There was a world of difference between the freshman English classes I taught in a Chicago public high school.

My "basic" students, mainly African Americans and a few Latinos, plugged away at vocabulary and pronunciation. Filled in the blanks on worksheets and read "grade appropriate" stories that put teen-age content into sixth-grade sentences. Sometimes we would rewrite a story into a play, and the students would briefly become actors. Then, and only then, did they come alive. Otherwise, classes were joyless.

By the end of the year, the third or so who had learned the required skills were upgraded to a regular English class. The others, however, who might have been bright in other ways, were assigned not just to basic English, but also to basic math, general science and other courses that led more to dropping out than to a diploma.

In contrast, my "honors" students, a balanced mix of blacks, whites and Asians, explored classical mythology and read and reported on English and American literature. They created poems, short stories and essays that often appeared in school publications. We didn't just act out plays, we attended them and then debated their merits. Classes were a sea of waving hands and lively conversations.

All my honors students took algebra, most took a foreign language and a good number enrolled in honors chemistry, physics and calculus.

My experience as a teacher illustrates what researchers have found to be a common, and damaging, practice in American high schools and middle schools.

Minorities suffer most

1. Students are branded with an ability level, typically based on a score on one multiple-choice test, and sorted for instruction.

2. The sorting, called tracking or homogeneous grouping, holds back students in the lower tracks.

3. African Americans, Hispanics and Native Americans suffer most because they make up most of the low-level tracks, learning little and rarely escaping.

For example, researcher Jomills Henry Braddock reported recently that a student's high school track—vocational, general or academic—largely determined how well he would handle the reading, writing and math tasks that are part of normal adult life. High school course assignments and adult literacy moved in lockstep no matter how much
schooling a child had received or what his social background was.

"We can say with some confidence that the tracking itself, over and above other factors, is responsible for a significant portion of the [different] outcomes among white, Asian-American and African-American groups," wrote Braddock, a researcher at the Center for Research on Effective Schooling for Disadvantaged Students, Johns Hopkins University.

Critics multiply

Such research has ignited a crusade:
- If minority achievement is going to improve significantly, tracking must be abolished, the Quality of Education for Minorities Project at the Massachusetts Institute of Technology proclaimed recently.
- In March, the Massachusetts Advocacy Center called tracking in Boston's public schools "immoral." With school-by-school and race-by-race statistics, it showed how student placement practices increase the differences in knowledge and ability that students bring to school. Those rich in knowledge get richer while those poor in knowledge slip farther and farther behind, according to the group's report, Locked In/Locked Out: Tracking and Placement Practices in Boston Public Schools.
- In July, the National Education Association (NEA) issued its own report, calling for alternatives to tracking as it is practiced in most American schools, as well as stressing the need for more and better preschool programs to put children on a level playing field at the start.
- Also this summer, the National Governors Association challenged educators to eliminate ability grouping and tracking.

Tracking was designed with the best of intentions: It would enable teachers to deliver instruction to meet the special needs of different groups of students. But abuses abound.

According to researchers, students in low tracks typically:
- Get a school's least experienced teachers.
- Have watered-down, boring lessons.
- Face low expectations and, as a result, don't think much of themselves.
- Are assigned less homework.
- Have little or no chance of moving to a higher track.

Further, low tracks often are dumping grounds for students who misbehave, creating a nearly impossible situation for those teachers who do deliver quality instruction.

Chicago policy fizzled

In the early 1980s, then-Supt. Ruth B. Love took a stab at rescuing Chicago's lowest-performing high school freshmen. As part of tougher graduation requirements, remedial classes were restricted to math and English, and students assigned to them were scheduled into extra "support" classes. However, the policy never worked out well in the schools and support classes are no longer required.

This experience underscores one warning in the NEA report: To be

Ways to reform, replace tracking

The following are recommendations for reforming a typical school tracking system.

Researcher John Henry Braddock offers this advice in an article published in the April 1990 issue of Educational Leadership:
- Postpone tracking as long as possible. To cope with different ability levels within a class, group students for just reading and math. To narrow the ability range in these groups, grouping may have to reach across grade levels, combining, say, high-achieving fifth-graders with low-achieving sixth-graders.
- Limit tracking to as few subjects as possible.
- Create a better assignment system. At a minimum, use separate, recent tests in each subject.
- Experiment with new methods of student assignment. For example, offer students extra credit for moving to a higher level course.
- Keep "special needs" classes—for the gifted, handicapped and English deficient—to a minimum, ensuring that they meet real needs.

In the Spring 1990 newsletter of the National Center on Effective Secondary Schools, Adam Gamoran recommends:
- Rotate teachers among track levels, to ensure that all students have equal chances of being taught by the school's most talented teachers.
- Ensure that students can shift tracks as their needs change. This requires a system of student assessment "that takes seriously the possibility of growth," as well as "extra-help" courses to help students cover material they might have missed in a lower track.
- Improve instruction in lower tracks. "Improving instruction in low tracks starts with—but must not be limited to—raising expectations."

In the typical low-level class, children are presented isolated bits of knowledge and practice isolated skills. Teachers should work instead to relate new knowledge to what children already know and to show children how different kinds of knowledge, such as reading and writing, work together.

Schools that move to nontracked classes will have to change instruction, too, so that slower children do not fall through the cracks and faster learners are challenged. Recommendations include:
- Use cooperative learning.
- Use activities of the "whole language" approach to teaching reading. For example, as a group, children brainstorm ideas for stories they will write and then read their stories to each other.
- Provide extra help, such as peer tutoring, to students who lag behind.
- Reduce the size of classes significantly.
- Arrange for team teaching.
effective, change must be crafted by individual schools.

Several years ago, the Board of Education in San Diego, Calif., also decided to do away with remedial courses in its middle and high schools. In contrast to Chicago, however, it set a seven-year timetable that includes refocusing the content of courses for lower-ability students. Like higher-ability students, they will deal more with problem solving.

The vast class-to-class differences in student performance at the high school level do not, of course, appear overnight.

