

Beyond Labels



*The American Education System is Failing:
Can We Fix It?*

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PART 1: Where We Stand



PART 1

WHERE WE STAND

Where We Stand



- *American education system best in the world at end of World War II*
- *American workforce was the best educated (as measured by attainment) among all the industrialized countries then*

Where We Stand



- Today, 35 countries outperform the U.S. in high school math
- 13 countries outperform us in high school reading
- The vast majority of graduating high school seniors headed to college are about to attend an institution that offers the equivalent of a what is a high school curriculum in the top-performing countries
- A large fraction of them are not well enough educated to successfully complete even that curriculum

Where We Stand



- Required first year courses in College Math are actually courses in 9th grade algebra and the majority of high school graduates seeking admission to our community colleges are not well enough prepared to succeed in those courses
- When the OECD did a study of the vocational education systems in their member countries, they would not accept the data from the U.S., because, they said, the U.S. did not meet the minimum standards for a national vocational education system

Where We Stand



- Most recent OECD study of the basic skills of the workforces of the industrialized countries found that millennials in the U.S. workforce (the heart of our workforce) ties for the lowest basic skills of any of the countries studied
- The country with the best educated workforce in the world after World War II now ties for last place among industrialized countries

PART 1: What's at Stake



PART 2

*WHY THESE STATISTICS
ARE IMPORTANT*

Why The Stats Are Important



- In 1945, when we had the best education system and the best educated workforce in the world, the U.S. dominated the global economy
- International trade was a small part of our economy and most workers competed with other American workers
- Today global companies can locate manufacturing and many service operations wherever they can find workers with the skills these companies need at the lowest possible price

Why The Stats Are Important



- If you remember only one point from this slide deck, it should be this one: Not only are U.S. workers the least well educated in the industrialized world, but we charge more for their services than the workers in almost all other countries. This is an unsustainable position.
- Globalization is not over. Companies are reducing their dependence on China modestly and mostly sourcing what they used to get from China from other countries that offer relatively low labor costs for better educated labor than they can find in the U.S.

Why The Stats Are Important



- There is only one solution to this problem: The U.S. can succeed only if we once again produce one of the best-educated workforces in the world.
- This would require an improvement in the quality of American education that would be unprecedented in both scale and speed; building a world class workforce would require us to redesign and rebuild our whole education system to catch the global leaders
- All the stats just shared were in place before COVID. COVID has made them worse, with respect both to the U.S. position vis a vis the global leaders and with respect to equity within the U.S. re race and class

PART 1: Where We Stand



PART 3

HOW DID THIS HAPPEN?

80's, 90's and 00's: Global Economic Change



- Globalization
- Automation of jobs involving routine work
- Vast extinction of the kind of low-skill, routine work jobs in the U.S. that our education system was designed to provide to most workers

The U.S. School Reform Agenda Since 1970's



- More money (more than 250% growth in last 50 years, AFTER accounting for inflation)
- Lower class size
- Choice (charters and vouchers)
- Technology
- Tough test-based teacher-accountability systems

How the US Responded — School Reform Agenda Since 1970's



- Famous Reagan-era report, *A Nation at Risk*, was wrong. We are not behind because American student performance suffered a big decline. There was no decline. But there was no improvement either.
- Other nations, many largely illiterate after World War II, raced past us, way ahead of us on both the quantity and quality of primary and secondary education, and spending less per student than we do
- Our problem is not decline; it is a failure to modernize a system that is still brilliantly matched to the needs of the smokestack economy of 100 years ago.

