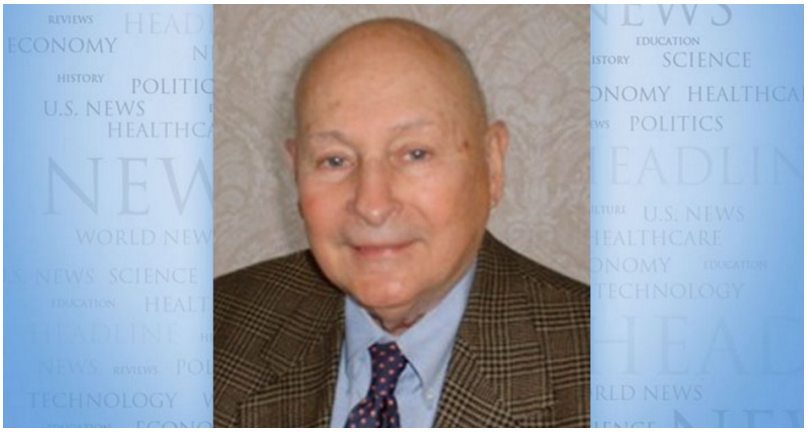
Written by **Sam Blumenfeld** on December 30, 2014

Who Are the World's Smartest Kids? Part 3



In our last article (Part 2) we wrote of Tom, the exchange student from Pennsylvania, who had chosen Poland as a country he wanted to experience because of its cultural heritage. But on his first day in the Polish high school classroom, he was asked to solve a polynomial math problem on the board. Like so many American high schoolers, he was terrible in math. But he walked up to the board thinking that the problem was not that hard. He started writing and the chalk snapped. Someone giggled. He missed a step, and the teacher asked the class: "Does anyone else want to try?"

According to Amanda Ripley, author of *The Smartest Kids in the World: And How They Got That Way*, American teenagers have more trouble with math than with any other subject. The United States was 26th in the world in math. Poland was third. Ripley writes:

> Math is a language of logic. It is a disciplined, organized way of thinking. There is a right answer; there are rules that must be followed. More than any other subject, math is rigor distilled…. Why weren't our kids learning the universal language of logic?… Again and again, the data revealed a startling math deficiency in the United States.

As the days passed, Tom noticed the difference between how math was being taught in Pennsylvania and in Poland. In the United States, Tom and his fellow students all used calculators. But in his Polish class, calculators were not permitted. Polish kids were doing a lot of math in their heads. Apparently, Polish educators understood that arithmetic is a system that requires memorization for its efficient use. But in the United States, progressive educators had banned rote memorization, considering it to be a form of child abuse.

Meanwhile, the National Governors Association decided that what was needed to improve reading, math, and science in American schools was a new set of rigorous teaching standards, which they called the Common Core State Standards. A new educational think tank, Student Achievement Partners, was chosen to write the standards to be adopted and implemented by all the public school systems in the nation. States were bribed to adopt the standards by generous grants from the Race to the Top federal program.

But America, unlike Finland or Poland, does not have a centralized Ministry of Education, even though we have a Department of Education. There is no mention of education in the U.S. Constitution. Education was left to the states. The result has been widespread opposition to the Common Core Standards, which many Americans fear will create a national system of education. Compared to the United States, Finland (population 5.4 million), Poland (38.8 million), and South Korea (50 million) are small nations with centralized education systems. California alone has a population of 38 million, Texas 27 million, and Florida 19.9 million. The United States has a total population of 319 million — 50 million of whom are functionally illiterate.

Eric (the exchange student from Minnesota whom we mentioned in Part 1) noticed that math was taught quite differently in Korea from in Minnesota. In the geometry class he saw how the teacher wove trigonometry and calculus into the lesson. The math moved fluidly, and the students answered questions as if math were a language that they knew by heart. Amanda Ripley observes:

> The truth was that American adults didn't like math or think it was critical to kids' life chances. In 2009, most American parents surveyed said it was more important to finish high school with strong reading and writing skills than with strong math and science skills.... But based on the standards of modernity, all decent jobs required some math and science fluency.... Early child programs in America pushed reading, arts and crafts, and behavior — important skills. Yet playing with numbers was still considered taboo, a subject best left to the later years, despite America's obvious and enduring math handicap.

There is much that American educators could learn by studying how Finland, South Korea, and Poland were able to achieve their high educational standings. But could these practices be adopted by the United States? In 2009, Poland had outperformed the United States in math and science. Its poorest kids outscored the poorest American kids. Over one third of Polish teens scored in the top two levels of literacy, higher than average for the developed world.

Considering that Poland had suffered greatly under Nazi occupation in World War II and had been under totalitarian communist control until 1990, the reform of its education system has contributed greatly to its transformation from a planned economy to a market economy. Polish 15-year-olds took the PISA (Programme for International Student Assessment) test for the first time in 2000. These kids, educated under the communist regime, did poorly. They ranked 21st in reading and 20th in math.

In 2003, a new group of Polish 15-year-olds took the PISA test. They now ranked 13th in reading and 18th in math, just above the United States. By 2009 Poland was outperforming the United States in all subjects, and in 2012 it officially joined the ranks of the educational superpowers.

How did they do it all in just 12 years? According to Jerzy Wisniewski, an advisor to the Polish Education Ministry, one reform had the strongest impact: the delay in tracking. Tracking tended to lessen learning. Once students were labeled and segregated in the lower vocational track, their learning decreased. But students did so well in the new schools that they were able to perform well academically. "Our youth have begun to think," a school official commented.

In the United States, tracking begins in elementary school, where 11 percent of the students repeat a grade. The United States is one of the few countries where schools divide younger students by ability. The smart ones are given programs for the gifted and talented. The dumb ones are relegated to a continued diet of mis-education. Ripley explains:

> Tracking in elementary school was a uniquely American policy. The sorting began at a very young age, and it came in the form of magnet schools, honor classes, Advanced Placement courses, or International Baccalaureate programs. In fact, the United States was one of the few countries where schools not only divided younger children by ability but actually taught different content to the more advanced track.
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> In Finland, when a child fell behind, a group of teachers went to work to bring that child up to par. Only two percent of Finnish children repeated a grade in the primary school. In the United States, 11 percent repeated a grade.

Many countries have taken education far more seriously than has the United States. In Poland, when

students take their graduation test, they dress in their best clothes. Education reform in Poland was largely the work of Miroslaw Hanke, who became minister of education in 1997. He was a chemist who believed that Poles would have to be smartened up if they were to succeed in the world of global capitalism. His reforms were implemented and they worked. When asked what was the key to his success and what he might do differently, he answered: “The teachers. Everything is based on the teachers. We need good teachers — well prepared, well-chosen. I wouldn’t change anything else.”

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