In the primary grades, schools accentuate the differences between children by assigning them to reading and math groups based on ability. Those group assignments often become classroom assignments in the middle grades. And these classroom assignments lead directly into high school tracks. "Tracking grows more rigid over time," said the NEA.

And the tracks move farther and farther apart, making their undoing more and more difficult.

Indeed, a number of Braddock's colleagues at Johns Hopkins University contend the best way to assure that no students are left behind is to pour enormous energy, creativity and resources into the early grades.

At least two schools, Gale Community Academy, 1631 W. Jonaquil, and Heffran Elementary, 4409 W. Wilcox, are abandoning the practice this school year.

Gale is combining its average and "gifted" tracks as it moves to a new year-round attendance plan. Children

"Public mythology holds education to be the route out of disadvantage....Schools that track set up gates that bar the roadway."

—Stephen R. Bing

And they are doing just that in 10 inner-city schools, where the goal is "to ensure that virtually every student will reach the third grade on time with adequate basic skills." (See separate story on page 4.)

In Chicago, there is no tally on the number of elementary schools that sort children into different classrooms based on "ability." A sizable number, was the educated guess of one central-office administrator.

will be asked to sign up for one of four specialty programs, each with its own school-year calendar.

Principal Edith Snyder said that the 30 lowest-scoring students in fourth, fifth and sixth grades will be assigned to classes of only 15 students each for a "different" kind of instruction. "Our goal is to help them believe they're going to pass up the rest, soon," said Snyder.

This approach—both grouping by student interest and high-powered instruction for slow learners—is in line with recommendations made by the critics of tracking.

At Heffran, the switch was prompted by the arrival of a new principal with different ideas. "We're going to pump those kids up and raise our standards," said Principal Patricia Harvey. "We're going to teach at grade level and if the youngsters are not ready, we're going to offer support."

Heffran's plans include: improved staff development for teachers, more planning time for teachers, team teaching, peer tutoring and, as at Gale, smaller classes for the lowest-performing students.

Experts would nod approvingly at these plans, for they include some of the top recommendations for working with a wider range of pupil performance.

With peer tutoring, the experts note, the tutor deepens his understanding as he helps c classmate.

The "whole language" approach to teaching reading sometimes is recommended because it ties together reading, listening and writing and emphasizes group experiences. For example, children choose their own reading material and discuss their reading with each other. They also can create their own spelling lists, using words they need for their sto-
Cooperative learning is recommended because students are divided into small groups and given incentives to help each other learn. (See separate story on page 6.)

Over all, the success of nontracked classes depends on updating the skills of people who work with children, said Georgia Hudson, principal of Lathrop Elementary, 1440 S. Christiana.

Since abolishing tracking six years ago, Hudson has invested heavily in people. Teachers have had special training and get five undisturbed periods each week for planning lessons. She has hired extra teachers to reduce class size to about 25. And parents have been trained to work in Lathrop’s extensive tutoring program.

'WE CAN TEACH ALL KIDS'

"Hudson has a vision of where Lathrop should be," said teacher Ann Dargas. "She’s shown us we can teach all kids."

Aiding the shift to nontracked classes are new regulations on the use of federal Chapter I funds. Under the revised rules, schools with at least 75 percent low-income children no longer have to spend that money only on their lowest-achieving children. They can use it instead for schoolwide programs.

Experts who call for the elimination of tracking concede they face a very steep uphill battle. Teachers and the parents of high-track students champion tracking, surveys have shown. And experts disagree over whether high-ability students can be as well served in mixed-ability classes as they are in tracked classes.

In Boston, the Massachusetts Advocacy Center bowed to this reality by recommending that high schools maintain honors courses, which many universities look for when admitting students. Other cities have reduced the number of tracks in their high schools.

The research community itself is divided over whether tracking should be replaced or just reformed, though reform is considered a must.

"Public mythology holds education to be the route out of disadvantage," says Stephen R. Bing, executive director of the Massachusetts Advocacy Center. "Perversely, schools that utilize tracking ... set up gates that bar the roadway."

Liane Clarrance Costen is a Chicago writer and former English teacher.

For more reading:


Locked In/Locked Out: Tracking and Placement Practices in Boston Public Schools, a 1990 report by the Massachusetts Advocacy Center, 95 Berkeley St., Boston, Mass. 02116. The report includes descriptions of alternatives to tracking and schools that are pioneering new approaches. ($10 prepaid)


"High School English Students in Low-achieving Classes: What Help?" by Martin Nystrand. Spring 1990 newsletter of the National Center on Effective Secondary Schools, 1025 W. Johnson St., Madison, Wis. 53706.

Three model programs deliver equal education

In elementary school: Pulling out the stops before third grade

Guided by research and fueled by dedication and extra money, 10 inner-city elementary schools, most in Baltimore, are out to wipe out the need for remedial education.

Judging from early returns, the effort, called Success for All, looks to be a success. After only one or two years in the program, Success for All schools posted far higher reading scores in each grade covered by the program than did comparable schools without the program.

For example, Success for All first-graders scored at the 50th percentile, or national average, while first-graders in comparable schools without the program scored at the 28th percentile, meaning they did better than only 28 percent of children across the country.

For children at the bottom of the first-grade classes, the difference was even more dramatic: Success for All youngsters scored at the 38th percentile; nonprogram youngsters, at the 8th.

A joint project with researchers at Johns Hopkins University, Success for All is funded by each school’s federal Chapter 1 money as well as other federal or private grants, bringing the total as high as an additional $1,000 per pupil. The program spans preschool through third grade. The greater the investment, the higher the returns, researchers have found.

Here are the key elements:

■ Each school has a half-day
preschool program and a full-day kindergarten.

- Each class has a range of student ability, but students are regrouped by ability for 90 minutes of reading instruction each day. Groups are limited to 15 children and may include children from different grade levels.

- The reading program puts an early emphasis on language development and comprehension and uses minibooks for phonics. Children often work in groups.

