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'Big Brother' in the Classroom

New ID system will track Massachusetts students

LAWRENCE, MA — The Massachusetts Department of Education (DOE) will begin issuing ID numbers to about one million public school children this fall through a new computerized tracking system called the Student Information Management System (SIMS). The system will require school districts to provide at least 35 bits of information on each student, including scores on the Massachusetts Comprehensive Assessment System (MCAS) tests, career plans, race, and other personal data.



Is "Big Brother" coming to your child's school?

The Massachusetts' *Eagle-Tribune* reported on August 22 that SIMS will create permanent records that will follow students throughout their years in public school. Information that formerly remained with the individual school districts will now be under state jurisdiction.

The DOE's chief technology officer, Gregory Nadeau, told the *Eagle-Tribune*: "Instead of having access to summary information on school districts, the state will now have the ability to do statistical analysis." He explained that SIMS will allow the state to isolate information in order to determine what programs work best and where to allocate resources.

The system is expected to streamline data collection and simplify the tracking of children from one school district to another. SIMS will eventually allow students to log onto any personal computer and access customized homework pages and personal homework folders.

The system has been under development since 1996 when Massachusetts

lawmakers directed the DOE to adopt "a system for evaluating on an annual basis the performance of both public school districts and individual public schools." Many officials, however, claim they knew nothing about SIMS until recently.

State Rep. Brian Dempsey (D) says he just learned of the program in August this year, and he questions why the DOE needs to collect data on individual students. "I think we should be improving what we're doing in the classroom," he told the *Eagle Tribune*. "I don't think getting specific statistics will result in a better product."

Michael Sweeney, a lawyer and school committeeman in Lawrence, Massachusetts, called the process of identifying all the state's school children "outrageous" and termed it "Big Brotherism." He noted that "a third of the information they are collecting is totally unnecessary. Any time the government starts centrally collecting information, people should worry."

While Nadeau insists that his department is taking security requirements "very seriously," the DOE's own handbook points out that SIMS data may be shared with other state or local agencies without consent, and that it will be possible for federal agencies, such as the Justice Department or Immigration and Naturalization Service, to subpoena the state for information.

Some parents and officials say they are upset with the stealth manner in which the system was developed and implemented. "Its existence has not been discussed much at the local level," noted the *Eagle Tribune*. Said committeeman Sweeney: "[It] slipped under people's radar screens."

Massachusetts officials point out that their state is not the only one introducing such a system. "About 20-25 other states have implemented or are developing similar systems." 

Invasive Exams Violate Civil Rights of 59 Girls

School district held accountable

SCRANTON, PA — U.S. District Judge A. Richard Caputo ruled on July 27 that the East Stroudsburg School District violated the Fourth Amendment rights of 59 6th grade girls who were given genital exams without parental consent in 1996. The exams occurred at the J.T. Lambert Middle School (see *Education Reporter*, June 1996 and October 1998). The judge ruled that the exams constituted "unreasonable searches," and said he "could not identify a compelling government reason to examine the genitals."

Two days later, the jury returned a verdict against the district, awarding a total of \$60,000 in damages, or \$7,500 for each of the eight student plaintiffs in the lawsuit. The jury did not award damages to the parents. The physician who performed the exams reached an out-of-court settlement with the girls' families.

The ruling is an important victory for parental rights, as reports of similar exams conducted on schoolchildren around the country continue to surface. John Whitehead, president of the Rutherford Institute, which represented the plaintiffs, said: "This case illustrates the increasing violation of students' rights and the usurping of power by schools against the rights of parents. The judge and jury have sided with common sense by condemning this kind of unconscionable abuse against students, and we hope this decision will put a stop to such violations by officials in schools across the country."

Rutherford is considering filing suit in a similar case in Oklahoma, where three- and four-year-olds were forced to

undergo invasive genital exams without parental consent. (See *Education Reporter*, Feb. 1999.)

