
12. Can he supply the last word of a statement such as Mother is a woman; Father is a ___?

The important thing for any parent, if specialized help is not available and if he or she has to make the decision alone, is simply to consider the matter of maturity and to make some kind of evaluation. You can compare your child’s maturities and abilities with those of other children in the neighborhood. Or most important of all, ask his nursery school teacher for an opinion. There is no better observer of a child’s total readiness than a good teacher.

(Continued on page 48)
The Metropolitan Life Survey of
FORMER TEACHERS
IN AMERICA

Why They Left, Where They Went, What Must Be
Done To Retain Good Teachers

No one knows the exact number of people who have left teaching for other occupations, but everyone agrees that the figure is a very, very large one. Every teacher knows someone in this category, and teacher lounges are often filled with talk of who has left and how they’re doing and of who is talking of leaving and why. A new survey, sponsored by the Metropolitan Life Insurance Company and conducted by Louis Harris and Associates, supplements the anecdotes we have all heard with some solid polling data. Based on a national sample of both current and former teachers, it provides valuable information on who is leaving and why, what new occupations they are entering and how they like them, and, most importantly, what teachers feel must be done to stop this exodus. As the survey analyst Lou Harris commented when he first presented the results: “A staggering 51 percent of current teachers say they have seriously considered giving up teaching as a career. Patently, no profession can survive with a latent turnover rate so high. . . . Those vested with the responsibility for education [must] take action not later but sooner. . . .”

The analysis and tables that follow have been excerpted from the full report, Former Teachers in America, which may be obtained by writing The American Teachers Survey, Metropolitan Life Insurance Company, One Madison Avenue, N.Y., NY 10010.

FORMER TEACHERS in America is the first national study of teacher attrition to be based on talking with the people actually involved. The survey includes interviews with a national sample of former teachers who left public schools within the last five years to work in some other occupation. Their attitudes about teaching, their experience in changing careers, and their views of improvements that are needed add new perspective and insight to our understanding of the teaching profession in America today.

This is a critical time in American education. Low salaries, poor working conditions, lack of occupational prestige, and a limited voice in school decisions have taken a toll on the teaching profession. The retention rate of current teachers seems too low and the production rate of new teacher graduates seems insufficient to avoid teacher shortages in the years to come. The National Institute of Education in its report, The Condition of Education, 1984, estimated that by 1992 this country will have 34 percent fewer new teacher graduates than are needed to fill the demand for additional teachers. The major strategies open to policymakers will include finding and enacting policies to: (a) retain current teachers at a higher rate, (b) attract greater numbers of college students into the profession, and (c) draw on the reserve labor force of certified and experienced former teachers.

Which strategy will prove most effective and efficient? It is difficult to predict how much each target group will alter its future behavior in response to various inducements. On grounds of efficiency alone, one could argue that if we want to retain our current teachers, it will be easier and more economical to do so before they leave rather than after they have left for new careers. But, in fact, many of the policy changes that policymakers will be considering will have a positive effect on the behavior of all of the above groups — former teachers, likely leavers, prospective future teachers, and those temporarily out of the labor force.
And in considering those possible policy changes, policymakers can learn a lot from former teachers that will be equally useful in appealing to the other constituencies that must also be reached.

This summary provides an overview of the results of the survey. Many findings described in the body of the report do not appear in this summary. Interested readers are urged to examine the body of the report to understand the full findings of The Metropolitan Life Survey of Former Teachers in America.

WHAT CAREER CHANGE HAS MEANT TO FORMER TEACHERS

Career change for many former teachers has meant higher salary, greater job satisfaction, and less job stress.

1. Former teachers frequently earn more money than current teachers. Thirty-five percent of former teachers now earn more than $30,000 a year, while only 12 percent of current teachers report earning this much. The increase in median income is $4,000, or about a 19 percent rise for the typical former teacher.

2. Former teachers' job stress has dropped dramatically since their teaching days have ended. Fifty-seven percent of former teachers recall that, as teachers, they felt great stress on the job several days a week or more. In their new job, only 22 percent of former teachers say that they experience great stress several days week or more.

3. Former teachers' job satisfaction has risen sharply after their career change. Ninety-six percent say they are satisfied with their new occupation as a career. This is an increase of nearly 50 percentage points from the 47 percent of former teachers who say they were satisfied during their teaching days. And it represents higher job satisfaction than that registered by current teachers who remain in the classroom, of whom 79 percent say they are satisfied.

4. As a result of these improvements, an overwhelming majority of former teachers say they are unlikely to return to teaching in the next five years, even though many say they miss teaching. Fifty-eight percent say they miss teaching. But 83 percent say they are unlikely to return to the classroom, while just 17 percent say they probably will.

WHAT CAUSED FORMER TEACHERS TO LEAVE

The full significance of the improvements enjoyed by former teachers is revealed when they explain what disappointed them most about teaching and why they left the profession. Many former teachers appear to have found in their new jobs things they felt were lacking in teaching.

1. The main reasons why former teachers left teaching were poor salaries and poor working conditions. Sixty percent of former teachers cite poor salaries as the chief reason. Another 36 percent name such poor working conditions as too much paperwork, too many nonteaching duties, and lack of input about their jobs. These are the same compelling reasons for leaving teaching mentioned most often by current teachers who are considering leaving teaching.

2. The more frequently teachers work under stress, the more likely they are to leave the profession. This finding has implications for all teachers, since teachers experience greater stress than most Americans.

3. Two-thirds of former teachers (64 percent) say that their professional prestige was worse than they had expected it would be before they began to teach.
**WHAT MAKES TEACHERS LEAVE**

Base: Former teachers and current teachers

**Question:** (Former Teachers)
What were the main things that caused you to leave teaching? Anything else?

**Question:** (Current Teachers)
What were the main things that made you consider leaving teaching? Anything else?

---

### Notes on Reading the Tables

An asterisk (*) on a table signifies a value of less than one-half percent (0.5%). A dash (—) represents a value of zero. Percentages may not always add to 100% because of computer rounding, multiple answers from respondents, or the elimination of “no answers.”