- Fully certified teachers provide 20 minutes of one-on-one tutoring each day for children who lag behind in reading.

- Children are re-evaluated every six weeks to determine who needs tutoring and whether children should change reading groups.

- A family-support team—its size depends on funding—helps parents help their children and arranges for needed family services.

- Teachers attend two days of inservice education at the beginning of the year and brief periodic sessions on various aspects of teaching and classroom management during the year. They also receive a detailed manual.

- A full-time facilitator helps operate the program and frequently visits classrooms and tutoring sessions, offering assistance to teachers.

- An advisory committee meets frequently to review progress.

For additional information, contact Lawrence Dolan at the Center for Research on Effective Schooling for Disadvantaged Students, Johns Hopkins University, 3505 N. Charles St., Baltimore, Md., 21218 (301)-338-7570.

In high school: Putting 'remedial' students into honors courses

In 1980, Mary Catherine Swanson, a teacher at Clairemont High School in San Diego, Calif., played a hunch about 30 freshmen who had low English scores but high math scores.

They were headed into remedial classes, but Swanson figured they could handle college preparatory work if they got special help. She was right. By the end of their junior year, the group had posted a B average, in honors courses.

Today, 70 middle and high schools in San Diego County are using the program Swanson designed, Advancement Via Individual Determination, AVID for short.

Of the 238 AVID students who have graduated, 225 went on to college. As freshmen, they did better by nearly a grade point than did the average freshman in a California state university.

These are AVID's key elements:

- AVID students are required to do lots of writing in all subject areas.
- Students take notes in class and then bring them, along with questions they have, to study groups. "That gave us a clear idea of what they understood," said Swanson.
- Top Clairemont graduates were hired and trained to run the study groups, principally by asking questions that lead the AVID students to find answers for themselves.
- Lessons were provided in time management, note taking, efficient textbook reading, library research and study habits.

For more information contact AVID, San Diego County Office of Education, 6401 Linda Vista Rd., Room 216, San Diego, Calif. 92111 (619) 292-3500.

In middle school: Teaming up to teach, learning as a team

At Mark Twain Middle School in San Antonio, Tex., four teachers teamed up to give likely dropouts the kind of education that only the best students usually get.

They tossed out fill-in-the-blank worksheets and drills and replaced them with projects showing how school subjects relate to each other, an approach called interdisciplinary teaching.

The projects called for "doing" as well as reading, writing and listening. For example, a study of water rights wound up with a visit to a city council session on water. For a unit on family histories, students checked out cameras to take pictures for their reports. And they made costumes for dramatizations of historical events.

Writing was a group event, with students helping each other develop ideas and then critiquing and correcting each other's work.

And students selected their own mentors—judges, politicians, favorite people—who were invited to read to the class. Each student also was paired with a worker from a nearby office, who visited the school weekly to tutor or just talk with his or her assigned student.

At the end of its first year, the program had put 10 percent of the likely dropouts on the school honor roll. A later study found it also cut the dropout rate.

Liane Clorfone Casten
Cooperative learning brings out best in all students

by Linda Lenz

A teaching method called cooperative learning is among the top recommendations of experts seeking to eliminate or reduce student tracking. However, leading specialists in math, reading, science and other subjects recommend cooperative learning as a powerful teaching method for all kinds of classes. The following stories on cooperative learning first appeared in the Chicago Sun-Times.

A new way of teaching based on an old saying, two heads are better than one, is invigorating students and teachers in schools as diverse as Palatine High in a northwestern suburb and Wilson Elementary in poverty-plagued Chicago Heights.

Called cooperative learning, the method breaks classes into small groups of students, usually of mixed abilities, and forces them to help teach one another.

For example, Carol Brost paired her Wilson second-graders for a recent spelling lesson. Both members of each pair were to agree on each answer and write them in their own spelling books. Then, Brost collected only one book from each pair for grading.

Using another strategy at Palatine High, chemistry teacher Gary Kraft said that if he has one A student and one F student in a group he might let the A student skip a quiz if the F student passes the next quiz.

In every cooperative lesson, however, each group member has a separate task. During class, for example, one might do the reading, another write the answers and a third check to make sure everyone understands the lesson.

For homework, students might divvy up parts of a chapter or book—like low school students cramming for the bar.

"I'll hear kids tell each other: 'Don't forget your work,'" said Palatine science teacher Roy Schodtler.

Cooperative learning, said Kraft, "puts the responsibility for learning back where it belongs, with the students."

Helps shy students

Students seem to like it that way. "It's like having three different tutors if you don't understand something," said sophomore Jeff Stockwell, adding that some kids "are too shy to ask the teacher."

"You learn more because you get to share ideas," said Brian McNamara, a junior. "My grade in this class is great and I've never had good grades."

New approach wins converts at Palatine High

At Palatine High School, biology teacher Tony Krotz was the first to get religion.

While working on a master's degree at National College of Education, he happened upon cooperative learning, and it made him a new man.

"Tony has always been a strong, solid teacher," said Kenneth Spengler, chairman of Palatine's science department, "but it was like he had been to a religious revival."

Krotz even wears a symbol of his faith: a whistle signifying his new role as a learning coach.

"I would come back to the office, and say: 'This is what I did,'" Krotz recalled. "Pretty soon teachers were carrying on professional conversation about strategies and techniques. We began to help one another and support one another."

That was in spring 1988. In summer 1988, Krotz's colleagues read Circles of Learning, a cooperative learning testament by University of Minnesota professors. In fall 1988, they attended a cooperative learning course arranged by Township High School District 211.

The science teachers now visit each other's classes, a rarity in American education, and meet every Wednesday after school, a practice they consider essential for keeping up the hard work of cooperative learning. Teachers from other departments have joined the gathering, and other cooperative learning courses have been held.