Case History

On March 19, 1996, 59 6th grade girls, ages 11 and 12, were examined by a local pediatrician hired by the school district in what was called a "state-mandated" physical. The girls were instructed to undress, and their requests to phone parents or opt out of the exams were denied. When efforts to obtain

a satisfactory response from the school failed, the parents of one of the students met with Rutherford attorneys, who filed suit on May 10 against the pediatrician, the school nurses, and the East Stroudsburg School District. The families of seven other girls eventually joined in the litigation. After three years of depositions and controversy, the court proceedings began in July.

The Trial

The three-week trial included testimony from doctors, state and school officials, the girls and their parents. While Pennsylvania state law requires that students undergo health exams prior to entering kindergarten and during the 6th and 11th grades, the director of the state Department of Health admitted during testimony that school physicals do not require genital exams.

Several doctors testified in support of the pediatrician's actions, but others condemned the practice of conducting genital examinations in school, stating that it "violates the girls' confidentiality and privacy" and stressing that "such matters

(See *Exams*, page 4)

Disconnecting Schoolchildren from 'Connected' Math

PLANO, TX — A group of parents in this Dallas suburb has filed suit against the local school district demanding that a program called "Connected Math" either be scrapped and replaced with traditional math, or that traditional math at least be included as an alternate choice. These parents say "Connected Math" is lowering academic standards and failing to teach their children basic math skills. They filed suit after trying unsuccessfully for 18 months to persuade the Plano district to reintroduce traditional math classes.

According to the *Washington Times* (Sept. 7, 1999), more than 550 parents in the district signed a petition requesting the

return of traditional math instruction. "Parents there are very upset," said attorney Tom Stack of the Texas Justice Foundation in San Antonio, who filed the lawsuit on behalf of the six families. "Many have gone so far as to offer to buy their own textbooks."

"Connected Math" and a related program, "Chicago Math," are the latest in a series of "whole math" curricula that for years have been referred to as "fuzzy math" or "New New Math." "Connected Math" has also surfaced in Maryland and in several other states. "Chicago Math"

was developed by the University of Chicago School Math Project (UCSMP), and is being implemented in a number of school districts. These curricula are often called "standards" math because they are based on guidelines developed by the National Council of Teachers of Mathematics (NCTM) in 1989.

Critics have complained that the NCTM's "standards" are not really standards at all, but a "progressive teaching philosophy" masquerading as math standards. Mathematician William G. Quirk, Ph.D., whose career has included teaching 26 different math and computer science courses at three different universi-

ties, noted in 1997 that "nowhere in the NCTM's 258 pages of standards do they suggest that kids should remember any specific math facts." Dr. Quirk warned that calculator skills, "pushed by the NCTM" and emphasized in "whole math" classes, "shouldn't be substituted for mastery of the traditional skills of arithmetic."

'Standards' Math vs. 'Classical' Math

A report by the Texas Public Policy Foundation (TPPF), a non-profit, non-partisan research institute headquartered in San Antonio, and the Education Con-

(See *Math*, page 4)



EDUCATION BRIEFS

Math textbook is laden with advertising. *Mathematics: Applications and Connections*, published by McGraw-Hill Inc., 1995 (revised in 1999), is a 6th-grade text approved for use in 15 states, including California and Texas. It contains brand names such as Gatorade, Kellogg's, Topps baseball cards, Burger King, Mattel Toys, Play Station, and many others. Items such as Nike shoes and characters trademarked by the Disney corporation appear as illustrations. Critics say the textbook "amounts to a collection of advertisements," and that it "crosses a line that hasn't been crossed before."

A Minnesota teacher has filed a complaint with the state's Department of Human Rights about a male cross dresser who uses the school's female restrooms. The man, a high school librarian, "came out" as a "transgendered person" and began wearing women's clothes after Minnesota became the only state in the nation to pass a law protecting "transgendered" people from discrimination. According to teacher Carla Cruzan's complaint, school officials are violating a 1993 amendment that exempts facilities such as locker rooms and restrooms from the law.

The Broward County, Florida, School Board wants to add 40 hours of community service to graduation requirements. The 1999-2000 freshman class may find that mandatory community service has been added to the school district's "character education" curriculum.

