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The Smartest Kids in the World (Class Jigsaw)

Write a summary of the section you read. It should be long enough so that others get a good understanding of the person/country you followed.

Chapter 1.

This section started with a scenario played out by Andreas Schleicher, who is not actually one of the school-aged subjects in the book, but in many ways plays a behind-the-scenes role in modern standardized testing. In real life, Schleicher was the scientist behind the experimental PISA assessment, first given in the spring of 2000 in 43 countries. Unlike other standardized tests, Schleicher aimed to design a test that measured how well students could *think* rather than memorization of facts and reading strategies.

After the first PISA results were announced in 2001, everyone—including Schleicher—was puzzled by Finland taking the No. 1 spot. Even Finland was puzzled. Typically, the world had looked to Americans or Germans as educational models. Plus, Germany highly regarded their own system. Interestingly, German educators—as well as educators from all 43 countries who participated in the PISA—had helped Schleicher and his colleagues write the test questions, so the test had validity.

The United States did not perform nearly as well as was expected on the PISA. U.S. teens performed acceptably in reading, but substandard in math compared to other developed countries. Also worth noting is that U.S. schools voluntarily participated in the PISA, and there was still a wide disparity in scores between advantaged and disadvantaged students. Soon after these scores were released, President G.W. Bush introduced the No Child Left Behind Act (NCLB) to improve America's worldwide standing.

After the introduction of the NCLB, Americans defended the current system. They blamed diversity and immigration, but Schleicher rebutted with data: The U.S. would have the same PISA ranking if immigrant scores were ignored. Worldwide, immigrant children accounted for only 3% variance between countries. Although race and income can affect test scores, how much varies country to country. Interestingly, privileged American kids attending a private school performed similarly to privileged kids in public schools. Also fascinating is the notion that increased per pupil spending does not make kids smarter or perform better. Of the smartest countries in the world, taxpayers pay less per pupil on education than taxpayers do in the U.S. Everything depends on what teachers, parents, and students do with these investments in education. More money does not equate to more learning. The U.S. spends a much larger amount on education than other countries, but what is it really doing?

The PISA comes about every 3 years...2000 to start, 2003, 2006, etc. With each new assessment, more countries opt to take the assessment and stereotypes continue to be torn down. For one, the smartest kids did not all live in Asia. U.S. kids were not the most creative in the world and smart kids are not naturally smart.

Ripley met Schleicher in 2010, just before she took the PISA assessment. She wanted to know how the PISA was actually different from all of the bubble tests U.S. kids are exposed to. Schleicher insisted that this test was unlike any other test Ripley had taken. When she arrived to take the test, Ripley was given a pencil, calculator and test booklet. There were 61 questions focused on math, reading, and science. Ripley noted that this standardized test was odd because it wasn't multiple choice. Rather, it asked for explanations and opinions to support your answers.

She said that the questions seemed like a test of life skills rather than school skills. After getting 1 question wrong, Ripley acknowledged her 22 years of life experience and 4 years of college over typical PISA test takers. The PISA required problem solving and communication—both skills she needed for her job. She now understood why critical thinking was such an essential quality for students to achieve by age 15 and how the PISA assessment measured it. In 2009, U.S. teens ranked 26th on the PISA in math, 17th in science, 12th in reading, while the U.S. was 2nd in the world for student spending. Whether going off to college or to trade school, American students needed to know how to think. This meant, reshuffling the system to move up on the list.

Chapter 4.

Tom was a new exchange student in Poland. He made excuses to teachers back at school in the U.S. and generally got away with it. In Poland though, his story starts off when he is asked to solve a math problem at the chalk board, repeatedly until he goes to the front. Tom is from the town of Gettysburg, PA, a major site of the American Civil War. He was generally uninterested in his own town. His mother and father were both attorneys. To escape their jobs, they loved to read. They would take family trips to Barnes & Noble and the whole family would read, side by side or in the back yard. Tom's brothers were leisure readers, but Tom was a reading fanatic. He read Eastern European novels to prepare for his arrival to Poland. But, when Tom went to the chalkboard in Poland that day, he carried an American burden nobody else could see—he wasn't good at math.

His difficulties worsened in middle school because in math, lessons build upon prior knowledge. He felt humiliated because it was like he was getting dumber. U.S. teens had more trouble with math than any other subject. Somehow, math could predict kids' futures. Teens who mastered high-level math classes typically graduated from college, even excluding race and income. But why? Math is a logical language. It's an organized way of thinking. The right answer comes from following rules. Math increases kids' abilities to reason. Even America's richest, most privileged kids scored lower than affluent kids in lower-income countries. America's poorest kids did even worse than the poorest kids in other developed nations. Why?