"It's become very contagious," said Spengler. "We have seen fads come and go but cooperative learning is going to stay."
Success at last for two social outcasts

Where cooperative learning enthusiasts gather, you'll likely hear poignant stories of transformed kids. Some samples:

- Sighs of relief spread through one of Sally Berman's chemistry classes at Palatine High as she assigned students to groups and the students learned that one student in particular—call him Bill—was not in their group.

Bill behaved strangely. He mumbled, he kept his head down while talking to people, he couldn't walk up to someone and ask a question. He was a social outcast.

Berman took care to team Bill with students, both girls, she thought would be supportive. She gave the girls a little pep talk and began writing notes to Bill, encouraging him to lighten up.

Slowly, the young man came out of his shell. At the same time, classmates saw the work Bill could do and began to seek him out for answers, Berman said. "Now he walks right up to you, introduces himself and offers to help," Berman said.

"He accepts help. And cracks jokes."

She added: "It's a shame he got to be 16 years old before he got this opportunity to shine."

- At the beginning of the year, one boy in Mary Davidson's fourth grade at Indiana School in Park Forest "was totally tuned out," she recalled.

He looked out the window, wouldn't answer questions, fiddled with things in his desk or just got up and walked around. That behavior subsided, however, once he began working in groups.

"One of the rules is: Keep your heads together," said Davidson. "You have to communicate and respect each other's opinions. This child saw that his opinions were respected. He suddenly discovered his self-worth."

Davidson said that both she and classmates discovered that the boy has an excellent vocabulary and a lot of knowledge.

"His parents are elated," she added. "They know that fourth grade is a pivotal point."

Linda Lenz

Some students with great grades are unhappy about sharing their intellectual wealth, teachers said.

Senior Keelam Chang was like that at first. After seeing that his grades didn't suffer, he became a fan. "If I know more, I can help," he said. "And it's fun."

Teachers eavesdrop

Teachers help groups over tough spots and eavesdrop to see how well learning is progressing. And they still lecture, only less often.

"The problem [with the traditional lecture] is that I'm answering the question before anyone has asked it," said Kenneth Spengler, chairman of Palatine's science department, which launched cooperative learning last fall. "With this approach I may answer the same question eight times but I do it when the kids need to know. They're paying close attention because they initiated the question."

So far, results at Palatine are encouraging. Students are failing science at half the rate they were last year.

Also in their first year of cooperative learning, teachers at Wilson Elementary see improvement, too.

Kindergarten teacher Marilyn Tracy said more pupils speak in complete sentences, which she attributed to their having to explain things to their partners.

"A year ago, I always had children who failed math facts quizzes," said Janet Colangello, a first-grade teacher. "Last week, all but two had an A plus."

When pupils practice in pairs they get more practice than when the teacher does all the questioning, Colangello noted.

Pupil behavior is improving at Wilson but it was slow coming, said Principal Dollie Helsel. The first attempts at cooperative learning failed because the pupils didn't know how to get along, she said.

Before every cooperative lesson, teachers tell their pupils they will be looking for one or more social skills, such as taking turns or 'happy talk,' which is co-op learning's term for encouragement.

The results can be comical, with the class erupting into chirps of "fantastic," "good work," "I like the way you did that." Children also shake hands after agreeing on an answer.

However, teacher aide Diane Lund said manners are improving outside school, too: "I live in the neighborhood and will hear kids say, 'You did a good job.' It's common for kids to say to each other, 'That's stupid.' Now I hear, 'I don't agree with you.'"

Epilogue

Since this story was first published April 16, 1989, Wilson Elementary has become a showcase school. All of its teachers have added cooperative learning to their ways of teaching. Children's test scores have risen dramatically.

At Palatine High School, cooperative learning has spread throughout the science department. Science course failures plummeted after the first year but rose slightly after the second. School officials stress that two years is too short a time for drawing conclusions.

A number of Chicago schools have adopted cooperative learning, too. They include Saucedo Elementary Magnet, 2850 W. 24th; Terrell Elementary, 5410 S. State; and Trumbull Elementary, 5200 N. Ashland.

Studies in elementary schools have found that cooperative learning improves student achievement, but studies in high schools, over all, have been inconclusive, said Adam
Civil rights leader promoting algebra for all

by Michael Klonsky

In the "tracked" schools of America, algebra acts as a switching station.

Students who learn algebra early typically get switched onto the fast track that prepares students for college and, in the long run, good jobs.

Students who don't learn algebra early get switched onto the slower vocational or general track. In today's high-tech economy, those tracks lead mainly to low-level jobs and sometimes to no job at all. And they are loaded with African Americans and Latinos.

For Robert Moses, a civil rights leader in the 1960s, that set of math facts makes algebra a civil right.

Drawing on his experience as Mississippi director of the Student Nonviolent Coordinating Committee and leader of the Mississippi Freedom Democratic Party, Moses is promoting algebra for all.

Mississippi revisited

Just as he helped Mississippi blacks see why it was important to be able to vote, Moses helped fellow black parents see why it was important for their children to learn algebra. That was in the early 1980s at Martin Luther King Elementary School in Cambridge, Mass., where his children were enrolled.

At the time, no King students were taking, let alone passing, the citywide test that would enable them to skip algebra in high school and move directly to higher-level math.

Since then, Moses, a mathematician, has developed a new way to teach algebra to all students beginning in sixth grade, regardless of how well they had been doing in arithmetic. He also has joined hands with the Efficacy Institute in Boston, Mass., which seeks to show students, parents and teachers how self-confidence and effort, rather than "ability," can form the basis for learning.

As a result of these developments, 40 percent of King's 1989 graduates passed the high school algebra exam and most of the others were placed into honors algebra as freshmen.

Last May, Moses came to Chicago to demonstrate his teaching method to teachers, parents and members of local school councils. He found fertile ground, for his Algebra Project and Chicago's school reform movement seem cut from the same cloth: The success of both depends on the cooperation of schools, families and communities. Both are a form of community organizing, of empowering people to determine their own futures.

Appropriately, Moses' two Chicago workshops were sponsored by the Neighborhood Innovations Network at Northwestern University in cooperation with two neighborhood organizations: the Developing Communities Project and the South Austin Coalition Community Council.