Students in Stephenville, Texas, defied a court ban to pray before a football game, smuggling in a portable public address system to do so. Earlier this year, the 5th U.S. Circuit Court of Appeals ruled that student-led prayer was permissible at graduations, but that sporting events are not sufficiently "solemn" to warrant such activities. Some school districts are turning a blind eye to similar "spontaneous acts," while others say students who pray will be "disciplined as if they had cursed."

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Exams

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should be confidential." (*Pocono Record*, July 15, 1999)

One of the girls told the court that, although she had received a physical from her private physician and that the paperwork was forwarded to the school, the school nurse claimed the form could not be found and forced her to undergo the exam anyway.

Other witnesses indicated that the consent forms failed to explain that the physicals would include gynecological exams. When the girls found out, many of them asked to be excused, and some begged to call their parents. They testified that school officials denied their requests, and even blocked the doors and windows to prevent them from leaving the examination room.

According to the July 14 *Pocono Record*, one mother testified that she had specifically requested to be present during her daughter's physical, and had checked the appropriate box on the consent form. Despite several follow-up calls to the school, she was never notified of the exam. "I was home all day, and no one called to say [my daughter] was having a physical," she told the court. "I filled out the form saying I wanted to be present." She added that she would never have permitted a genital exam "at her [daughter's] age," and that when she questioned school officials, "they tried to shift the blame onto the parents."

The court also heard testimony that the school violated the Pennsylvania school code by conducting nearly three times the number of exams per hour than the code allows. (*Pocono Record*, July 16, 1999) School nurse Cynthia Dougherty, one of the defendants, admitted that "every school nurse is aware of four [allowable exams] per hour," but that the pediatrician "probably did 10 an hour."

During closing arguments, an attorney for the plaintiffs contended that the exams were done "illegally, 15 an hour," despite state regulations. Another lawyer called the exams "a sham" and of "no medical value or use."

Goals 2000 Connection

Nationally syndicated columnist Kathleen Parker observed in the *Washington Times* on August 5 that both the Pennsylvania Department of Health and Department of Education supported the school district's actions, claiming that they "were as required by applicable laws and regulations." She connected those laws and regulations to what she called the "monolithic 'Goals 2000: Educate America Act.'"

Pennsylvania State Representative Sam Rohrer has repeatedly cited, as the source of abuses such as the East Stroudsburg incident, the first of the eight National Education Goals contained in Goals 2000, which states: "By the year 2000, all children in America will start school ready to learn." Rep. Rohrer notes that the reauthorization of the federal statute known as Title I, which was established in 1965 to provide funding for additional education services for poor children, is now being used along with Medicaid to provide medical services in the schools to almost every child.

Kathleen Parker sums up the feelings of many parents and concerned citizens: "It seems ridiculous that we need a federal judge and jury to tell us what should be obvious to anyone with an ounce of sense," she wrote. "In more reasonable times, schools provided nurses to tend to skinned knees and cut fingers. Now, under the ever-expanding guise of 'protecting the children,' we employ doctors to perform the most intimate procedures, with or without regard to parental wishes." 

Analyzing Math Textbooks

The founders of Mathematically Correct conducted an analysis of "standards-based" and "classical" math textbooks, which was published by the Texas Public Policy Foundation (TPPF) and the Education Connection of Texas. Mathematically Correct is a national organization of mathematicians, scientists, engineers, and concerned individuals who volunteer to improve the academic integrity of elementary and secondary math education. Their web site, <http://www.mathematicallycorrect.com> is considered a primary resource for mathematics information.

The analysts based their conclusions on three principles: (1) That students should be prepared to study algebra in 8th grade. Both the U.S. Secretary of Education and the President have called for states to aim for this goal in order to compete with nations scoring high on the Third International Math and Science Study (TIMSS). (2) That instruction should be thorough and clear, with both exposition and examples that will enable students to acquire explicit math concepts and skills. (3) The model for learning

expectations draws upon the Mathematically Correct Standards and the San Diego Standards, which were designed to be in line with both the California State Standards and the achievement goals in Singapore and Japan.