Tom picked up the chalk to write, but he somehow missed a step. He felt incompetent all over again. A Polish student giggled, and the teacher called upon another student. The teacher did not call on Tom again, the rest of the semester. In his Polish math class, calculators were not allowed. But back in the U.S., Tom was allowed to use a calculator. Tom's Polish classmates were obviously doing the math in their minds using learned tricks. On top of this, everyone's grades were announced in front of the class. It made Tom very uncomfortable. Apparently, kids in Poland were accustomed to failing. In U.S. schools, failure was to be avoided, but in Polish schools, it was viewed as the way to learn successfully. As a result of his

failure, Tom had learned to stay away from math. What he didn't realize was how central math was to certain subjects he loved and that he could master math with time, persistence, and hard work.

Ripley followed 3 American students. Of the 3, Eric was the only one who didn't fear math and carried with him a solid math background. Eric came from Minnesota, one of two U.S. states that performed just behind math powerhouses like Canada, Korea and Finland. Eric was born at just the right time in Minnesota. Otherwise, it might have turned out differently.

In 1994, 4th graders in Minnesota placed below average in math internationally. It was generally a white, middle-class state. But, that didn't seem to impact math scores. Two years later, Eric started kindergarten when the state had implemented smarter and more focused math standards. When Eric was in high school, peer math scores were above average in the U.S. and a lot of the world. Did Minnesota perform some type of magic? Why couldn't other states do this?

Minnesota had a strong education system to begin with. With some pragmatic changes and common-sense repairs, the stated showed that math was truly important and that all kids were capable learners. They agreed on precise, targeted statewide standards—rather than confusing state and local standards—so that standardized tests were representative of the material taught. In addition to this, elementary students began spending 60 minutes per day on math rather than the previous 30 in 1995. These new standards taught fewer topics, but the focus was more in-depth. Plus, the material was more challenging. Overall, Eric was nowhere near as bored as he used to be, and as he would have been elsewhere in the U.S.

When Eric was in Korea, the remainder of the U.S. was seriously looking at Minnesota's accomplishment. Soon to be known as the Common Core, 45 states adopted these more rigorous standards in math and reading. Kids would no longer have to learn fractions for 8 years or decimals for 6 years—they would be learning these topics more in-depth for a shorter period of time. Of course, there were many critics. Local authority would be lost, perhaps teachers wouldn't receive the required training, and unions were not happy with the accountability vs. lack of time to prepare.

In Korea, the only class Eric truly enjoyed was math. It was different, something even Minnesota hadn't figured out. The class was geometry, but it was cross-disciplinary. Woven into it were trigonometry, calculus, and real-world problem solving. It was not an advanced class, but Koreans here were doing math much more advanced than a typical sophomore in Minnesota. When compared with other countries, an 8th grade math class in the U.S. taught content from 6th or 7th grade whereas higher performing countries were teaching 8th graders 9th grade math. Why? Tom and Kim had decided in middle school that math was something you were either good at or not, and they were not good at math. Americans consider math to be an innate ability, unlike reading. American parents surveyed indicated that reading and writing skills were much more important skills to have upon graduation than math and science skills, even though modern occupations require math and science fluency. Early childhood programs in the U.S. have consistently pushed reading, arts, and behavior. All are important skills, but number play continues to be left out, perpetuating America's math handicap.

Chapter 7.

This chapter begins with a historical summary of Breslau, Germany (also known as Wrocław, Poland)—the city where Tom lived. The Soviets took the city from the Germans during World War II, which leveled and destroyed most of the city. After the war, the city was given to Poland with the new name Wrocław. The city was old. Over centuries, it had over 50 different names. It was a city of ghosts with many parallel histories. The Poles tried to reinvent their city, removing references to Hitler and the Nazis. But also after WWII, Poland fell under communist rule for 40 years. They were imprisoned, secret police permeated neighborhoods, and street names changed again.

The people who blamed poverty and dysfunction for America's education problems had obviously never been to Poland. It's difficult to explain Poland's tumultuous half century. Communism fell in 1989, which brought hyperinflation, chaos, and more transformation. When Tom arrived in 2010, Poland was part of the European Union. The country continued to deal with poverty and crime, with the UN ranking their material well-being dead last in the developed world. Just like in the U.S., Polish citizens distrusted the government. Yet, despite its tremendous difficulties, it was able to do what other countries could not. From 2000-2006, average reading scores for Polish 15-year olds went up 29 points on the PISA. In less than a decade, Polish kids went from below average to above average whereas U.S. scores remained stagnant. Tom was experiencing the transition that Finland and Korea saw decades earlier.