WHAT WE SPENT—WHAT GOT FOR IT



- Between the 1969-70 school year and the 2013-14 school year, per pupil expenditures in the public schools increased from \$5,147 per student to \$11,998 per student, **AFTER ACCOUNTING FOR INFLATION**
- Over the same period, the scores of our high school students on the Long-Term National Assessment of Educational Progress did not vary more than six points for reading. It was much the same for math.
- The cost of the system more than doubled, while student performance remained flat

How the US Responded — School Reform Agenda Since 1970's



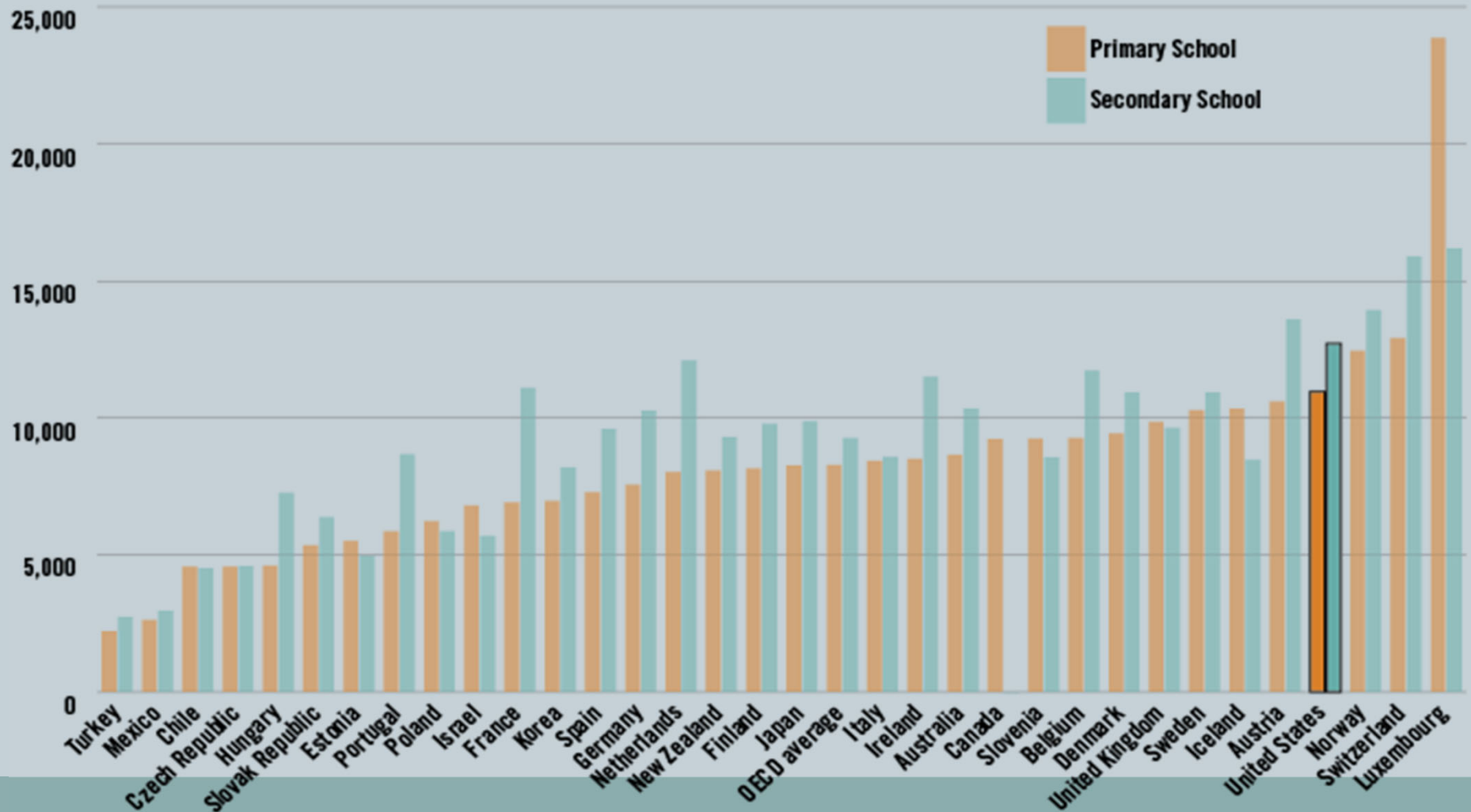
THE REFORMS OF THE RIGHT (E.G., CHARTERS,
VOUCHERS), THE REFORMS OF THE LEFT (MORE MONEY)
AND THE REFORMS OF THE CENTER (MORE ACCOUNTABILITY)
MADE NO DIFFERENCE AT ALL