Textbooks for the 2nd, 5th and 7th grades were analyzed as markers for the progression through the material leading to algebra readiness. Some of the major textbook series available for use in public schools were identified.

Analysis of grade 2 textbooks identified three broad clusters of instructional quality:

Cluster I — Instruction meets most of the high level expectations for student learning.

SRA Math Explorations and Applications, SRA/McGraw-Hill

Cluster II — Instruction meets many, but falls short of high level expectations for learning. Supplementation of these textbooks would be required to provide students the opportunity to attain high level expectations for student learning.

Math in My World, McGraw-Hill School Division

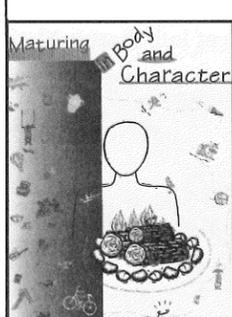
(See *Textbooks*, page 3)

Book of the Month



Maturing in Body and Character, LeAnna Benn and Alfred J. Derby, M.D., Teen-Aid, Inc., 1999, \$69

Maturing in Body and Character is an upper elementary or middle school curriculum for teaching character education. It uses the concepts outlined in the Personal Responsibility



Act, which was signed into law by Congress in 1996 to establish requirements for teaching abstinence education.

Part I of the curriculum lays the foundation for good character

which will enable students to make appropriate choices as they mature.

Part II discusses *why* young people should postpone sexual activity until marriage, as well as *how* to wait. Students will learn the benefits of abstinence along with the potentially harmful physical and psychological consequences of sexual activity. The curriculum also teaches children how to reject sexual advances and how drug and alcohol use can make it more difficult to resist such advances.

Maturing in Body and Character identifies information adults need to understand about the character training process, and outlines steps for students to follow. For example, the adult (teacher) trains the learner (student) to avoid negative behavior and its consequences. The student is encouraged to listen to parents and respect authority. The adult is instructed to use contrasts to teach beyond "do this or do that" directives. The student is taught the meaning of each character quality and what it "looks like" to be a person who displays that quality.

The curriculum includes seven teaching strategies for educators: (1) Modeling suitable behavior while helping to establish which students are positive role models for other students. (2) Lectures; (3) Discussion and experience; (4) Written reports and original writing; (5) Audiovisuals; (6) Simulations, or role-playing; (7) Action learning, or putting positive character traits into action at home, school, and in the community.

Curriculum materials include a teacher's manual, student workbook, resource lists, and "parent-grams" — handouts designed to strengthen parent-child communication. The goal of parent-grams is to help parents handle the initial discussion about physical changes their child can expect, and to foster an open relationship about sexuality and behavioral expectations.

Contact Teen-Aid®, Inc., 723 E. Jackson, Spokane, WA 99207-2647, 509/482-2868, teenaid@teen-aid.org.

FOCUS: Did Kansas Ban Evolution?

By Nancy Pearcey

Listening to the Chicken Littles in the press, you'd think the sky had fallen in Kansas. Ever since the Board of Education voted to exclude evolution from state guidelines, handwringing articles have decried the "gutting" of education by "enemies of science." The governor is threatening to disband the democratically elected board; lawsuits are in the works.

But let's sort out the facts. What did the board actually do? The controversy began when Kansas rejected sections of a national standard issued by the National Academy of Sciences. Contrary to hysterical reports, the board did not ban evolution from the classroom. In fact, the new guidelines substantially *increase* coverage of the topic. The board merely decided not to include evolution in state competency tests, by implication, not treating it as a fact beyond dispute.

The vote is best understood as a courageous stand for academic freedom — for giving students the right to examine all the evidence on a contested issue.

Christians everywhere need to make it clear that we want **more** taught in the classroom, not less. Of course students should learn about Darwinian theory and the evidence supporting it. But they should also learn the evidence **against** it, the problems and controversies.