Tom's experience in Poland was exactly as he'd imagined, exactly what he'd read about. When Ripley interviewed him, Tom showed off a local café with excitement. There were bookshelves filled with books, with several people hunched over books or laptops. 6 months had passed since the Polish math teacher had called Tom up to the chalkboard. Since that time, Tom learned Chopin's "Prelude in E Minor" on the piano, just as he thought he would. His Polish was much better too.

Tom's high school in Poland was known as number thirteen. Next to the high school was a dodgy neighborhood known as the Bermuda Triangle, similar to an American ghetto. Over the past decade though, these kids spent time in an education system that had reimagined what was possible. They were given better odds than they would have encountered in many districts in the U.S., a wealthier country. Although these kids still lived in the Triangle, their chances were better.

When Handke became Poland's education minister in 1997, people wondered how a chemist was qualified to do the job. He knew almost nothing about education, policy, or politics. With a fast-growing economy, Polish adults did not seem to have the skills to compete in the modern world. Handke looked at the education systems of other countries, including the U.S. He met with teachers, researchers, and politicians around Poland and in 1998, he wanted to push the entire system out of its equilibrium to achieve a new equilibrium, trying to teach chemistry to 38 million people, so to speak. To achieve this new equilibrium, the country would undergo 4 phases: inject rigor into the system, introduce accountability through standardized testing, increase expectations for kids, and allow autonomy for teachers to choose their textbooks, curriculum, and professional development from approved options.

Alongside these phases, some teachers would have to go back to school to improve their own education. Increased testing would provide accountability—helping to identify which students, teachers, and schools need additional help. For older students, tests would be used to

identify which high schools and universities students could attend. For the first time ever, local teachers would no longer grade the exams, putting a certain amount of trust back into the grading process. Although the Poles were unaware of this yet, a PISA analysis later indicated that school systems using standardized tests regularly tended to be fairer places, introducing smaller knowledge gaps between rich and poor kids. Even in the U.S., widespread standardized testing has increased test scores of African-American and Hispanic students. Identifying problems is a necessary step in fixing them.

Another radical transition in Poland was delaying tracking for 12 months, which meant creating 4,000 new junior high schools overnight. Rather than tracking to vocational or academic programs at age 15, Polish kids would do so at 16. It was politically impossible to impose a new curriculum, stricter testing, and thousands of new schools without granting other freedoms in exchange. American states have never even encountered a disruption like this. This is where the 4th reform, autonomy, came into play. This dynamic was found in other countries that had dramatically improved their results, including Finland. Plus, teacher pay increased and bonuses were introduced. Handke declared that these changes would all occur within a year.

Some Poles were thrilled with Handke's plan to prepare Poland's youth for a global economy, but no one was certain whether or not this gamble would pay off. Overwhelmingly, the teacher's union, teachers, principals, and parents were up in arms with too much change in too much time with too little funding. At the time, Poland's new government was full of so-called reformers, so this plan fit in with their new scheme. Similar to Schleicher, Handke aimed to design a new system that would teach children how to think—a system for the present, not the past. At the end of that first year, 60% of Poles continued to doubt these new reforms.

At the same time education reforms were hitting Poland, countries were being recruited for the PISA experiment, including Poland. Coincidentally, the PISA captured snapshots of Poland before and after the reforms. In 2000, the first PISA assessment was given and Poland's scores were startling, below average for the developed world. In 2003, Polish 15-year olds took the PISA and again, the results were shocking. These kids started in the old system but continued their schooling during the reform period. For this round of testing, Poland surpassed the U.S. in both reading and math. By 2009, Poland was further outperforming the U.S. in math and science, despite spending less than half as much per student than in the U.S. Poland's poorest kids outperformed America's poorest kids, indicating that poor kids could learn more than they were learning. But what made the biggest difference in Poland's sudden leap to becoming an education superpower? The one reform that mattered the most was the delay in tracking. In fact, the younger tracking occurred, the worse the country performed on the PISA. Once kids are labeled and segregated into a lower track, their learning slows down.

In Pennsylvania, Tom was tracked in 3rd grade, placed into the gifted and talented program. As a freshman, Tom's school had 3 tracks: accelerated (Advanced Placement), regular, and applied. Tracking in the U.S. was different than in Poland. The U.S. is one of the few countries where schools divide young children by ability and teach different content to advanced students. Race and income in the U.S. further divide schoolchildren to create barriers to learning. Elsewhere in the world, such as in Finland, children were not promoted if they were not ready, meaning that all kids had to learn. Education spending was based on need, so the worse off the students or school, the more money they received. In Tom's state of Pennsylvania, it was the opposite. Poor districts received 20% less per student.

