Only a few countries are teaching children how to think

The Smartest Kids in the World: And How They Got That Way: By Amanda

BAMA Companies has been making pies and biscuits in Oklahoma since the 1920s. But the company is struggling to find Okies with the skills to fill even its most basic factory jobs. Such posts require workers to think critically, yet graduates of local schools are often unable to read or do simple maths. This is why the company recently decided to open a new factory in Poland—its first in Europe. "We hear that educated people are plentiful," explains Paula Marshall, Bama's boss.

Poland has made some dramatic gains in education in the past decade. Before 2000 only half of the country's rural adults would finish primary school. Yet international rankings now put the country's students well ahead of America's in science and maths (the strongest predictor of future earnings), even as the country spends far less per pupil. What is Poland doing right? And what is America doing wrong? Amanda Ripley, an American journalist, seeks to answer such questions in "The Smartest Kids in the World", her fine new book about the schools that are working around the globe.

Though America's grim education results come in for special drubbing in this book, the country is not alone in failing to teach its children how to think critically. This, at least, is the view of Andreas Schleicher, the "educational scientist" behind what is known as the Program for International Student Assessment, or the PISA test. If most exams quantify students' ability to memorise material, this one aims to assess their effectiveness at problem-solving. Since 2000 it has been administered to millions of teenagers in more than 40 countries, with surprising results. Pupils in Finland, Korea, Japan and Canada consistently score much higher than their peers in Germany, Britain, America and France. The usual explanations for these achievements, such as wealth, privilege and race, do not apply.

To understand what is happening in these classrooms, Ms Ripley follows three American teenagers who spend a year as foreign-exchange students in Finland, Poland and South Korea. Their wide-eyed observations make for compelling reading. In each country, the Americans are startled by how hard their new peers work and how seriously they take their studies. Maths classes tend to be more sophisticated, with lessons that show the often fascinating ways that geometry, trigonometry and calculus work together in the real world. Students forego calculators, having learned how to manipulate numbers in their heads. Classrooms tend to be understated, free of the high-tech gadgetry of their schools back home. And teachers in every subject exhibit the authority of professionals held in high regard.

Ms Ripley credits Poland's swift turnaround to Miroslaw Handke, the former minister of education. When he entered the post in 1997, Poland's economy was growing but Poles seemed destined for the low-skilled jobs that other Europeans did not want. So he launched an epic programme of school reforms, with a new core curriculum and standardised tests. Yet his most effective change was also

his wooliest: he expected the best work from all of his pupils. He decided to keep all Polish children in the same schools until they were 16, delaying the moment when some would have entered vocational tracks. Poland's swift rise in PISA rankings is largely the result of the high scores of these supposedly non-academic children.

This is a lesson Ms Ripley sees throughout her tour of "the smart-kid countries". Children succeed in classrooms where they are expected to succeed. Schools work best when they operate with a clarity of mission: as places to help students master complex academic material (not as sites dedicated to excellence in sport, she hastens to add). When teachers demand rigorous work, students often rise to the occasion, whereas tracking students at different cognitive levels tends to "diminish learning and boost inequality". Low expectations are often duly rewarded.

In Helsinki Ms Ripley visits a school in a bleak part of town, where classrooms are full of refugee immigrants. "I don't want to think about their backgrounds too much," says their teacher, wary of letting sympathy cloud his judgment of his students' work. "It's your brain that counts". She marvels at how refreshing this view is when compared with that of teachers in America, where academic mediocrity is often blamed on backgrounds and neighbourhoods. And she laments the "perverse sort of compassion" that prevents American teachers from failing bad students, not least because this sets these youths up to fail in a worse way later on.

Not every story of academic success is a happy one. In South Korea Ms Ripley finds a "culture of educational masochism", where pupils study at all hours in the hope of securing a precious spot in one of the country's three prestigious universities. The country may have one of the highest school-graduation rates in the world, but children appear miserable. Even so, South Korea offers some good lessons for how quickly a country can change its fate. Largely illiterate in the 1950s, it is now an "extreme meritocracy".

America's classrooms do not fare well in this book. Against these examples of academic achievement, the country's expensive mistakes look all the more foolish. For example, unlike the schools in Finland, which channel more resources to the neediest kids, America funds its schools through property taxes, ensuring the most disadvantaged students are warehoused together in the worst schools.

Ms Ripley packs a startling amount of insight in this slim book. She notes that Finland, Poland and South Korea all experienced moments of crisis—economic and existential—before they buckled down and changed their stories. America, she observes, may soon reach a similar moment. She cites the World Economic Forum's most recent ranking of global competitiveness, which placed America seventh, marking its third consecutive year of decline. Meanwhile Finland, that small, remote Nordic country with few resources, has been steadily moving up this ladder, and now sits comfortably in third place.