Let's teach students about the Cambrian explosion, when all the basic blueprints for animal life appeared suddenly in the fossil record, contradicting the theory of slow, gradual evolution. Let's teach about the "gaps" in the fossil record, the pervasive pattern of the sudden appearance of new life forms followed by stasis — contradicting the theory of continuous evolutionary change. Let's teach what the discovery of DNA implies: that at the core of life is a language, a message, and that messages are not created by physical-chemical forces, any more than this article was created by chemical forces in the paper and ink.

Let's teach students to decipher con-

flicting uses of the term "evolution." No one denies the fact of limited, cyclical variation, represented by dog breeds, crop varieties, and insect resistance to pesticides, which is sometimes called "microevolution." What is problematic is "macroevolution," the conjecture that these minor variations are unlimited and directional, capable of producing dogs and corn and insects in the first place.

Let's tell students how textbooks often misrepresent evidence for evolution,

TUFTS PROFESSOR DANIEL DENNETT PRAISES DARWINISM AS A "UNIVERSAL ACID" THAT DISSOLVES TRADITIONAL RELIGION AND MORALITY.

like the "evidence" of the peppered moths. The standard theory is that as the tree trunks were darkened by industrial pollution, lighter moths were picked off by birds, while darker forms proliferated — a showcase example of natural selection. But a startling article in *The Scientist* (May 1999) reveals that peppered moths don't even rest on tree trunks and that the photos were staged. Scientists glued dead moths onto the trees.

Or consider the Galapagos finches that greatly influenced Darwin's own thinking. In the *Wall Street Journal* (August 16, 1999), Berkeley law professor Phillip Johnson notes that a 1977 drought killed most of the finches, leaving survivors whose average beak size was slightly larger (presumably they could eat the tough seeds that remained). A few years later, after a flood, beak sizes returned to normal — a clear case of limited, cyclical change. Yet, astonishingly, a 1998 publication of the National Academy of Sciences fails to mention the return to normal, and even encourages teachers to speculate what might happen should the trend toward larger beaks continue for

centuries: "Would a 'new species of finch' arise?"

"When our leading scientists have to resort to the sort of distortion that would land a stock promoter in jail," Johnson comments, "you know they are in trouble."

Given the paucity of evidence, one suspects that the underlying reason many scientists cling so tenaciously to Darwinism is philosophical. If one could explain the **physical** universe by completely material, purposeless causes, that would support the **metaphysical** claim that there is no overarching purpose or design. It's this metaphysical claim that makes Darwinism so unpalatable to the public.

For it is not only fundamentalist "extremists" who say Darwinism has atheistic implications. Many respected Darwinists agree. Francisco Ayala of the University of California says Darwinism is controversial precisely because it "exclude[s] God as the explanation accounting for the obvious design of organisms." Tufts philosopher Daniel Dennett praises Darwinism as a "universal acid" that dissolves away traditional religion and morality. Cornell biologist William Provine says consistent Darwinism means "no ultimate foundation for ethics; no ultimate meaning for life; no free will."

Precisely right. Creation is the foundation of the Christian worldview; if it falls, so does everything else. If God created us for a purpose, then morality is the guidebook telling us how to fit in to that purpose. But if we are products of mindless, material forces, then there is no purpose, no basis for morality. Religion and morality are merely ideas that appear in the human mind once it has evolved to a certain level. So the fundamental question is stark and simple: Did God create us, or did we create the idea of God?

Contrary to what critics say, protesters of Darwinism are not trying to inject religion into the classroom. Instead, they're trying to get people to see that Darwinism **already** injects a religious

message into the classroom, and they're asking that those atheistic implications be discussed openly, and that alternative scientific theories be considered, such as intelligent design.

Invoking design is not just shorthand for saying, "God did it." Design is a testable concept. Consider an illustration: If you are vacationing and see the faces of four presidents carved into Mt. Rushmore, you don't say, "Look what interesting shapes can be created by water and wind erosion." Instead, you recognize evidence of a pre-determined pattern. Similarly, archeologists run tests to determine whether what they've unearthed is just a rock or a tool chipped by an ancient hunter. Police run tests to determine whether a person died of natural causes or an intentional act (murder).