Spending Per Student



Per Pupil Expenditure by Country, 2011

Primary and secondary education, all services



Source: OECD Education At a Glance

The Relationship Between Spending and Student Performance



- OECD data show that, once a country has reached a spending threshold of \$50,000 per student for the entire period of 1st grade through 12th grade, there is almost no relationship at all between the amount of money spent and the results in terms of student achievement
- After that threshold is met, how the money is spent is much more important than how much money is spent
- The top performing countries spend less than 70% of what the U.S. does per student, but they spend much more on support for families with young children



Part 4

HOW FAR BEHIND ARE WE?

Other Countries' Performance Zooms Past Us



US Rankings on PISA

	Reading	Mathematics
2000 (32 countries)	15	19
2018 (79 countries)	13	35

U.S. Workforce Skills (PIAAC*)



- OECD survey of the skills of all U.S. workers
 - Reading: Average
 - Numeracy: Near the bottom with Ireland, Spain & Italy
 - Digital Problem Solving: Dead Last
- ETS analysis of 16 to 34-year-olds in survey
 - At or near the bottom in reading, numeracy & problem solving
- U.S. scores *declined* since last PIAAC survey

*Program for the International Assessment of Adult Competencies, OECD



Part 5

WHY DOES IT MATTER?

Our Students, Now Far Behind, Must Now **Be Far Better Educated** Than Ever Before



- Many poor nations now able to give their workforce the same basic skills our workers have
- But those workers, in direct competition with ours, charge much less than our workers do – there is less and less work for our relatively well-paid low skill workers
- Artificial intelligence, robots, all kinds of automated equipment, machine learning and related technologies are devastating the market for people who have only the basic skills (1/2 our graduates)



Part 6

**HOW CAN WE MATCH
THEIR PERFORMANCE?**

How Can We Match Their Performance?



That's simple:

Figure out how they did it,
Then do it even better

It's called **INDUSTRIAL BENCHMARKING**

How Did Our Competitors Do It?



- Did not double down on our mass-production industrial model (inexpensive teachers; low standards)
- That model designed to produce majority of graduates with little more than an 8th grade level of literacy
- Knew the jobs available to them would rapidly decline
- Needed to provide to virtually all a kind and quality of education until then available only to their elites—for no more money than the old model
- That required a whole new model

What We've Learned



Part 7

MATCHING THE TOP PERFORMERS

How A State Can Match the Top Performers



- What the top performers provide to make sure all students start first grade able to participate fully in the curriculum
 - Substantial child allowances for each child – not means tested
 - Free home visits, nutritional assistance, medical care etc. available to pregnant women
 - Mandated year or two of family leave for both parents
 - High quality, low-cost day care available to all families when family leave runs out
 - High quality low-cost or no cost early childhood education available, strongly aligned with Kindergarten, provided by staff with qualifications comparable to those of elementary school teachers
 - A web of support for families in concentrated poverty with young children

How A State Can Match the Top Performers



- Define student academic performance standards, then create incentives for everyone to work hard to achieve those standards
- Figure out what it really takes to succeed in the first year of community college
- Use that information to set the standard for a true College and Career Ready (CCR) credential to be issued by high schools to students who meet it
- The Goal: To get most students there by the end of sophomore year in high school, almost all by the time they leave high school
- Options when CCR reached:
 - AP diploma, IB diploma, Cambridge diploma
 - CTE credential with real economic value (fewer than 5% get this now)
 - Associates Degree earned while in high school

How A State Can Match the Top Performers



- When performance standards are set, then create incentives for everyone to work hard to achieve them and build capacity of the system to deliver them
 - Build curriculum frameworks to get students to CCR by end of sophomore year
 - Build course syllabi to match curriculum frameworks
 - Train your teachers to teach those courses to students from many different backgrounds using whole class differentiated instruction
 - Use formative evaluation to make sure all the students in the class are getting it before you move on; while giving most able students an enriched curriculum to keep them challenged

