

Common Core Mathematics Standards and Teacher Professional Development

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Common Core Mathematics Standards

- ...a very big deal!
- ...national standards for mathematics instruction for the first time in the history of the United States!
- ...*we had better not screw it up!*

Common Core Mathematics Standards

- ...a very big deal!
- ...a one-time opportunity for teachers to transform the status of their profession,
- ...*they had better not screw it up!*

Professional status... Comparisons...

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Study: U.S. Must Raise Status of Its Teachers

By SAM DILLON

To improve its public schools, the United States should raise the status of the teaching profession by recruiting more qualified candidates, training them better and paying them more, according to a new report on comparative educational systems.

Andreas Schleicher, who oversees the international achievement test known by its acronym Pisa, says in his report that top-scoring countries like Korea, Singapore and Finland recruit only high-performing college graduates for teaching positions, support them with mentoring and other help in the classroom, and take steps to raise respect for the profession.

"Teaching in the U.S. is unfortunately no longer a high-status occupation," Mr. Schleicher says in the report, prepared in advance of an educational conference that opens in New York on Wednesday. "Despite the characterization of some that teaching is an easy job, with short hours and summers off, the fact is that successful, dedicated teachers in the U.S. work long hours for little pay and, in many cases, insufficient support from their leadership."

The conference, convened by the federal Department of Education, was expected to bring to-

industrial powers. He wrote the new report, "What the U.S. Can Learn from the World's Most Successful Education Reform Efforts," with Steven L. Paine, a CTB/McGraw-Hill vice president who is a former West Virginia schools superintendent, for the McGraw-Hill Research Foundation.

It draws on data from the Program for International Student Assessment, which periodically tests 15-year-old students in more than 50 countries in math, reading or science.

On the most recent Pisa, the top-scoring countries were Finland and Singapore in science, Korea and Finland in reading and Singapore and Korea in math. On average, American teenagers came in 15th in reading and 19th in science. American students placed 27th in math. Only 2 percent of American students scored at the highest proficiency level, compared with 8 percent in Korea and 5 percent in Finland.

The "five things U.S. education reformers could learn" from the high-performing countries, the report says, include adopting common academic standards — an effort well under way here, led by state governors — developing better tests for use by teachers in diagnosing students' day-to-day learning needs and training more effective school leaders.

"Make a concerted effort to raise the status of the teaching profession," says the report.

Unfavorable

Word from PISA

Andreas Schleicher, who oversees the international achievement test known by its acronym Pisa, says in his report that top-scoring countries like Korea, Singapore and Finland recruit only high-performing college graduates for teaching positions, support them with mentoring and other help in the classroom, and take steps to raise respect for the profession.

Five things...

- The “five things U.S. education reformers could learn” from the high-performing countries, the report says, include adopting common academic standards —
- an effort well under way here, led by state governors — developing better tests for use by teachers in diagnosing students’ day-to-day learning needs and training more effective school leaders.

... ..

...but the most important...

"Make a concerted effort to raise the status of the teaching profession" was the top recommendation.

Who can raise the status of teachers?

- In the end it is only the teachers themselves that can raise their professional status...
- ...their numbers are too big...
- ...and no other constituency has sufficient self-interest invested in the outcome...
- ...for it to be otherwise.

Other professions have transformed themselves...

...through their own education, professional development, and self-management of professional

- Health professionals
- Finance
- Higher education

Components of career-long professional enhancement for university faculty

- We continue to learn and generate new mathematics
- We review our own work and that of our peers and colleagues
- Through research and teaching, we become a resource for students, colleagues and the profession

Politics made this possible!

- After the Second World War and Sputnik, society became convinced that they needed advanced mathematics and were willing to pay for it
- The profession and our enablers (university administrations) took advantage of that perceived need

Career-long professional enhancement for mathematics teachers

- Continue to learn/do mathematics
- Continue to analyze teaching practice
- Become a teaching resource for students, colleagues and the profession

Common Core gives teachers a political opportunity

- Acceptance of the Common Core Standards by the sovereign States means that society is becoming convinced that they need high-quality mathematics teaching
- Common Core Mathematics Standards will not be realized without highly professional mathematics teachers

Common Core gives teachers a political opportunity

- An opportunity for teachers to achieve the status and command the necessary respect...
- ...so that society will adequately acknowledge and reward their profession

Can teachers do it alone?

No

“Outside” help

- Professionally trained teacher-leaders
- Laboratories of excellence
- Superstars of the profession
- Understanding the need for achievement and the need for access...
- ...but also recognizing that these two needs are different...

Professionally trained teacher-leaders

- Boston University/EDC Masters program

Laboratories of excellence

- Math for America
- IAS/Park City Mathematics Institute
- PROMYS for Teachers

Upcoming event

- CBMS/MfA/PCMI national leadership workshop in July
- How can we begin the process of raising the status of mathematics teachers?
- Or rather, how can we begin the process of supporting mathematics teachers as they raise their own status?