Teaching from experience

Moses' teaching method begins with a real-life experience, a ride on the subway. This was the same approach he and fellow civil rights workers used to teach reading and writing in the Freedom Schools of the South. Teaching started with what people already knew. And it was a group effort.

Further, Moses believes that by taking the classroom into the city's public transportation system, students will learn to respect and take care of something that belongs to them.
In exchange, he reasons, the Chicago Transit Authority should pitch in, perhaps by providing a bus to take children from their school to the nearest subway stop. The CTA also could brief students on the workings of the CTA. With these suggestions, Moses once again aims to build bridges between school and community and show how each is dependent on the other.

The city, of course, has a far more important reason for working for and with the Algebra Project. Without it or something like it, few Chicago students will get on the track that takes them through the courses they need for college.

A year ago, about 85 percent of Chicago’s entering high school freshmen were enrolled in algebra, with about 12 percent of those students in honors classes, according to the Board of Education. But a large number of students failed the course: 17 percent of the honors students and 32 percent of the regular students.

For these students and thousands more like them each year, that failure constitutes a denial of equal opportunity. For the city, it amounts to a tremendous waste of resources.

Michael Klonsky is a Chicago writer.

For more information on the Algebra Project, including a forthcoming videotape of Robert Moses’ presentation in the Austin community, contact the Neighborhood Innovations Network, Center for Urban Affairs and Policy Research, Northwestern University, 2040 Sheridan Rd., Evanston, Ill. 60208-4100 (708) 491-3395.

40 years late
Algebra begins to sink in

by Bruce R. Thomas

I am in a church meeting room on the Far South Side. With me are some 30 other people—teachers, parents, local school council members. And Bob Moses.

Moses is, literally, walking us through his Algebra Project. He has us up on our feet, forming lines, shifting positions, making trips to the chalkboard. He, too, is constantly moving, quietly talking all the time.

I am instantly moved back 40 years, becoming a grade-school student befuddled by math concepts I never came to understand.

“What is the basic question in arithmetic?” asks Moses. We toss around answers and finally settle on: “How many?” That makes sense. Virtually all arithmetic dances around this one simple question: How many times does 4 go into 12? If there are 13 cats and 9 emigrate to Samoa, how many remain? If 18 mommy elephants each have 4 baby elephants, how many mommy and baby elephants are there?

But algebra is different. “How many?” is important, but so is at least one other question. Moses asks us what that other one is. We stumble around it and toward it but never get to it. He finally, quietly tells us: “Which way?”

“What way?” What’s “which way?” I don’t get it.

As I try to figure it out, Moses asks us to tell him about a local subway line. We choose Jackson—Howard, the stretch from 35th Street to 95th Street. Volunteers rise to form that stretch, each one representing a stop.

A human number line

We begin to play around with questions about taking a trip from 35th Street to 63rd Street: How many stops does the trip involve? Which direction are we going?

It slowly dawns on me: Moses is creating a human number line to get at the meaning and importance of direction in algebra. “Which way?” is beginning to sink in.

We toss out more questions and answers, and Moses moves to the chalkboard, capturing the discussion with a sketch, words and symbols. He asks us to take a trip from 35th Street to 47th Street and come up with a way to describe that trip in symbols. Volunteers write their suggestions on the chalkboard. For example: \((x+2)\) and \((x \rightarrow 2)\).

With these symbolic pictures of our trip from 35th to 47th Street, we have completed our walk through the five steps of the method Moses created to teach algebra to all youngsters.

We started with a physical event or experience, the subway trip. (Kids in the project take a real subway trip.) Then we made a picture or model of the event. Next we described the event in everyday language. After that, we replaced everyday language with the symbolic language of math. Finally, we developed our own set of symbols as ways of reproducing the experience.

For a group of sixth-graders, going through these steps could take weeks. With shortcuts, we adults walked through them in about an hour and a half. We learned—in my case, began to learn—how to associate one question (How many?) with another (Which way?). We began to see how numbers can move backward and forward, up and down, as well as be added and subtracted.

More generally, we built our own...
Opinions

School reform shaped to preserve white power

by Robert T. Starks

Mayor Daley's refusal to make African Americans a majority on the new Board of Education shows, once again, that school reform is aimed at serving and preserving the city's white power structure.

African-American children make up 50 percent of public school enrollment. But African-American adults will make up less than half of the new board, unless the City Council rejects Daley's appointments. Given the history of school reform to date, this outrage is no surprise.

First we saw a corps of veteran black school administrators replaced by people more open to the bidding of the liberal, middle-class education groups allied with Daley. Officials of two of those groups, Leadership for Quality Education and Designs for Change, even have seats on the interim Board of Education.

Then we saw Daley maneuver to extend the life of his handpicked interim School Board, which also lacks an African-American majority.

Daley keeps control

Under state law, the mayor is to act on School Board candidates "within 30 calendar days after a slate of candidates is approved by [the School Board Nominating] Commission." Daley ignored that mandate last spring and probably would have continued stalling if he had not faced protests organized by a group I lead, the Task Force for Black Political Empowerment.


For two weeks, we staged demonstrations in front of the mayor's office, picking up the support of the Latino Coalition for Progressive Education and a white group from Uptown called the Coalition of 1,000 for Awareness.

'Curious' deadline

We demanded that Daley not only follow the letter of the law, which sets timetables for the selection of School Board members, but also the spirit of the law, which directs the mayor to "consider the demographics of the student population" when making appointments. In Chicago, that means a School Board composed of nine African Americans, four Hispanics and two whites.

On May 16, we moved our demonstration to the Interim Board of Education, which was supposed to have gone out of business May 15.

The May 15 deadline is a curious one that underscores the conspiratorial nature of reform. The law says the terms of the Interim School Board members "shall expire on May 15, 1990 or upon the appointment of the new board, whichever is later." Typically, such deadlines read whichever is sooner. Seeing the likelihood of Daley's election, the framers of the School Reform Act built in extra time for his School Board.