Likewise, in the study of living things, design can be empirically detected. In fact, evidence for design is so ubiquitous that Oxford biologist Richard Dawkins defines biology itself as "the study of complicated things that give the appearance of having been designed for a purpose." Like all Darwinists, Dawkins tries to explain away that "appearance" as **really** the result of purposeless, natural forces. But why not take the evidence at face value and conclude there is real design?

Phillip Johnson cites a Chinese paleontologist who commented, "In China, we can criticize Darwin, but not the government. In America, you can criticize the government, but not Darwin." Allowing students to grapple with the whole range of theories, along with their philosophical implications, is simply good pedagogy. It would train students in critical thinking and thaw the icy grip of dogmatism on the biology classroom — injecting science education with a new sense of intellectual adventure.

Nancy Pearcey is co-author, with Chuck Colson, of *How Now Shall We Live?* just out from Tyndale. She is managing editor of *Origins and Design*, and co-author, with Charles Thaxton, of *The Soul of Science*.

Textbooks (Continued from page 2)

Math Grade 2, Scott Foresman-Addison Wesley

Math 2: An Incremental Approach, Saxon Publishers

Math Advantage, Harcourt Brace
Mathematics: The Path to Math Success, Silver Burdett Ginn

Cluster III — Instruction does not meet minimal expectations for student learning. Programs not recommended for use.

* *Everyday Mathematics*, Everyday Learning

* *Investigations in Number, Data and Space*, Dale Seymour Publications

Analysis of grade 5 textbooks identified four broad clusters of instructional quality:
Cluster I — Instruction comes close to high level expectations, although an experienced teacher would be necessary for students to attain such a high level of learning.

SRA Math: Explorations and Applications, SRA/McGraw-Hill

Cluster II — Instruction, although moderately effective, falls short of preparing students to attain high levels of achievement. Acquiring the level of achievement targeted by this analysis would require supplementation.

Math 65: An Incremental Development, Saxon Publishers

Mathematics-Texas Edition, Silver Burdett Ginn

Cluster III — Instruction falls below expectations for learning established by this analysis. Achievement with these programs would be limited to modest mastery without substantial supplementation.

Math-Texas Edition, Scott Foresman Addison Wesley
Math Advantage, Harcourt Brace
Math in My World, McGraw-Hill

Cluster IV — Not recommended for use in 5th or higher grades.

* *Everyday Mathematics*, Everyday Learning

* *Investigations in Number, Data and Space*, Dale Seymour Publications

Analysis of grade 7 textbooks identified four broad clusters of instructional quality:

Cluster I — Instruction that prepares students well to sequence next into algebra.

Pre-Algebra, an Integrated Transition to Algebra and Geometry, Glencoe/McGraw-Hill

Passport to Algebra and Geometry, McDougal Littell

Algebra ½, Saxon Publishers

Cluster II — Instruction that prepares students at a lower level of learning to sequence next into algebra but might be effective with an experienced teacher.

Middle School Math Course 2, Scott Foresman Addison Wesley

Mathematics: Applications and Connec-

tions, Course 2, Glencoe/McGraw-Hill

Math Advantage Middle School Preparation for Algebra, Harcourt Brace

Middle Grades Math: Tools for Success

Course 2, Prentice Hall

Cluster III — Instruction not suitable for transitioning students directly into algebra, but might be suitable as pre-algebra.

Math 87, Saxon Publishers

Passport to Mathematics Book 2, McDougal Littell

Cluster IV — Instruction that fails to meet criteria for pre-pre-algebra (5th) grade.

* *Math Thematics*, McDougal Littell

* *Connected Mathematics*, Addison Wesley Longman

NOTE: * Asterisks denote National Science Foundation-sponsored math programs.

