



PHOTO / MARTHA STEWART

## Why Do German Students Learn More, When Their Schools Get Less Money?

**EDUCATION ANALYSTS** often compare U.S. schools to those in Finland, Korea, Poland, even Shanghai. But surprisingly, few compare the schools here to those in Germany, though the two countries have much in common. Each nation is the largest democracy, with the biggest economy, on its continent. And each has a diverse population, strong unions, a federal system of government, demand for a skilled workforce, and a school system that in 2000 was badly in need of reform.

After examining schools and public opinion in both countries, our team at *Education Next* and scholars at the University of Munich were left with an intriguing question: why have German schools made significant progress since the turn of this century, while U.S. schools have not?

You can read our report at [hks.harvard.edu/pepg](http://hks.harvard.edu/pepg), but here are some key facts:

In 2000, U.S. and German students at age 15 were performing at roughly the same level on international tests in reading, math, and science. Shortly thereafter, a spirited school-reform movement was launched in both countries. And yet, by 2012, German 15-year-olds were outscoring their U.S. peers by 32 points in math, 27 points in science, and 10 points in reading.

Notably, the German gains did not come at the price of equity. In both countries, the gap between students in the upper and lower quarters of the test-score distribution narrowed considerably between 2000 and 2012.

Are the German gains related to higher teacher salaries? In 2013, German teachers with 15 years of experience at the higher-secondary grade level earned roughly \$70,000, while their U.S. counterparts made \$50,000. Beginning elementary-school teachers earned about \$47,500 in Germany, about \$10,000 more than their U.S. peers.

Somehow, the Germans find a way of paying these generous salaries without imposing higher costs on taxpayers. Per-pupil expenditures for secondary education run about \$10,300 in Germany and \$12,700 in the United States.

At the elementary-school level, the numbers are \$7,600 and \$11,000, respectively.

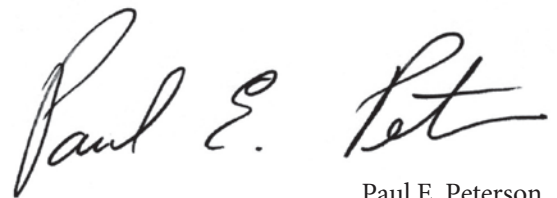
Despite the fact that Germans are getting more for less, they are less satisfied with their local schools, according to our polls. On an A-to-F scale, 47 percent of people in the United States give their local schools an A or a B, as compared to just 42 percent of Germans. Similarly, U.S. adults give an A or a B to 51 percent of their local teachers, while Germans rate just 41 percent that highly.

Why did German schools improve after 2000 when U.S. schools did not? Was it because school reform in Germany was pushed forward by a consensus among state-level political leaders, educators, teachers unions, and the public at large, while in the United States, union and partisan opposition quickly emerged?

Why are costs in Germany relatively low despite higher teacher salaries? Is it because German schools are run by the states, with little federal direction and no local school boards at all? Are operations more efficient when schools are run mainly by one tier of government instead of three?

Why do Germans give schools and teachers lower grades, when students there are learning more? German students, if they want to get ahead, must pass exams at about age 10 and again upon finishing secondary school. When students must pass high-stakes exams, do people expect more from their teachers?

We cannot draw firm conclusions from a comparison between just two countries. But it's still worth pondering these questions when two very similar countries see such dramatic differences in educational outcomes.



Paul E. Peterson

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**MISSION STATEMENT** In the stormy seas of school reform, this journal will steer a steady course, presenting the facts as best they can be determined, giving voice (without fear or favor) to worthy research, sound ideas, and responsible arguments. Bold change is needed in American K-12 education, but *Education Next* partakes of no program, campaign, or ideology. It goes where the evidence points.

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