**NOTE:** Figures add to more than 100% because teachers were free to offer more than one reason in answer to the open-ended question. “Net” figures show the total giving at least one answer within a major grouping of answers.

† Current teachers who seriously considered leaving in the past and who say they are likely to leave within the next five years.

---

<table>
<thead>
<tr>
<th></th>
<th>Recent Former Teachers</th>
<th>Current Teachers Who Seriously Considered Leaving</th>
<th>&quot;Likely Leavers&quot;†</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Base</strong></td>
<td>500</td>
<td>985</td>
<td>421</td>
</tr>
<tr>
<td><strong>Inadequate, Low Salary</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working Conditions (net total)</td>
<td>60</td>
<td>62</td>
<td>65</td>
</tr>
<tr>
<td>Paperwork</td>
<td>11</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Nonteaching duties</td>
<td>10</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>School environment, physical aspects</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Overcrowding, class size</td>
<td>5</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Long hours</td>
<td>4</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Lack of input, independence, freedom</td>
<td>14</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>Workload</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Lack of supplies, materials</td>
<td>1</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Inadequate time for planning</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>All other</td>
<td>3</td>
<td>21</td>
<td>22</td>
</tr>
<tr>
<td><strong>Student-Related (net total)</strong></td>
<td>30</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>Lack of discipline by students</td>
<td>15</td>
<td>21</td>
<td>22</td>
</tr>
<tr>
<td>Lack of motivation by students</td>
<td>8</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>General attitudes of students</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Changes in lifestyles</td>
<td>7</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>All other</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Administration-Related (net total)</strong></td>
<td>30</td>
<td>25</td>
<td>28</td>
</tr>
<tr>
<td>Lack of administrative support</td>
<td>17</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>Dissatisfaction with administration</td>
<td>11</td>
<td>22</td>
<td>14</td>
</tr>
<tr>
<td>Incompetent administration</td>
<td>7</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>All other</td>
<td>—</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Lack of Respect (net total)</strong></td>
<td>17</td>
<td>25</td>
<td>27</td>
</tr>
<tr>
<td>Society's attitude toward teaching</td>
<td>3</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Lack of respect from students</td>
<td>3</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Lack of respect in community</td>
<td>4</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Low status, prestige</td>
<td>6</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Lack of respect in general</td>
<td>2</td>
<td>4</td>
<td>4</td>
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<tr>
<td>Lack of respect from parents</td>
<td>—</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Not considered a professional</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>All other</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Emotional Aspects (net total)</strong></td>
<td>27</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>Routine, boredom</td>
<td>13</td>
<td>13</td>
<td>13</td>
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<tr>
<td>Stress</td>
<td>4</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Frustration</td>
<td>1</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Lack of fulfillment</td>
<td>5</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Burnout</td>
<td>8</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>All other</td>
<td>—</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>Parent and Community-Related (net total)</strong></td>
<td>16</td>
<td>21</td>
<td>22</td>
</tr>
<tr>
<td>Lack of parent support</td>
<td>13</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Lack of community support</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>All other</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Miscellaneous</strong></td>
<td>14</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Opportunity to do something else</td>
<td>15</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>No chance of advancement</td>
<td>6</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Lack of school funds, budget</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Teacher testing</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>New laws, reforms</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Better benefits elsewhere</td>
<td>10</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Dissatisfaction with colleagues</td>
<td>10</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>All other reasons mentioned</td>
<td>10</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

*Less than 0.5%
### The Other Occupations That Attract Teachers

Base: Former teachers and current teachers

#### Question: (Former Teachers)
What occupation are you currently in?

#### Question: (Current Teachers)
The most recent time you considered going into a different occupation, what occupation was that?

#### Table

<table>
<thead>
<tr>
<th>Professional Specialties (total)</th>
<th>Recent Former Teachers</th>
<th>Current Teachers</th>
<th><em>Likely Leavers</em>†</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Base 500</td>
<td>782</td>
<td>342</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Executive, Managerial, Administrative (total)</td>
<td>21</td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td>Personnel, labor relations</td>
<td>4</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Education-related administration</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Manager, administrator</td>
<td>8</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Accountant, auditor</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>All other</td>
<td>7</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>37</td>
<td>37</td>
</tr>
<tr>
<td>Engineer</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Mathematician and computer scientist</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Natural scientist</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Health occupation</td>
<td>2</td>
<td>4</td>
<td>5</td>
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<tr>
<td>Teaching at some other level</td>
<td>*</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Counselor</td>
<td>3</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Librarian</td>
<td>*</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Psychologist, social scientist</td>
<td>*</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Social worker, recreation worker, religious worker</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Lawyer</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Author</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Designer</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Painter, artist, sculptor</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Performer, performing artist</td>
<td>*</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Editor, reporter</td>
<td>*</td>
<td>2</td>
<td>1</td>
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<tr>
<td>Public relations</td>
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<td>2</td>
<td>3</td>
</tr>
<tr>
<td>All other</td>
<td>2</td>
<td>3</td>
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<td></td>
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</tr>
<tr>
<td>Science technician</td>
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<td>1</td>
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<tr>
<td>Computer programmer</td>
<td>4</td>
<td>7</td>
<td>8</td>
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<tr>
<td>All other</td>
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<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>37</td>
<td>24</td>
<td>25</td>
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<tr>
<td>Sales supervisor or owner</td>
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<td>4</td>
<td>5</td>
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<tr>
<td>Insurance</td>
<td>12</td>
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<tr>
<td>Real estate</td>
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<tr>
<td>Securities</td>
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<tr>
<td>Commodities</td>
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<tr>
<td>Business in general</td>
<td>—</td>
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<td>All other</td>
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</tr>
<tr>
<td></td>
<td>5</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Ticket or reservation agent</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Mail clerk, postal clerk</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Secretary</td>
<td>*</td>
<td>1</td>
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</tr>
<tr>
<td>All other</td>
<td>3</td>
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<td>2</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Farming, Forestry, Fishing</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Precision Production, Craft Repair</td>
<td>5</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Operator, Fabricator, Laborer</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

*Less than 0.5%
CURRENT TEACHERS
RATE POSSIBLE STEPS TO RETAIN GOOD TEACHERS

Base: Current teachers

Question:
I will now read some steps that might be taken to encourage good teachers to remain in teaching instead of leaving the profession. For each, please tell me whether you think it would help a lot, help a little, or would not help at all in keeping good people in teaching.