See complete analysis on the Internet at <http://mathematicallycorrect.com/books.htm>



Math

(Continued from page 1)

nection of Texas, a non-profit organization providing information to the public about elementary and secondary education, states that the NCTM's goals are to make students "feel confident about math, value math, solve problems, and reason as well as communicate mathematically."

According to the NCTM, math should: (1) focus on applied, not theoretical, learning; (2) utilize calculators for computation; (3) develop process skills before computational skills; and (4) be constructed by the student with the teacher serving as a guide.

"Standards" math doctrine holds that:

- ♦ The highest form of learning is the development of an abstract ability to think independently and solve problems that transfers across all fields of knowledge (but is not specific to math).

- ♦ It is more valuable for students to learn how to acquire and analyze information than to learn a specific body of knowledge because technology renders specific information readily accessible and rapidly obsolete; and

- ♦ Learning is most effective in the context of complex "real world" problems and least effective when it is focused on the acquisition and practice of basic component skills.

"Classical" or traditional math holds the opposite view. Students are taught facts and skills that make up a specific body of knowledge developed by mathematicians and handed down through cen-

turies of Western civilization. Teachers instruct and correct students to ensure that this knowledge is successfully acquired.

According to the TPPF, "Classical math is taught as a specifically organized sequence of building math language, symbols, and manipulations." Students master basic components through repeated practice, and when the use of basic skills becomes automatic, learning can be effectively focused on developing abstract and sophisticated problem solving. "Advocates of traditional math," says TPPF, "believe that knowledge, unlike technology, never grows obsolete."

Chicago Math

Illinois parents have been fighting their own battle with "standards" math. One mother testified before her local school board that she was shocked to discover that, when her son entered 5th grade, he still had not learned basic math skills. She hired a tutor, who confirmed that the child "needed major work on these skills." She began talking to other parents with children in various grades, all of whom were having similar problems.

"I spent weeks on the Internet, and was spurred on by the endless numbers of web sites, newspaper articles, personal stories, research papers and the like, all with the same identical stories and problems as mine across the country," she testified. "As I researched, I realized that this is a national crisis."

The mother, Vicky Kennedy, ex-

plained to the school board that "Chicago Math":

- ♦ Is a major deviation from traditional math education.
- ♦ States that its mission is to change mathematics education in the U.S.
- ♦ Is funded in part by the NCTM and the National Science Foundation (NSF).
- ♦ Uses no textbooks, only workbooks, which are not intended to come home.
- ♦ Fails to teach students to master skills and to systematically build from one concept to another.
- ♦ Promotes no drill of basic math facts, de-emphasizes basic math in general, and supports the use of calculators, working in groups, and math "discovery."
- ♦ Promotes the use of a facilitator instead of a teacher.

"There is no one correct answer as long as students feel good about what they are doing," she stated. "The program promotes math discussion, drawing, coloring, and playing games." (See "Everyday Math," this page.)

She urged the school board to adopt a fair representation of traditional math for the 1999/2000 school year, and reports that progress is being made.

Warning Signs

The TPPF lists six warning signs to parents that their children are enrolled in "standards"-based or fuzzy math programs. These include when students (1) direct their own learning, (2) work in groups to teach one another, (3) construct their own math language, facts, and computations, (4) are not required to memorize facts or formulas, (5) use calculators as the primary form of computation, and (6) are taught that correct solutions are not important.

The 'Standards' Math Money Trail

"Standards" math programs and textbooks have been developed and funded by the NSF. They dovetail with the federal initiatives Goals 2000 and School-to-Work, and with various statewide initiatives. Though their primary targets are school districts with large minority or "at-risk" populations, the TPPF maintains that "standards" math has penetrated every school district in the nation.

Many say it is the federal dollar that has made these programs so enticing. Last February, Texas Board of Education Members Richard Neill and David Bradley wrote an editorial entitled "The Fuzzy Math Experiment: Show Me the Money!" It provided details of a grant program that funnels millions of dollars to Texas school

districts through the Statewide Systemic Initiative (SSI), a federally-funded program developed by a state-funded entity at the University of Texas. The grants pay for teacher training and classroom materials to implement "Connected Math" in 43 Texas school districts.