Tom experienced a new principal after his first year at Gettysburg High School, Mr. Blanchard, who was on a mission to improve the school's test scores. In speaking with teachers, parents and students, Mr. Blanchard began to understand that the sole expectation was for students to "get through" high school. The principal began looking at the curriculum and the 3 tracks. To him, the applied track was full of bonehead classes. This track was deleted, with resistance from staff members. The next year, no one dropped out because bonehead English vanished. People stopped talking about it. But, it was still like Gettysburg was two different schools—one to challenge the top students and another for the rest. Tom's high school in Poland was much more simplistic than those in the U.S., lacking SmartBoards, laptops, a cafeteria, and school sports. Here, there was no confusion about what school was for.

Chapter 10.

While in Poland, Tom got the email that he was accepted into his first choice, Vassar College. His grandmother and brother attended Vassar. Tom wanted to study English. In the U.S., the unemployment rate for college graduates was 4%. Americans who do not graduate from college are more likely to divorce, become single parents, and die younger than college graduates. A quarter of their peers may not even graduate from high school, perpetuating life struggles with low wages, decreasing benefits, and high unemployment. Tom could essentially be living in a different country than the kids he sat next to in kindergarten.

Something that is hurting U.S. education is the lack of rigor compared to high performing countries. In the real world, people don't always get second and third chances. They don't receive credit for simply showing up. They don't always get help when they need it. School exists to help kids learn to think, to help them work hard, and to fail. Yes, fail—it's OK to fail at first, unlike many American parents believe.

What did you learn about the American school system that you didn't know before? What are your thoughts about this new knowledge?

First off, I did not realize that the U.S. has the second highest funded education system in the world and that we don't really rank very well internationally. Like Ripley suggested, struggles between local, state, and national control could in part be to blame. Plus, I can definitely see where the lack of rigor and reluctance to fail comes in to play. Something else I didn't fully realize was how stagnant our education system had become. The world is rapidly changing and becoming more modernized, but U.S. standards are not keeping pace with the changing world. When standards vary so much, are not aligned, and are not challenging, we cannot maintain the quality of education required to remain a global superpower.

What did you learn about the country you read about and that stood out as particularly interesting?

I never truly understood the history of Poland in terms of WWII and communism. Poland has struggled through the years with inflation, poverty and crime. Rubble and partially destroyed buildings remain as reminders of war. Despite all of this, Poland has made itself a better country through educating its youth. Though drastic reforms were originally frowned upon by the people, Poland is now internationally ranked above the U.S. in math, reading, and science. This is an indication that wealth is not a requirement to learn. Although Poland remains an

impoverished nation, poverty is not used as an excuse like in the U.S. Through governmental reform, having qualified teachers (some were required to go back to school), approved materials, and accountability measures, every student was able to learn.

Select one passage that explains something about how the country understands the purpose of education and/or what qualities an educated person ought to have that you found particularly interesting. Explain what you found interesting, inspiring, or surprising about the passage.

p. 131, The Smartest Kids in the World: And How They Got That Way (by Amanda Ripley)

The Poles couldn't know it yet, but this kind of targeted standardized testing would prove to be critical in any country with significant poverty, according to a PISA analysis that would come out years later. Around the world, school systems that used regular standardized tests tended to be fairer places, with smaller gaps between what rich and poor kids knew. Even in the United States, where tests have historically lacked rigor and purpose, African-American and Hispanic students' reading and math scores have gone up during the era of widespread standardized testing.

This passage is insightful because I didn't realize how useful standardized testing could be, ***if*** the results are used correctly. Standardized tests help schools see what they're doing right, wrong, and which students require more help. However, making problems known doesn't guarantee that any of them will be fixed and U.S. school districts have proven this time and time again. Testing for the sake of testing doesn't do any good. In Poland though, low performing students were targeted—specifically with money—to bring in extra teachers for them to get the help they needed. Even though per pupil spending is much lower in Poland than in the U.S., the organization of the reforms alongside additional money allowed for targeted funding like this. Rather than pouring money into schools or technology, Poland thought it to be more worthwhile to aid individual students as needed. International test scores indicate this method worked.

Question: *Would aiding individual students based on test scores be a viable option in the U.S.? Why or why not? How could it potentially be done?*

Response to Classmate (1).

Do you think raising the standards to become a teacher or join a teacher preparation program is threat to teachers? How do you think raising standards would impact enrollment rates, teacher shortages, and student outcomes? Do you think there is a correlation between educational quality and higher degrees or test scores, etc.?