<table>
<thead>
<tr>
<th>Steps to Retain Good Teachers</th>
<th>Help a Lot</th>
<th>Help a Little</th>
<th>Would Not Help at All</th>
<th>Not Sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing a decent salary</td>
<td>% 94</td>
<td>6%</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Providing more respect for teachers in today's society</td>
<td>% 90</td>
<td>9%</td>
<td>1%</td>
<td>*</td>
</tr>
<tr>
<td>Having students who are more strongly motivated to learn</td>
<td>% 85</td>
<td>13%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Providing increased financial support for the school system</td>
<td>% 84</td>
<td>15%</td>
<td>1%</td>
<td>*</td>
</tr>
<tr>
<td>Providing smaller class size</td>
<td>% 79</td>
<td>20%</td>
<td>1%</td>
<td>*</td>
</tr>
<tr>
<td>Reducing any unnecessary rules and requirements that waste teachers' time</td>
<td>% 72</td>
<td>25%</td>
<td>2%</td>
<td>*</td>
</tr>
<tr>
<td>Providing better tools and supplies teachers need to do their job</td>
<td>% 69</td>
<td>29%</td>
<td>2%</td>
<td>*</td>
</tr>
<tr>
<td>Reducing the time teachers need to spend on discipline</td>
<td>% 69</td>
<td>27%</td>
<td>3%</td>
<td>*</td>
</tr>
<tr>
<td>Reducing the time teachers need to spend on administrative tasks</td>
<td>% 68</td>
<td>30%</td>
<td>2%</td>
<td>*</td>
</tr>
<tr>
<td>Providing more independence to organize classes the way teachers think they should be</td>
<td>% 59</td>
<td>38%</td>
<td>2%</td>
<td>*</td>
</tr>
<tr>
<td>Having more parent involvement with the school</td>
<td>% 56</td>
<td>39%</td>
<td>5%</td>
<td>*</td>
</tr>
<tr>
<td>Providing a closer match between student needs and teacher capabilities</td>
<td>% 55</td>
<td>39%</td>
<td>5%</td>
<td>1%</td>
</tr>
</tbody>
</table>

*Less than 0.5%

FORMER TEACHERS
COMPARE TEACHING VERSUS OTHER OCCUPATIONS

Base: 500 recent former teachers

Question:
We'd like you to rate some of the aspects of teaching compared to (occupation mentioned in Q. 14). Is the (read each item) better in teaching or better in (occupation mentioned in Q. 14)?

<table>
<thead>
<tr>
<th>Aspects in which Teaching Is Rated Better or Equal</th>
<th>Better in Teaching</th>
<th>Better in Other Occupation</th>
<th>Same, No Difference (Volunteered)</th>
<th>Not Sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vacation benefits</td>
<td>% 59</td>
<td>35%</td>
<td>6%</td>
<td>1%</td>
</tr>
<tr>
<td>Job security</td>
<td>% 49</td>
<td>35%</td>
<td>16%</td>
<td>*</td>
</tr>
<tr>
<td>Health insurance benefits</td>
<td>% 40</td>
<td>40%</td>
<td>19%</td>
<td>1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Aspects in which other Occupations Are Rated Better</th>
<th>Better in Teaching</th>
<th>Better in Other Occupation</th>
<th>Same, No Difference (Volunteered)</th>
<th>Not Sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retirement benefits</td>
<td>% 39</td>
<td>49%</td>
<td>11%</td>
<td>1%</td>
</tr>
<tr>
<td>Total number of hours worked each week</td>
<td>% 38</td>
<td>42%</td>
<td>18%</td>
<td>2%</td>
</tr>
<tr>
<td>Caliber of the colleagues you work with</td>
<td>% 31</td>
<td>42%</td>
<td>25%</td>
<td>2%</td>
</tr>
<tr>
<td>Intellectual challenge</td>
<td>% 26</td>
<td>56%</td>
<td>17%</td>
<td>*</td>
</tr>
<tr>
<td>Personal satisfaction</td>
<td>% 25</td>
<td>58%</td>
<td>15%</td>
<td>1%</td>
</tr>
<tr>
<td>Your control over your own work</td>
<td>% 15</td>
<td>75%</td>
<td>10%</td>
<td>*</td>
</tr>
<tr>
<td>Salary</td>
<td>% 14</td>
<td>79%</td>
<td>6%</td>
<td>1%</td>
</tr>
<tr>
<td>Professional prestige</td>
<td>% 13</td>
<td>75%</td>
<td>12%</td>
<td>1%</td>
</tr>
<tr>
<td>Equipment you have to work with</td>
<td>% 8</td>
<td>75%</td>
<td>15%</td>
<td>3%</td>
</tr>
</tbody>
</table>

*Less than 0.5%
This finding underscores a theme that pervades the opinions of current teachers: Teachers are not respected as professionals by students, parents, administrators, and society.

A LOOK AT FORMER TEACHERS IN THEIR NEW JOBS

Former teachers have successfully gone into a wide range of new occupations that they consider better than teaching on many, but not all, key job criteria.

1. An overwhelming majority of former teachers have used some transferable skills to change careers. Nearly eight in ten former teachers report that they use some of the same skills in their new jobs that they previously used as teachers. Thirteen percent had a noneducation undergraduate major related to their new occupation; 10 percent had noneducation graduate training that was related; and 26 percent had previously held a second job that was related to their new occupation. But a majority (54 percent) report that their new job also required them to obtain some further education or training in order to qualify.