The mayor took full advantage of that gift. He stalled when he got the first group of slates from the nominating commission, and he stalled again when he got the second group.

Meanwhile, three-year school union contracts have been approved, and the school personnel pot continues to boil. More central-office layoffs are in the works. And Supt. Ted D. Kimbrough fired 151 security guards, selected from the community, to save up money for members of Mayor Daley's police force to be assigned to high schools.

The removal of black leaders and Daley's actions to date have served the general goal of reshaping the image of the public schools so that it is more acceptable to the city's white, middle-class establishment.

Black voices muffled

By catering to the establishment, the mayor figures to lessen the resistance of business leaders to higher taxes and, thus, to coax more school money out of the state legislature. The underlying logic is that public education is doomed without white, middle-class dominance and black subordination in the agenda setting and operation of the schools.

Putting aside its white-supremacy roots, this logic overlooks the state's constitutional obligation to educate
all children.

School reform groups point to the support of African Americans. But there is no doubt in my mind that the masterminds of school reform were mainly white and middle class. In one sense, the reform groups bought their rainbow of backers because they got organizing grants from businesses and foundations. Black groups never see that kind of money.

The organizations that have protested Daley's actions believe in education reform and have fought for it individually and collectively over the last 25 years. We have rejected this current version of reform for the following reasons:

- Reform should be driven by parents and community. Local school council members were elected to represent their schools and communities, but the Interim School Board has locked them out of decisions about the future of reform.

- The School Board should reflect the majority African-American presence in the public schools. Neither the interim board nor the new board does.

- Schools should receive equitable and adequate funding. The School Reform Act provided no new money and did not go far enough in correcting inequities.

- The entire emphasis from this school administration has been on bureaucratic changes, with scant attention paid to the crucial changes needed in the content, purpose and direction of education. The mayor's office has aggravated this problem by appointing a deputy mayor for education who has no clearly defined duties or role, has given no direction, has failed to link the mayor's office with local school councils and has generally engaged in alienating rhetoric.

It is clear to us, then, that the intent and the spirit of Mayor Harold Washington's Education Summit, the original education reform initiative, has been derailed and subverted by the Daley administration with the intent of controlling the bureaucracy and politicizing the process of reform.

In fact, Mayor Daley has used education reform as a tool to further divide and fragment the people of Chicago. The mayor has chosen to ignore the pleas of the overwhelming majority of parents who support meaningful reform and are eager to participate, as we saw by their enthusiastic participation in council elections and efforts to govern. The mayor and the Interim Board of Education have locked out this vital resource.

Robert T. Starks is an associate professor of political science and inner-city studies at Northeastern Illinois University.

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Law distorts teachers' voice

by Gerald R. Adler

Chicago's version of school reform was born of politics. But in some key areas it fails to take account of political reality. This is especially true where the school reform law deals with teachers and their role in reform.

If teachers and other local council members are to work in harmony, the law must be changed. As a long-time political and teachers union activist, I offer these recommendations:

- Teacher members of local school councils should not be allowed to vote in the selection of principals.

The "politicking" by teachers for or against a candidate is very divisive among the faculty. The choice of a principal is important, but so is the unity and morale of the faculty.

Further, allowing teacher LSC members to vote on their boss, a member of management, runs counter to collective bargaining procedures. Under collective bargaining, neither side may choose or have veto power over the representative chosen by the other side.

And as union members, teacher LSC members may some day have to file a grievance against the person they helped install.

Instead of voting, teachers should follow the example of bar associations in judicial elections: Interview the candidates and rate them as well qualified, qualified or not qualified.

At the same time, teachers should work to make their union a more viable force for teacher empowerment.

- Principals should not serve on professional personnel advisory committees.

The presence of a principal often has a chilling effect on discussions. Teachers should be free to debate their proposals and agenda by themselves. Then they should present their ideas to the principal and negotiate a school improvement plan that they would jointly propose to the local school council.

If the PPAC is not made separate but equal, it will become no more than a "company union" or "front" for the principal, as PTAs often were.

- Special elections should be held to fill teacher vacancies on local school councils.

Permitting the LSC to select replacements for elected representatives is an invitation for trouble. Indeed, a teacher vacancy and the way it was filled played heavily in one of the most disruptive and disputed principal selections in the city last spring.
In the case of teachers, holding a special election is easy.
  ■ Steps should be taken to dilute the power of wealth and special interest groups.

Many problems in larger political life stem from the power of special interests. We should not allow such problems to affect local school councils. Every LSC candidate should get one free mailing, through the school, to parents and employees. Candidates should be able to use school copying machines for free, so long as they provide paper.

While not a matter of law, teachers should be discouraged from campaigning for any parent or community candidate, and parent and community candidates should be discouraged from campaigning for teacher candidates. And no teacher union money or resources should be extended to any candidate.

Over all, the goal of my recommendations is to create harmony among the interest groups recognized in the law and deter manipulation or domination of one group by another. These groups may have the same goals, but they do not always agree on the best way to achieve them.

In Chicago, forging a consensus is especially difficult because members of the school governing bodies are so different. (In the suburbs, members of school governing bodies are similar and often are marched into line by a superintendent.)

While LSCs vote and the majority rules, councils need training in negotiating differences and building consensus. Such training should be done by a neutral party. I suggest the Quakers, specifically the American Friends Service Committee. The Quaker church is built on consensus. It rejects hierarchy. It has no Chicago school agenda. It is perfect for the job.

The need for skill in reaching consensus likely will grow more important. I predict we eventually will see supplemental teacher "contracts" negotiated at each school. The Chicago Board of Education and the Chicago Teachers Union will negotiate the master agreement, but school staffs and LSCs will add their own working agreements.

The likelihood of this development is one more reason the law should be changed to establish teachers as separate but equal participants in school reform.

Gerald R. Adler is a teacher at Kelly High School.