How A State Can Match the Top Performers



- Make Career and Technical Education a High Value Option for Students (and their parents)
 - Make admission to CTE contingent on reaching the new CCR standard (meaning, abandon the idea that CTE is for students who are no good at academics)
 - Go to your employer community and offer to partner with them to design programs that will enable them to close their skills gaps if they will offer apprenticeships to students who want to meet their requirements
 - Go to your community college and design technical programs that begin in high school and continue seamlessly in community college
 - Stop calling students who take 3 CTE courses in high school CTE concentrators and start taking CTE seriously

How A State Can Match the Top Performers



- **Get First Rate Teachers for Your Schools**
 - U.S. is now getting most of its teachers from the bottom half of high school students going on to college
 - Top performers get their teachers from middle, top 40%, top 20%, even, in one case, top 5%.
 - Most top performers allow only a few of their research universities to train their teachers, thus limiting teaching careers to high students who can get in to those universities

How A State Can Match the Top Performers



- **Get First Rate Teachers for Your Schools**
 - Limit right to offer a teacher ed program to no more than two or three research universities in your state
 - Offer strong financial incentives to high quality high school grads to go into teaching
 - Pay all teachers at rates benchmarked to high status professionals
 - Build your teacher education program on the findings of cognitive science and the science of learning
 - Provide a strong clinical requirement into your teacher ed program

How A State Can Match the Top Performers



- **Organize and manage your schools like fully professional workplaces**
 - Reduce the amount of time that teachers are required to teach
 - Make that time available to teachers to develop new lessons, create better assessments, build new programs, tutor students who need extra help, observe each others' classes, conduct research
 - Set up teams in which teachers do these things together
 - Create career ladder systems with advancement and compensation based on quality of teaching, contribution to the work of teacher teams, leadership ability and research leadership

How A State Can Match the Top Performers



- **...And Much More (for example...)**
 - Don't wait for students to struggle—provide extra support when they start to slip, right away, as much as they need, in school and out
 - Partner poor performing schools with schools that do much better with similar students/incentivize successful principals to mentor less successful ones, the same with teachers
 - Give the schools the resources they need to do the job, but hold them strictly accountable for using it the way you intended

QUESTIONS FOR YOU



- Do you agree with this picture of:
 - How the global economy has evolved?
 - How the U.S. education system has failed to evolve to meet the demands of a rapidly changing world?
- How did all those other countries get so far ahead from a starting point so far behind us?
- Who is to blame or is anyone to blame?
- Do you agree that the best place to look for guidance is the strategies used by the top performers to get so far ahead of us?

QUESTIONS FOR YOU



- If not, where should we be looking for guidance?
- The ideas offered here would require the U.S. to greatly modify its heritage of local control of schools. Could that be done in the U.S.? Should it be done here? What's the alternative?
- The top performers spend much less per student than we do and get much better results. But that does not count what they spend on families with young children – Should we adopt the same finance pattern? Is it politically possible?

QUESTIONS FOR YOU



- The top performers are getting their teachers from their top research universities. If the U.S. were to do that, we would have to shut down hundreds of schools of education, which would result in the closing of many small universities. Should we do that? Could we?
- This proposal calls for redesigning our high schools so that they offer a curriculum comparable to the high school curriculum in top-performing countries, which would mean doing what we now do in community college in high school. Is that possible? What would have to change to make it work?

QUESTIONS FOR YOU



- Career and technical education in the United States is our curriculum of last resort, the place where students the schools cannot do academic work go. This proposal calls for building a new career and technical education system that prepares students who want a hands-on experience for work that will require strong academic skills. Does that make sense to you? Could it be done. How would you organize it? Could we get businesses to become active participants in preparing students for the demanding technical work that lies ahead. How?