2. Former teachers have successfully moved into executive and managerial positions (21 percent), professional specialties (20 percent), technical occupations (5 percent), and careers in sales (37 percent), such as insurance, real estate, and the like. Current teachers who consider leaving look to enter these same occupations. But nearly twice as many current teachers (37 percent) aspire to enter professional specialties as the proportion of former teachers (20 percent) who have landed these jobs. More former teachers have instead entered sales and managerial jobs.

3. Former teachers work as hard in their new jobs as they did as educators, and most have remained with the same employer they joined upon leaving teaching. Both current and former teachers work approximately 50 hours per week on work-related duties. And 80 percent of former teachers who left in the past five years have remained in the job they entered upon leaving teaching.

4. Former teachers’ comparisons of teaching with their new occupations provide evidence that many historic attractions of teaching — personal satisfaction, vacations, and job security — now are outweighed by salient disadvantages. Former teachers admit that job security, vacation benefits, and health benefits are better in teaching than in other occupations. But a majority of former teachers also believe that salary, professional prestige, control over one’s work, equipment one needs for work, and intellectual challenge are all better in their new occupations.

SIGNOS OF TEACHERS MOST LIKELY TO LEAVE

This survey dispells one widely held belief: that the most talented and qualified teachers leave the profession much more frequently than other teachers. The results of this survey challenge this assertion, revealing a number of other characteristics or tell-tale signs that better identify teachers who are most likely to leave or stay. This section draws together such signs from throughout the report.

1. Comparing indicators of professional quality between current and former teachers shows that all kinds of teachers — from the least qualified to the most — leave the profession at roughly similar rates. Similar proportions of current and former teachers report that they had a master’s degree, had been asked to supervise other teachers, and had received a teaching award.

2. The largest exodus from teaching occurs early in teachers’ careers. Forty-six percent of former teachers in this survey have less than ten years’ experience, compared to 22 percent of current teachers.

3. Moonlighting is one of the strongest indicators of a teacher who may leave. Twenty-eight percent of current teachers say that they held a second job during the past twelve months. About twice this proportion of former teachers (54 percent) worked a second job during their last year as a teacher.

4. Frequent job stress is one of the most important indicators that distinguishes leavers from stayers.

5. Expressed dissatisfaction with teaching as a career is also, not surprisingly, a tell-tale sign. A majority of former teachers (53 percent) say they were dissatisfied with teaching. However, satisfaction with teaching by itself is no longer for many teachers a sufficient incentive to stay in teaching: 47 percent of former teachers say they were satisfied but still left for other reasons.

6. Former teachers and “likely leavers” are far more likely to believe that the intellectual challenge is better in other occupations. Thus, this opinion is an additional indicator of teachers who may be next out the door.

7. Two-thirds of former teachers are men and seven in ten former teachers taught in secondary schools. In contrast, 71 percent of current teachers are women, and the majority of current teachers work in elementary schools. A companion report, The Metropolitan Life Survey of the American Teacher 1985, revealed that men and secondary schools teachers are more likely to consider leaving the profession. This new finding shows that such teachers do, in fact, have significantly lower retention rates.

WHAT MUST BE DONE TO ATTRAECT AND RETAIN GOOD TEACHERS

Almost all former and current teachers, those most familiar with teaching, agree on what must be done to attract talented new teachers and to stop the nationwide exodus from teaching. This powerful endorsement amounts to a virtual mandate for policymakers on how to strengthen teaching and our educational system.

1. Eighty percent of both current and former teachers support changes that would help teachers to be treated more like professionals, paid more like professionals, and given working conditions and materials to allow them to perform as professionals. These changes include:

   • Providing a decent salary;
   • Providing more respect for teachers in today’s society;
   • Teaching students who are more strongly motivated to learn; and

(Continued on page 48)
EVERYBODY'S TALKING AT ME

BY ARISTIDES

IN THE realm of boredom, as in so many others, it is better to give than to receive, and I would have it known that, as a university teacher, I give — and give plenty — at the office. With the aid of my scintillating talk, I have in my day put a student or two to sleep. When first I noted this strange power, I was a touch alarmed and more than a touch resentful. In the fullness of time I have gotten over both the alarm and the resentment. Except in seminar rooms, where there is the danger of injury through their striking their heads against a table top, I allow such students to snooze away, drawing the line only at passionate snoring. I suppose I could wake them, but I don't like a scene. Besides, my reasoning is, if my students cannot arise from my classes inspired, at least they will awake refreshed.

To treat a brawny lad or an indelicate lass, after a night of who-knows-what wild roistering, to a brief nap through the aid of my sometimes intricate commentary on the novels of Joseph Conrad or Henry James seems to me no grave disgrace. It happens to others and, I prefer to think, perhaps even to the best of teachers. For all one knows, Aristotle may well have sent his lot of Athenian youths into the arms of Morpheus with his lectures on Prior Analytics; Doubtless at times even his best student's attention must have strayed. To be a bit boring is part of the job of the teacher; it is, you might say, ed. biz, not everything about which is appealing.

But it is given only to a few to bore a throng. I am one of those few. The throng in question numbered on one occasion somewhere between six and seven hundred; the setting was a middle western university, to which I had been invited as a guest lecturer. The school had decided to use one of my books for its freshman composition course — provided, that is, that I agreed to visit the campus, meet with the students, and deliver a lecture. In teaching the book and bringing its author to the school, officials there apparently wished to demonstrate to the students the imperfection of the work and the life both. Financially it seemed a good deal. Driven by lucre, flown by United, I arrived on campus with a typed, double-spaced, twenty-one page lecture entitled "Is There a Literary Life Before Death?" clutched in my warm fist.