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**Letters**

What happens to infants affects school learning

As CATALYST suggested in its September issue, school reformers must support programs that help families prepare their youngest children for school.

Research by Prof. Benjamin Bloom of the University of Chicago shows that more than half of our intelligence is in place by age four.

"General intelligence appears to develop as much from conception to age four as it does during the 14 years from age four to 18," Bloom says. And, he points out, general intelligence seems linked to an underlying pattern of habits and ways of relating to the world—patterns learned as early as infancy.

Many infant specialists support this belief that learning patterns in humans develop at a very early age. Dr. T. Berry Brazelton, a well-known pediatrician, says he can tell whether a nine-month-old child is likely to succeed in school simply by observing how the child approaches very simple tasks, such as playing with blocks.

A recent national study presents perhaps the most convincing evidence that programs providing resources and education to families with very young children can significantly effect the learning capacity of these children. The study is called the Infant Health and Development Project, and it involved 985 premature, low birth-weight babies and their parents.

For three years, all babies and their parents received pediatric care and help from other community agencies at regular intervals.

But a third of the babies and parents, chosen at random, received three additional services. In the first year, researchers visited these families weekly, providing health and development information to the parents and a program of games and activities for the children.

During the second and third years, children in this group attended a child development center five days a week, while families continued to receive home visits and attend parent group meetings.

At age three, the children who had received extra services exhibited better social functioning and scored substantially higher on intelligence tests. The children who had not received extra services were three times more likely to be mentally retarded.

This dramatic evidence that efforts to ensure the healthy development of at-risk infants and toddlers can indeed affect their chances of school success.

Susan R. Miller
Kids Public Education and Policy Project

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Add poor people to board?

I read with interest "Add Poor People To Board" (CATALYST/Opinions, May, 1990) wherein Carlos Heredia argues that poor people should be appointed to the Board of Education and paid to serve.

Since poor people are usually uneducated, is he suggesting that we add uneducated people to the Board of Education, in principle?

He says that "a blue collar worker, a welfare recipient or a member of the working poor must have a means of support." Can blue collar workers and a member of the working poor take time off from their jobs to attend board meetings? As for the welfare recipients, they have a means of support. They receive welfare.

It would be helpful to examine the composition of school boards where there are really excellent schools (like Evanston, for instance) and see if their outstanding school systems are the result of having "poor people" represented.

I hope that "poor people," unlike ethnic groups whose identity is unchangeable, and who are, with good reason, proud of it, will become rich people as soon as possible.

Joy Cathou
Glen Ellyn
REFORM UPDATES

**Studying reform** Promoting "an informed public discourse about schooling in Chicago" is the aim of a consortium launched by the school system, area universities and school research groups.

The consortium has three initial goals:

- Creating an agenda of studies that will not only document and measure changes under school reform, but also contribute to school improvement. Opinions and ideas will be sought from parents, principals, teachers, and other school "stakeholders."

  "Broad access...is critical because those who control the agenda significantly shape future thoughts about school improvement in the city," a background paper says.

- Recommending what information the School Board should collect periodically to indicate whether schools are better serving children and children are learning more.

- Devising a way to maintain and catalog data so that quality and availability are improved.

In all these endeavors, the consortium will strive to make research "user friendly" for people working in schools.

More broadly, the consortium's work is important to grass-roots reformers because "what gets looked at shapes what gets talked about, and that determines how people conceptualize reform," said Tony Bryk, a University of Chicago professor who is organizing the group.

The Chicago Research Consortium is unusual because it includes the public schools. "Usually, those with control don't want to share it," said Bryk.

Yet it was a request for help from the Board of Education's research department that sparked the project.

Recognizing the public's distrust of central office, school officials reasoned that the public would not have faith in any reform progress reports unless outsiders helped prepare them.

**Chicago not so radical**

Chicago gave birth to a reform plan called the most radical in the country, yet its first steps are quite conservative, according to a consultant who has reviewed them.

"Here you have school councils that are free to think big, but they have not gone outside the mainstream," said Fenwick W. English, a specialist in education administration at the University of Cincinnati.

English is a consultant to the Chicago School Finance Authority, which, by law, is the final official judge of the school system's master plan for reform. Much of that plan reflects what local school councils have decided to do.

As an example of radical reform, English pointed to Kentucky, where the state's school funding system was declared unconstitutional. The legislature subsequently adopted a school reform plan drawn up largely by a consultant.

That plan included, for example, the elimination of grade divisions for children in kindergarten through third grade, a form of school organization recommended by many early childhood experts. The plan also provides that all workers in a school can have their salaries docked if pupil achievement does not rise.

English said that Chicago's democratic approach to reform is unlikely to produce radical change: "Where do people get their ideas? They get them from their own educational experience or the popular press, which is usually mainstream."

Further, unlike Chicago schools, Kentucky schools got more money to put reform into effect.

While English is not impressed by Chicago's master plan, he is not attempting to impose his ideas. Instead, he is telling the finance authority whether each section meets the requirements of the reform law and is a "reasonable" application of professional educational research and opinion.

The authority does not intend to impose its ideas either. Said chairman Philip D. Block III: "The plan should be something that comes from the board. Implementation will be more expeditious if it comes from them."

In August, the authority accepted about 40 percent of the plan, following several wholesale rejections since August 1989. The main problem was that sections lacked cost estimates.

SCHOOL BOARD ACTION

**New promotion policy**

Teachers should focus on grades rather than test scores when deciding whether to promote a student, the Board of Education says in a revised promotion policy.

"The primary factor to be considered...is the student's successful completion of the curriculum for the assigned grade," the policy says.

"The curriculum includes reading, the other language arts, mathematics, science, social studies, art, music, health and safety education, physical education and library science. Successful completion of all these subjects...is important."

The old policy included recommended minimum test scores for promotion, a practice under increasing attack from education experts.

The new policy discourages pupil retention and encourages schools to involve parents when students appear
to be in danger of flunking. An elementary school student may be retained or demoted only once.

