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REVIEW ARTICLE ON 'NEW MATH'

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Statement of HON. RON PAUL OF TEXAS

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- Mr. PAUL. Mr. Speaker, I submit for the **Record** and highly recommend to all of my colleagues Bill Evers' 'Secretary Riley Reignites the Math Wars,' which recently appeared in the Weekly Standard. Mr. Evers' provides an excellent overview of the controversy created by the Department of Education's endorsement of ten 'discovery-learning' programs (also known as 'new, new math' or 'fuzzy math'). Concerns have been raised that 'fuzzy math' de-emphasizes traditional mathematics in favor of encouraging children to 'discover' math without the guidance of a teacher. Under some 'new, new math' programs traditional teaching is discouraged on the grounds that teachers may harm a child's self-esteem by, for example, correcting a child's 'discovery' that  $2+2$  equals 5. Obviously, this type of 'education' diminishes a child's future prospects, after all, few employers value high self-esteem more than the ability to add!

- Mr. Evers' article points out that the federal government has no constitutional authority to dictate or even recommend to local schools what type of mathematics curriculum they should adopt. Instead, all curriculum decisions are solely under the control of states, local communities, teachers, and parents. I would remind my colleagues that outrages like 'new math' did not infiltrate the classroom until the federal government seized control of education, allowing Washington-DC based bureaucrats to use our children as guinea pigs for their politically correct experiments.

- The solution to America's education crisis lies in returning to the Constitution and restoring parental control. In order to restore true parental control of education, I have introduced the Family Education Freedom Act (HR 935). This bill would give parents a \$3,000 per year tax credit for each child's education related expenses. Unlike other so-called 'reform' proposals, my bill would allow parents considerably more freedom in determining how to educate their children. It would also be free of guidelines and restrictions that only dilute the actual number of dollars spent directly on a child.

- The Family Education Freedom Act provides parents with the means to make sure their children are getting a quality education that meets their child's special needs. In conclusion, Mr. Speaker, I remind my colleagues that thirty years of centralized education have produced nothing but failure and frustrated parents. I, therefore, urge my colleagues to read Mr. Evers' article on the dangers of the federal endorsement of 'fuzzy math' and support my efforts to improve education by giving dollars and authority to parents, teachers and local school districts by cosponsoring the Family Education Freedom Act.

- Williamson Evers is a research fellow at the Hoover Institution, an adjunct professor of political science at Santa Clara University, a research fellow at the Independent Institute and an adjunct fellow of the Ludwig Von Mises Institute. Mr. Evers has served on the California State Commission for the Establishment of Academic Content and Performance Standards and he is currently a member of the California State Standardized Testing and Reporting (STAR) assessment system's Content Review Panels for history and mathematics as well as the Advisory Board of the Californian History-Social Science Project. Mr. Evers is the editor of

What's Gone Wrong in America's Classrooms (Hoover Institution Press, 1998). Mr. Evers has been published in numerous scholarly and popular periodicals, including the New York Times, the Wall Street Journal, the Los Angeles Times, and the Christian Science Monitor.

**(BY BILL EVERS)**

In early 1998, U.S. Secretary of Education Richard W. Riley called for a 'cease-fire' in the math wars between the proponents of solid content and the proponents of discovery-learning methods. He said he was 'very troubled' by 'the increasing polarization and fighting' about how and which mathematics should be taught from kindergarten through high school.

Despite this call for a cease-fire, the U.S. Department of Education endorsed ten discovery-learning programs in October 1999. This federal imprimatur should not be allowed to disguise the fact that content (such as dividing fractions and multiplying multidigit numbers) is missing from these federally approved programs and that there is no good evidence that they are effective. Discovery-learning math is often called by its critics 'fuzzy math' or 'no-correct-answer math.'

In response to the Department of Education, about two hundred mathematicians and scientists signed an open letter to Secretary Riley, which was published in the Washington Post on November 18, 1999 (see letter at [www.mathematicallycorrect.com/riley.htm](http://www.mathematicallycorrect.com/riley.htm).) The signers, who included Nobel laureates and some of the country's most eminent mathematicians, didn't like the Department of Education's new equation: Federal Math=Fuzzy Math. The letter asked Riley to withdraw the federal endorsements. The news stories that followed got at the essence of the debate.

Steve Leinward of the Connecticut Department of Education was on the U.S. Department of Education's panel that picked the math programs that would receive federal approval. In an interview with the Chronicle of Higher Education, Leinward defended the approved programs as the least common denominator--'a common core of math that all students can master.'

Leinward is not saying that the federally approved programs cover the material taught in top-performing countries such as Japan or Hungary or that the programs contain complete coverage of elementary and secondary school math. What he and his fellow panelists want is a

watered-down program that all American students--as currently trained--can master.

Mathematics professor David Klein of California State University at Northridge is a proponent of solid content. He is quoted in the Chronicle of Higher Education as saying that algebra is the key course for students, the gateway to success in mathematics and to success in college in general. Leinward says that Klein's algebra-for-all position is elitist.

Here we have the central difference between the two sides. The rigorous curriculum side says that, like Japan, Taiwan, and Singapore, we can have algebra for all, preparing students for technical careers and college-level work. The water-it-down side says U.S. teachers and students aren't capable of teaching and learning algebra.

These federal recommendations are for kindergarten through high school, which has serious consequences. In essence, the U.S. Department of Education, by making these endorsements, is closing the gate on going to college or even on technical blue-collar jobs for many students. And it is closing that gate as early as kindergarten.

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