A hectic visit was planned. Dollar value was to be exacted. Mine was one of those schedules that read "11:00-11:10 — author free"; otherwise the author was

Aristides is the pen name of Joseph Epstein, editor of The American Scholar, from which this essay is condensed (Autumn 1985), with permission of the publisher.
About many things Mark Twain did not know diddly, but about lectures in churches he was brilliant.

fully occupied. The two hours before the lecture were given over to a dinner with students and a fireside chat with the author. At roughly a quarter to eight the author was marched over, without aid of tumbril, to the large church in which his lecture was to be given. A church, according to Mark Twain, a practiced lecturer, is a fatal setting for a secular talk; people are unaccustomed, and hence unwilling, to give way to laughter in a church. About many things Mark Twain did not know diddly, but about lectures in churches he was brilliant. At five of eight the students and a few faculty members filed in; the author later learned that attendance at this lecture was compulsory. A compulsory lecture delivered in a church — this, then, was my assignment.

But I had a secret weapon. In my hand was not a list of fifty-seven Communists currently working in the State Department but an hour-long talk completely over the heads of my audience. I did not know this when I began, but it soon became evident. I started with a little joke. "The title of my lecture," I announced, "is, 'Is There a Literary Life Before Death?' Please note that I do not intend to discuss the other side of this question: Is there a literary life after death? That is the more interesting question, but on it the data just now is rather thin." This was greeted by puzzled silence. My lecture proper began with what I thought was an amusing anecdote. Apparently I was alone in thinking it so. Before I arrived at page two, I had to allow to myself, "No doubt about it, this is not going smoothly."

I thought I had interlarded my lecture with witticisms, apercus, interesting formulations. My audience, again, evidently thought otherwise. Occasionally, the sound of a raucous masculine laugh rang out, echoing in the vasty deep of the church. Where are you, brother? I wondered, as I droned away at my lecture. I scanned the church to find the eyes of this solitary appreciative student. Where were there less to hear me than to honor the memory of Jules in 1870...Reading this sentence I thought, "No doubt these kids cannot have heard of the Goncourt brothers — neither, after all, had I at their age — but I am fairly certain that they never even heard of 1870." I proceeded, slowing my pace now, quite enjoying myself, and finally rather sorry to end, which I did to applause of a strength that did not quite merit the word "wan." Somehow I was able to restrain myself from blowing kisses and bowing deeply from the waist.

NOT ALL my public performances have been so uniformly dismal. One of the nicest days of my adult life was the day I gave the H.L. Mencken Memorial Lecture at the Enoch Pratt Free Library in Baltimore. It was a sunny Saturday afternoon, and, standing out in front of the library, I recall wondering whoever would wish to waste such an afternoon on listening to a lecture. As I entered the hall in which the lecture was to be given, I encountered a friend. "Kenneth," I said, "what are you doing here?" "I don't know," he answered, "Frankly I'd rather be in Fenway Park." So, truth to tell, would I. But more than four hundred people showed up — an overflow crowd. And a fine crowd it was, composed not principally of professors or students but of a lovely diversity of people, of all ages and social classes, who were there less to hear me than to honor the memory of H.L. Mencken, their city's great writer. Afterward Mencken's bartender at the Rennert Hotel came up to show me a letter from Mencken, which he had had framed, that congratulated him, the bartender, on his craft.

I could be mistaken — the distorting egotism of the performer is never to be trusted in these matters — but I thought the lecture went very well. The audience laughed where I hoped it would and seemed thoughtful where I had hoped to provoke thought. The applause at the close felt neither perfunctory nor phony. A coffee was served after the lecture, to which the public was invited, and a dinner of the Mencken Society was held later in the evening in a magnificent room of the Peabody Conservatory Library. An official of the Pratt Library handed me my check in an envelope, and it turned out to be for more than had been promised. At the coffee a stream of people came up to tell me how much pleasure my lecture had given them — and I determined to believe them. At the dinner I asked the man...
who was the outgoing president of the Mencken Society, an insurance man in his sixties, what it was he liked about Mencken. "Reading him," he said, "makes me happy." So, I thought, has this day in his honor in his native city made me happy.

YET LECTURING, it has not taken me long to appreciate, is not my métier. I like the money when it is more than I deserve; I like the sociability between lecturer and audience when it exists; I like the applause and praise when it seems genuine. It is, really, only delivering the lecture that I don't much care for. Part of it is the nervousness I feel about being able to please a crowd. A recent survey revealed that Americans fear only cancer more than public speaking. Although never surveyed, I am one of those Americans. I scarcely ever speak before more than ten people without an initial flutter of nerves. The word *flutter* suggests butterflies, the reigning metaphor for such nervousness. I feel too old for butterflies; perhaps what I get are moths. In any case, something is fluttering when the prospect of speaking to an audience of any substantial size is before me.

But for me there is a deeper problem than nerves, and this is that I do not think all that much of the lecture either as a form of entertainment or as a medium of education. Today I give lectures, but, with rare exceptions, I do not go to them. As a college student, of course, I was bound to attend my share of lectures, but I remember chiefly two things about my attendance at such lectures: a frantic mental scampering to take notes on material that I judged might be on examinations (six such lectures: a frantic mental scampering to take notes on material that I judged might be on examinations); and a heavy boredom that all too often elided nicely into slumber. Occasionally, during my student days, I would note items of intellectual style in a lecturer — the dramatizing quality of German lecturers, the casualness of English ones — or acquire such little intellectual tips as the proper pronunciation of *banal*. Sometimes I would go to a lecture or a reading to see an artistic celebrity; for precisely this reason — to see quite as much as to hear — I went, as a young man, to poetry readings given by Marianne Moore, e. e. cummings, and Carl Sandburg. I went to these readings, in effect, as an intellectual and artistic groupie. On occasion I even now go to a lecture by a scholar I revere: Arnoldo Momigliano or Edward Shils, Hugh Trevor-Roper or E.H. Gombrich. Approaching the age of fifty, I remain an intellectual groupie.