**Orders anger LSCs** Two personnel shuffles ordered by Supi Ted D. Kimbrough angered principals and local school councils, who complained they were not consulted.

The first order was a matter of law and the Chicago Teachers Union contract; the second was a matter of money.

Under the first order, some 200 teachers were temporarily assigned to schools without principals’ approval. These are so-called supernumeraries, the term for teachers who lose their positions because of declining enrollment or program changes at their schools.

The legislature guaranteed jobs for such Chicago teachers. The union and Board of Education then negotiated the details: A supernumerary must apply for a vacancy. If rejected by three different principals, he would be assigned by the superintendent.

Principals recognize the need to put supernumeraries to work, said Bruce Berndt, president of the Chicago Principals Association. But they are angry, he said, because supernumeraries are replacing teachers they had recruited.

Kimbrough’s second personnel order was to fire 151 security monitors so that he would have money to hire 90 police officers to patrol high schools. Again, most security monitors had been recruited by principals from their communities. Schools that lost monitors are to receive increased attention from officers in beat cars.

High school principals want more security, but they are concerned about receiving officers who have not had experience dealing with teenagers, said Berndt. They also are concerned about their ability to supervise employees of the police department, he added.

**RESOURCES**

**LSC lessons** Next month, every public school will begin receiving a free set of videotapes and printed guides aimed at helping local school council members do their job better.

The video training library will cover these topics: duties and authority of local school councils, effective meetings, budgets, building support for school improvement, creating vision statements and action plans, principal leadership and working with principals.

The library is being produced in English and Spanish by the City-Wide Coalition for School Reform and Leadership for Quality Education. For more information contact Ronald Sistrunk at the coalition (312) 663-3603 or Chris Warden at LQE (312) 592-5545.

**Assist for black parents** Jack and Jill, a national organization that helps African-American parents arrange educational, social and charitable activities for their children, has a chapter in Chicago.

The group’s goals are to ensure that black children understand the importance of education and of contributing to their communities. For example, the Chicago chapter last year raised $4,000 for a shelter for seriously ill children.

Jack and Jill was founded in 1938 by a group of mothers in Philadelphia. It has 199 chapters in 35 states. For information about the Chicago chapter, write Marietta Beverly, 9150 S. Constance Ave., Chicago, Ill. 60617.

**Bilingual materials** Bilingual teaching materials are available in 13 languages from the National Dissemination Center, 417 Rock St., Fall River, Mass. 02720 (508) 678-5696.

Catalogs list more than 1,000 print and audiovisual products in these languages: Cambodian, Cape Verdean, Chinese, French, Greek, Haitian Creole, Hmong, Italian, Korean, Laotian, Portuguese, Spanish, Vietnamese and English as a second language. Teachers guides are written in English.

**CONFERENCES**

**Focus on students** “Student Development for the 21st Century” is the theme of a conference the Citizens Schools Committee will hold from 7:45 a.m. to 3:50 p.m. Oct. 27 at Malcolm X College, 1900 W. Van Buren.

The conference will include a discussion on principal evaluation and selection. Workshops will be held in English and Spanish. The fee is $12, including meals. The registration deadline is Oct. 19. For more information, call Karen Pope (312) 726-4678.

**For principals only** The roles of a principal will be discussed at the second in a series of “principal fellowships” being held at the Community Renewal Society, 332 S. Michigan, Suite 500. The session will be held from 2 p.m. to 4:30 p.m. Oct. 24. For more information, call Nelson Ndove (312) 427-4830.

**School improvement plans** Models for school improvement plans will be the topic of a school reform forum scheduled for 2 p.m. to 4:30 p.m. Oct. 26 at the Community Renewal Society, 332 S. Michigan, Suite 500. Co-sponsor is Roosevelt University.
For more reading:


"It's Hard to Get Left Out of a Pair" by Alfie Kohn. (October 1987) Psychology Today.
Veteran teachers guide newcomers

New teachers have always learned the ropes from veterans, but at Goodlow Magnet School, 2040 W. 62nd, the practice has been upgraded to build a stronger faculty.

Veteran and new teachers get together at the beginning of the school year and then monthly to discuss teaching and school policies and procedures.

The veterans get a chance to demonstrate what they do well, and the newcomers learn everything from how to handle discipline problems to how to help families fill out free-lunch applications, said Principal Les Fant.

"It cuts down on the time that I would have to spend with new teachers individually, and they are probably more receptive to information coming from their peers," said Fant.

The year-old program has encouraged teacher cooperation and trimmed the time it takes newcomers to become familiar with the school, he added.

Les Fant (312) 471-8765.

Teens form learning club

In South Shore, several honors students are helping classmates from around the city who are having problems in school. They also are helping each other maintain good grades.

Called the S.S. Teens, the group has these rules: Members must have at least a C+ average, not be involved in gangs or drugs, respect adults and refrain from using profanity. If a member violates a rule, he or she is fined 25 cents to a dollar.

The students—15 seventh- and eighth-graders—meet monthly for an hour of school work and then educational video games or other activities.

"It looks like fun, but they're really learning something," said Susan Tooles, mother of one member.

The club encourages friendships while expanding students' cultural and academic horizons, she said. It also teaches the students "to stick together," she added.

The group is an offshoot of Black Youth in Action, a program sponsored by the Chicago Area Project, 407 S. Dearborn, to help prevent juvenile delinquency.

David Bey of Chicago Area Project (312) 663-3574.

Parents design student homework

Children at Mozart Elementary School, 2200 N. Hamlin, soon will get homework lessons planned by their parents.

Parents were so pleased with learning activities they made at a workshop held at the school's parent center that Principal Charlotte Projanjky decided to go one step farther.

Parents now will design homework activities aimed at meeting their children's specific needs, as identified by their teachers.

"Parents feel more like a team with the school when the material is tailored to fit their children's needs," said Projanjky.

Charlotte Projanjky (312) 292-5160.

Send tips about bright ideas to CATALYST/Bright Ideas. Include your name and phone number.