Test Results

A chief complaint about "standards" math programs is that students' scores on standardized tests drop following their implementation. In Palo Alto, California, for example, test scores fell 28 points after whole math was introduced in 1995. In August 1998, the Texas Education Agency reported poor algebra scores statewide after an algebra textbook, focusing on jalapeno recipes, Vietnam War protests, and radical environmentalism, relegated quadratic equations to the back of the book.

More recently, a front-page headline in the *Chicago Sun Times* (Sept. 10, 1999) screamed: "Math tests a mess." The newspaper reported that 57% of 8th graders failed to meet state math standards in the new Illinois Standards Achievement Tests (ISAT).

Public Opinion

Surveys by the New York-based research firm, Public Agenda, have shown that Americans favor teacher-directed, structured math instruction, and want schools to require that students give correct answers to math questions and problems. These studies also show that most Americans favor the teaching of paper and pencil computation skills prior to introducing calculators, and that they believe standardized tests should measure individual accountability.

The TPPF found that Texans "strongly support traditional or 'classical' math instruction, and reject reforms introduced by 'standards' math programs." In 1997, when Texas adopted a new curriculum entitled the "Texas Essential Knowledge and Skills (TEKS), newspapers throughout the state protested the "feel good and know nothing math." The adoption of several "standards-based" textbooks in 1998 produced a similar outcry. (See "Textbooks," page 3.)

In Plano, the parent activists are hoping to win their case against "Connected Math." Noted one concerned parent not involved in the lawsuit: "Maybe it's time the school district stopped fighting parents with their own tax dollars and started listening to them."

Does 'Everyday Math' Add Up?

(Excerpts from published materials)

"Everyday Math" is the title of the elementary school curriculum of the University of Chicago School Mathematics Project (UCSM) — dubbed "Chicago Math." The curriculum states that it is based on the philosophy that:

- * Children come to school knowing more than they currently get credit for.
- * Mathematics means more when it is connected to real-life problems.
- * Schools should take advantage of the teaching tools technology presents.

The curriculum also states that "manipulation of numbers is not the prime object." It then claims: "Real life is not doing rows and rows of computation!"

Everyday math uses various strategies "to help students develop an understanding of basic math facts." The major components are:

Math Messages — These "may consist of problems to solve, directions to follow, tasks to complete, notes to copy, or brief quizzes." A 4th grade math message could include: "½ of me is 15. Who am I?"

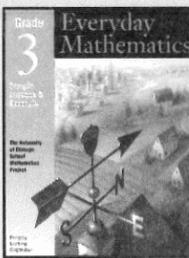
Math Boxes — "Unlike traditional worksheets that have 10 to 20 versions of the same problem, math boxes may have from 4 to 8 math activities." Some examples of 4th grade math boxes: "5 gal. = ___ qts.; write a number story for 593/12, then solve the problem; find the area of a 4" x 7" rectangle."

Journals — "These are workbooks with a different twist. Not only are students required to solve problems, but of-

ten are encouraged to 'write math.'"

Games — "Games are an integral part of this program. They are a great alternative way of practicing number facts (kill and drill)." Games can include "Beat the Calculator." Players add or multiply numbers on cards. One student is the "caller," a second is the "calculator," and a third is the "brain." A deck of number cards is shuffled and placed face down. The caller turns over the top two cards from the deck. These are the numbers to be added or multiplied. The calculator finds the sum or quotient electronically, while the brain solves it without a calculator. The caller decides who got the answer first. Players trade roles every 10 turns or so.

Home Links — "These are short activities students bring home to complete with the help of a family member. They are designed to reflect classroom activities. In class, students are encouraged to look for many ways to solve problems. Parents need to learn to accept open-ended questions and many correct answers instead of only one." An example of a 3rd grade Home Link: "Look for very large numbers and very small numbers. Bring them to school to add to your collection. Write about the numbers. Remember to include any labels, units, or symbols that go with them. Tell where you found each number."



ROCKET SCIENCE