Far and away the most effective lectures I have ever attended were those I went to as a private during basic training in the peacetime army. What they effected was deep and contented sleep. The army could do with subject matter what it did with food: make it all seem alike and all supremely boring. Be the subject communism or chemical warfare or nuclear attack, lectures in the army, listened to on cold mornings in Fort Leonard Wood, Missouri, while I was wearing fatigue, boots, and a field jacket, could unfailingly put me out in somewhere under three minutes. In this they surpassed even a session of papers on literary theory at a meeting of the Modern Language Association. How I wish I had tapes of those army lectures in my possession now to replay on the infrequent nights when I suffer insomnia!

THE WORLD has never known a shortage of brilliant lecturers. Charles Dickens was famously successful as a lecturer, although his lectures were chiefly composed of dramatic readings of his own work. Mark Twain's lecturing consisted of comic turns, which he did consummately; and throughout his life he was able to call on his ability as a lecturer as a means of refilling the coffers he repeatedly emptied through his many bad business investments. Oscar Wilde's lectures in America were a very great hit, and Wilde was fond of comparing his own success in this line with Dickens's. As a lecturer, Wilde came on as an exotic; from St. Louis he instructed his agent to acquire for him "a sort of Francis I dress: only knee-breeches instead of long hose. Also get me two pair of grey silk stockings to suit grey mouse-coloured velvet. The sleeves are to be flowered — if not velvet then plush — stamped with large pattern. They will excite a great sensation.... They were dreadfully disappointed at Cincinnati at my not wearing knee-breeches." Emerson, as his biographer Gay Wilson Allen remarks, looked to lecturing "to be his own salvation, both for sanity and solvency" — and so it proved.

**I looked up from my text to catch the pretty Miss Goldstein's eyelids at half-mast; the red-haired Mr. Pipal, eyes completely shut, was well out of the intellectual struggle.**

Dickens, Twain, Wilde, Emerson, all were, quite apart from their distinctly different geniuses, considerable showmen. Without this element of showmanship there can be no exciting lecturing, for entertainment is intrinsic to the successful lecture. Writers without a showman's flair have fared poorly as lecturers. Melville, though he needed the money desperately, was unable to make a go of it as a lecturer. Walter Pater's lectures were said to be inaudible; "a form of self-communion," Max Beerbohm called them, adding: "He whispered them." E.M. Forster did a certain amount of lecturing over the course of his life, but not, apparently, altogether successfully. Katherine Anne Porter recalled hearing him lecture to a political conference in Paris in 1935: "He paid no attention to the microphone, but wove back and forth, and from side to side, gently, and every time his face passed the mouthpiece I caught a high-voiced syllable or two, never a whole word, only a thin recurring sound like the wind down a chimney as Mr. Forster's pleasant good countenance advanced and retreated and returned." At Harvard, Lee Simonson remembered Santayana lecturing his students while "gazing over our heads as if looking for the sail that was to bear him home," to Europe presumably.

WHEN I began teaching I thought to lecture my students about the authors whose books we were reading. I filled these lectures with facts, anec-
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sion as lectures. They were over­

I wouldn’t say that it is the main attraction, but one always goes to a lecture anticipating little foul-ups, gaucheries, comic faux pas. As a form of “live” entertainment, lectures in the natural course of events often provide these. In this line once, when giving a classroom lecture on F. Scott Fitzgerald, I described the young Zelda Sayre, not yet Fitzgerald’s wife, as the “ball” of Montgomery when of course I meant the “belle.” Somerset Maugham, whose stammer made each of his lectures and speeches an act of bravery, in a speech at Yale during World War II referred to “the price of liberty” and then cold not for the life of him remember what the price of liberty was. John Berrymen, a drinking man, used fairly frequently to give lectures and poetry readings at which he thought he was perfectly charming when it was clear to everyone in the audience that he was perfectly drunk. Stories are not uncommon of older professors simply delivering a lecture to the wrong class, or the wrong lecture to the right class. In the long lore of lecturing, has any lecturer, I wonder, ever put himself to sleep with his own lecture and had to be gently awakened at the lectern? My own favorite lecture story is about an Englishman who was delivering a public lecture about George Eliot, when in the middle of the audience he noticed a beautiful young woman raptly attending to his every word. He began to direct his lecture to her alone; as he went on he felt rather like a Spanish caballero serenading his lovely senorita. On and on he talked about George Eliot, and her eyes, shining with what seemed like great intelligence, never left his. At the end of the lecture there was applause, followed by the announcement that the lecturer would be pleased to answer any questions from the audience. The beautiful young woman raised her hand. The lecturer, anticipating a question of brilliant perception, called on her straightaway. In a husky voice, with a German accent, she said, “Zis Middlemarch, may I ask you, vat elze he write?” The lecturer’s answer, quite properly, is not recorded.
normal temperamental tendency to warm up slowly." Even more extreme are children who are downright fearful and timid — a trait, according to Harvard developmental psychologist Jerome Kagan, that seems to be more enduring than others with which children come into the world.

Some children have trouble forming friendships because their insecurities result in displays of hostility, driving others away. Others, in contrast, manage somehow to become the scapegoat in a group. They seem to emit signals that they can be taunted or have jokes played on them. Eventually, they may give up trying to make friends, withdraw, and begin playing the role of "loner."

Still others seem to crave the companionship and attention of adults rather than peers — as if they wish to avoid the competition of their own kind. Such children often depend on teachers for emotional support. They become the "teacher's pet," and thus may further alienate their friends.

Keep in mind, too, that some children may be outgoing enough under normal circumstances but are passing through a stressful time that causes them to withdraw. A child who is anxious or depressed is no more likely to be gregarious than you or I when weighted down by feelings of fear and hopelessness.

Because the dynamics of poor peer relations vary, there is, of course, no one-for-all rule to help overcome the problem. Sensitivity to individual differences is the key.

Slow-to-warm-up or timid children require considerable patience. They seem to do best when encouraged to try new experiences — including experiences in a group — but allowed to adapt at their own pace. Too much pressure heightens their natural inclination to withdraw.