After reviewing Appendices A and B at the bottom of your post, I'm inclined to say that America's practice of recruiting teachers is appalling. I wholeheartedly think that raising the standards to join a teacher preparation program would be a good first step to ensure that only qualified individuals are teaching our youth. I think that weak teacher preparation programs that lack rigor and quickly churn out teachers would feel threatened because mediocrity would no longer be the norm. Furthermore, those who aspire to be educator "coaches" with easy teaching jobs and average abilities would perhaps feel threatened by higher standards. Quality, not quantity, should be the focus.

I do not think enrollment rates would be impacted because after all, school is required by law. I have seen classes combined and administrators put back into classrooms until qualified teachers are hired. I have also seen substitute teachers overutilized. Of course, I'm sure parents would be in an uproar if higher standards were implemented on current teachers (like in Poland) because their favorite teacher(s) my no longer be qualified to teach. I expect that teacher shortages would rise at first. But, the hope would be that more qualified teachers would begin to receive respectable pay, so that perhaps more students would choose to enter the profession and ease the perpetual shortage.

Lastly, I think the quality of education a child receives is directly impacted by the child's teachers. Requiring more rigorous teacher preparation programs would bring more high-quality teachers into America's classrooms. A high-quality teacher is more receptive to students' needs, allows students the experience of failing, and challenges each student in the class, regardless of socioeconomic status, race, etc. These are the teachers America needs now more than ever because the quality of education is currently perceived from test scores and how many students move on to college.

Response to Classmate (2).

How do schools find the balance in extracurriculars vs. education when extracurriculars, mainly sports, are so engrained within American society? Should schools drop sports programs if the grades of the school are not being met, like the movie Coach Carter? What do schools need to do in order to send a message that education should come first, without destroying the ethos and mentality of the social growth of extracurricular activities.

I think it's difficult to reconcile extracurriculars (sports) and education in the U.S. I always thought that the purpose of school was just that—school. Education is the foundation of a school, but somehow not all schools see it that way. Although I've never been to Texas, I've heard and read (several times) how football often takes priority in Texan schools. I never understood how people could be such fanatics over a school sport, given that the focus should

be on education. While pondering this question, I'm also thinking that sports are so engrained within certain regions and schools in the U.S. that I'm unsure how any importance is placed on academics. Even at the last school I worked at in Wake Co., athletes were out of class quite often. They left school early for games, and sometimes even practice. Interestingly, academics at the school were overwhelmingly poor, but that didn't matter much because sports in this particular town reigned.

As an educator, school sports need to be dropped if the students' grades are not being met first. Sports are fine if students maintain positive grades, but everyone must remember that the purpose of a school is educating its students. To promote the idea that education should come first, yet still maintain extracurricular activities, I can think of two options: 1.) Hold required after-school group study/remediation sessions with rotating teachers. Chances are, if students didn't understand a concept from the first couple of teachers, they'll begin to understand it from others and fill in remaining knowledge gaps. If athletes do not attend as required, they're off the team. For non-athletes, enact appropriate consequences. 2.) Hold Skype, Facetime, Hangouts, etc. as well as an in-person conference for parents and students explaining expectations for involvement in extracurriculars. Explain and show that education comes first and foremost. Failing or refusing to seek or accept assistance results in loss of privileges for extracurriculars, including sports, clubs, etc.

Final Reflection.

I enjoyed reading about the different education systems of Finland, Poland, and Korea while also learning more about the state of education in America. I think there are several faults in the U.S. education system that could be rectified. However, there is too much to change at once. Plus, with 50 states, I think it would take too much effort to create a single national program. I could not see spending as many hours per day attending school and studying as Korea. The amount of stress would be utterly amazing. Poland and Finland though offer some ideas that the U.S. could work with. Rather than having a surplus of mediocre teachers, U.S. teacher preparation programs should be more selective in order to create higher quality teachers. In addition to this, hiring should be more selective and it should be easier to get rid of ineffective teachers. Surprisingly, the U.S. is the 2nd in the world for student spending, yet many countries with much less money perform better on international assessments. Rather than pouring more money into education, perhaps the U.S. could work on streamlining education by eliminating the mix of local, state, and national standards. Having a national curriculum would be easier to follow and would lead to less confusion regarding what to teach. Although local municipalities want to maintain their power over schools, this may no longer be the best option given the interconnectedness of the U.S. and the world. Common Core is a good first step, but we still have a long way to go with improving teacher education programs, making curriculums more challenging, requiring more accountability, and disallowing tracking too early.

References

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