As Stanford psychologist Philip Zimbardo points out, teachers can help draw out shy students by arranging for them to participate in studies or classroom tasks with peers who are especially understanding and accepting and by encouraging other children to include them in their activities. Grouping children together who have common interests can also prove useful.

It helps also to find opportunities to build up the withdrawn or hostile child's self-esteem — for example, by encouraging areas of expertise and offering praise for the child's accomplishments. And when reluctant children do interact with their classmates, they should be reinforced for their efforts.

In encouraging children to overcome roadblocks in their peer relations, it is important for teachers and parents to work as a team, sharing observations and ideas. The world of friendships extends far beyond the classroom, and efforts to encourage its development should be coordinated and consistent.

There are, of course, when no interventions seem helpful, and these deserve special attention. Indeed a growing body of evidence — from both clinical observations and systematic research — suggests that chronically poor peer interactions may be one of the most potent early indices of later psychological difficulties. Put another way, if you were to survey all of the facets of a child's life, the one that might be the clearest "tip off" to the quality of the child's adjustment is the ability to enjoy rewarding friendships.

The evidence stems, in part, from a series of follow-up studies completed decades ago by psychologist Merrill Roff, in which children with problems in adjusting to peers were found many years later to suffer more than the usual range of mental health difficulties. Roff's results are now buttressed by more recent studies that also portray problematic later adaptation among such children. The prognostic power of peer interactions has been highlighted, for example, in the research of University of Rochester psychologist Emery L. Cowen and his colleagues. From their poor peer relations, a number of first-grade children had been flagged as being at greater risk for mental health problems later on. After thirteen years, these very children did, in fact, appear with a disproportionately high frequency as clients for mental health services.

To be sure, the pattern is hardly inviolate. Studies show, for example, that some creative and contented people were "lone wolves" as kids. But whether they were at odds with their peers or just wanted to spend time alone, they seemed likely also to be blessed with a number of very positive traits: flexibility, assertiveness, self-assurance, a sense of humor, curiosity, venturesomeness, resilience to stress, and constructive ways of reacting to problems.

On the other hand, when consistently poor peer relations are the dominant theme in a child's life and when the pattern is accompanied by other disturbing signs, such as rebelliousness, anxiety, depression, and acting-out behavior, teachers should consider helping direct parents to sources of early professional intervention.
identify school and program characteristics that were associated with the gains. While finding no evidence of a relationship between students' reading achievement and a variety of teacher background characteristics, they did find that the teachers' sense of efficacy was positively related to pupil achievement.

Another observation on the importance of teacher efficacy comes from Eleanor Duckworth, who describes how a set of rules from a research study can have negative effects on teachers who have no sense of professional authority:

It is just as necessary for teachers as for children to feel confidence in their own ideas. It is important for them as people, and also important if they are really going to feel free to acknowledge the children's ideas. If teachers feel that their class must do things just as the book says, and that their excellence as a teacher depends upon that, they cannot possibly accept children's creations. A teacher's guide must give enough indications, enough suggestions, so the teacher has ideas to start with and to pursue in some depth. But it must also enable the teacher to feel free to move in directions of her own when other ideas arise.

Now what must not happen is for a cadre of researchers to form an ad-hoc alliance with school superintendents to sell teacher efficacy checklists and organizational charts! Each state and local district must approach the issues of teacher authority in ways appropriate for the local setting. Authority and efficacy are based on a complex interaction of variables beginning with student teaching and the way people are introduced to the profession. Authority and efficacy require that teachers have a strong professional community anchored on norms reflecting the expertise of teachers. This expertise, based as it must be on differences of subject matter and the developmental level of students, should be reflected in a rich literature of case studies and lessons written by teachers. It is teachers themselves who must become the primary elders of the teaching community.

Finally, teachers must resist the efforts of researchers and school administrators to pose as the architects of lesson design. Educational researchers have much of importance to say about learning and organizational theory, but they have left their area of expertise when they begin developing blueprints for teachers to follow.

REFERENCES


Austin: Research and Development Center for Teacher Education, The University of Texas at Austin, 1978.


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- **Budget Charter Trips** — A host of one, two and three-week budget charter trips to Europe, the Orient and the Middle East are available at incomparable charter-value prices. For example, a one-week vacation to Paris and London, complete with air and hotel, sells for only $775. Other exciting destinations are All Ireland, Great Britain, Vienna, the French Riviera, Spain and Portugal, Rome, The Rhine, Athens, Kenya Safari and All Italy. All economy trips include roundtrip charter airfare, budget hotel accommodations and motorcoach touring. Discounts available for retiree members and children.

- **Home Exchange Program** — Save on vacations by participating in the Home Exchange Program between the AFT and the National Association of Schoolmasters/Union of Women Teachers in Great Britain. This program enables you to visit Great Britain at a fraction of the normal commercial costs. But, more importantly, it provides a meaningful and historic way to enjoy and participate in British life and at the same time enhances the close bond of friendship with your union counterparts abroad. A $25 fee is required to enroll.

**New This Year!** Specially discounted rates in vacation villages throughout France are available at specially reduced prices for AFTers and their families. These villages were built (and are used) as vacation facilities for the French. We have, however, arranged for members to participate in this unique vacation opportunity.

All villages are vacation-style facilities situated on attractive grounds (some are near major cities) and offer relaxation, leisure and sports activities, artistic and cultural events, all in a marvelous setting. Seven-night stays (with options to extend in same or different village) are available, beginning this summer and fall. Accommodations vary according to village, but generally are in 1 and 2 family cottages (or bedroom suites) with bath/shower. Continental breakfast and lunch and dinner (with wine) are included at most villages. Rooms are simply, but adequately furnished, and each rental unit has kitchen facilities. Car rentals can be arranged.

A host will be on the premises to assist with activities, optional touring and to integrate you into the lifestyles of the French. Some villages have organized games, meals and excursions for children. Each village has a Main Building that serves as the recreation center.

Land only and complete packages are available. For land only, rates begin at $320 weekly. Reduced airfares to Paris and Nice also available, and complete tour price will include transfers and baggage handling (for groups) from airport to village. Departures begin July 1 through Sept. 26.

Some of the villages offered include Dourdan, situated on 30 acres in the middle of the Dourdan Forest and 30-40 min. from Paris. Tennis and golf are available. Visits to the medieval town of Dourdan include traditional handicraft stores, castles, chateaux and churches. The resort village of Muro is located in the sunny "Provence" region and is the ideal resort for nature lovers. A choice of cultural activities are within a short drive. The village of Gordes, the Abbey of Senanques, city of Avignon, the Camargues region (home of French cowboys) and weekly bullfights at the arenas of Arles.

This is the region where the great French writer Daudet and the poet Mistral were born. The village of Grasse, located in a pristine forest on 84 acres surrounded by the Mediterranean Sea, offers such activities as nearby concerts in Hyeres, evening musical shows, excursions to Porquerolles Island and short stays on the island of Corsica. *Graisse*, world capital of the perfume industry, is situated on 42 acres near Cannes and the Naxoupe Bay.

Please write for complete details.

**Remember!** Academic travel credit is available, upon application and qualification, on all AFT-sponsored trips. For complete descriptions of all travel programs, write AFT Travel, 555 New Jersey Ave., NW, Washington, DC 20210.

*All prices are per person, based on double occupancy.*
Ready or Not
(Continued from page 33)
nursery school teacher. Believe her if you tell you that
your girl or boy is not going to be ready for kinder-
garten.

A

Poem by Kay M. Innes of Madison Heights, Michi-
gan, reprinted in part below, captures some of the
typical difficulties experienced by an overplaced
"November boy":

I'm a bright November boy,
School for me is not a joy.
Teacher thinks I'm rather slow.
I just need more time to grow!
Next to me sits prissy Pearl,
Teacher's "good" December girl.
Pearl just loves her A, B, C's —
Wants to learn to make her threes.
I prefer the trucks and water —
Teacher doesn't think I oughter.

Johnny's March — he really shines,
Colors well within the lines.
April Smith can write her name
In big round letters, all the same.
Teacher says that I don't try —
All I do is blink one eye,
She thinks that I am not too bright,
I still mix my left and right!

Teach says I should listen more
And spend less time down on the floor.
I can sing and march and play,
Can paint — but not her way!
I made a person — red and blue
With lots of hair and buttons, too.
It was good — but what the heck!
All she said was, "Where's the neck?"

Teacher's getting rather riled,
Thinks I am a stubborn child.
Hopes that I don't have a brother —
Says she couldn't stand another.

Warns if I don't pay attention
She is thinking of retention.
That threat of hers it thrills me so,
Then I would have more time to grow.

Fortunately, fewer and fewer "November children"
are being subjected to this boy's ordeal. The concept
that birthday age is not an adequate criterion for
determining readiness and that what we term "develop-
mental placement" can substantially reduce school fail-
ure is gaining ground in this country rather rapidly.

However, all is not roses. There are still many admin-
istrators at the state level who seem to believe that
readiness is not important and that children can and
should be forced to do whatever the school requires.

Who will win out in this theoretical battle of oppos-
ing philosophies is by no means certain. But we are
betting on the teachers, and on the children.

References
1. Ilg, Frances L., and Ames, Louise B. School Readiness. New
2. Available from Jastak Assessment Systems, 1526 Gilpur
Avenue, Wilmington, Delaware, 19806.

Former Teachers in America
(Continued from page 39)

- Providing increased financial support for the school
system.
- Majorities of current and former teachers also
agree on a number of steps that would "help a lot" to
attract and produce good teachers in the future. These
include:
- Providing compensation to beginning teachers
comparable to other professions requiring similar
training;
- Reducing time spent on nonteaching duties;
- Paying compensation partly according to qualifica-
tions;
- Providing advanced study sabbaticals;
- Upgrading accreditation standards for teacher-
training programs;
- Upgrading admission standards for education
majors; and
- Requiring a supervised internship before certifica-
tion.

Conclusion
The survey findings show that only a small fraction of
former teachers (17 percent) say they are likely to
return to teaching in the next five years. Does it seem
plausible that a larger proportion of former teachers
might change their minds and return if policymakers
were to enact many of the changes endorsed by eight in
ten current and former teachers? Perhaps. Trying to
gauge the probable future impact of proposed policy
changes is a very uncertain art. And many individuals
don't know themselves exactly what they would or
would not do in response to hypothetical future induc-
ments. Yet, any increase at all in the return rate would
be a significant help in reducing the expected shortage
of new teacher graduates in the next decade.

But policymakers ought not pin their main hopes on
any big increase in the return rate of those who have
already left for new careers. People who have taken a
major decision in their lives, made a career change,
and are now enmeshed in the duties and rewards of a new
occupation are naturally going to be much harder to
influence than are those who have not yet left teaching.

Prudence suggests that, if we wish to retain the teachers
we have, we should concentrate on doing so before
they leave, rather than hoping to attract them back after
they have walked out the door and taken new jobs.

The principal impact of improving salaries and work-
ing conditions will most likely be achieved with other
groups — with those current teachers who are con-
considering leaving the profession, with college students
trying to decide on a future career, and with those
former teachers, now out of the labor force rearing
families, who may be thinking about whether to resume
their career. This survey clearly shows what steps
would be effective in influencing such people.

The evidence in this survey of Former Teachers in
America offers abundant lessons for action by policy-
makers. The question is whether society can and will act
in time to assure sufficient numbers of qualified profes-
sional teachers in the classrooms of the future.
Planning your summer vacation or weekend getaway? Then take advantage of the AFT Discount Hotel Package Plan, which offers a savings of 50% (or more) off regular room rates at preferred hotels in Washington, D.C., Boston, New York, Orlando, Detroit, Los Angeles, or San Francisco.

This special membership benefit is available exclusively for AFTers.* You can enjoy immediate and substantial savings year round.

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The Coupon

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