STANDING ON THE SHOULDERS OF GIANTS

A National Symposium

Redesigning the American education system based on the strategies used by the top-performing nations

National Center on Education and the Economy
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U.S. BEING OVERTAKEN BY ONE NATION AFTER ANOTHER ON:

- **Quality**
  Student performance
- **Equity**
  Degree to which socio-economic status predicts student performance
- **Productivity**
  Cost per capita of educating our students
• **JAPANESE CHALLENGE OF 70s**
  Higher quality, lower cost

• **AMERICAN RESPONSE**
  Industrial benchmarking

• **NCEE**
  Benchmarking the top-performing nations in education for 22 years
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- **ORIGINS**
  Secretary Duncan request to OECD

- **WHY THIS MEETING**
  This paper goes further than OECD report

- **ANSWER TO THE QUESTION:**
  “If you knew what we know about the strategies used by the top-performing nations, what strategies would you implement to put the U.S. over the top?”
With the exception of the states’ Common Core State Standards program, the most popular education reform strategies in the United States are not being used by the top-performing countries, and the key strategies being used by the top-performing countries are not being used in the United States.
More money
Smaller class sizes
Tying teacher pay and retention to scores on standardized student achievement tests
Supporting social entrepreneurs to produce disruptive change
Taking the caps off charter schools
• Aggressive international benchmarking
• Powerful, coherent, aligned instructional systems
• Design to get all students to high standards
• Funding systems that put more money behind students who are harder to educate
• High quality teaching force
• Workplace organized and managed along professional lines, not industrial lines
• Coherent education systems
• Research for this paper focused on Canada (Ontario), China (Shanghai), Finland, Japan and Singapore
• *Strong Performers and Successful Reformers*
• Paper for this meeting based on a major revision to *Strong Performers* to be published in the fall by Harvard Education Press as *Surpassing Shanghai: An Agenda for American Education Built on the World’s Leading Systems*
• I’ll summarize “Standing on the Shoulders...”
• Intent on knowing what their competitors are doing
• They never stop
• Focused on the strategies used to produce widespread acquisition of complex skills, creativity, innovative capacity, not just basic skills
• Internationally benchmarked standards, across the whole core curriculum
• High quality exams for complex thinking skills
• Curriculum frameworks
• Teachers are taught to teach the curriculum
• All highly aligned
• CCSS a good start, but a long way to go
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All Students to High Standards

• Design criterion, not a slogan
• State or national finance, not local control
• Best teachers for hardest-to-educate
• No tracking; all expected to hit the high note
• None pushed ahead, none left behind
• Diagnosis and prescription the key to teacher education
• Very high standards for getting into teacher education
• Moving teacher education from low status institutions to research universities
• Make sure all candidates—including future elementary teachers—deeply versed in the subjects they will teach
• In pedagogy, focus on diagnosis and prescription
• Apprentice new teachers to master teachers
• Career ladders in teaching and leadership
• Teachers paid at same level as leading professions
• Same kind of professional autonomy
• Ratio of applications to places 6:1, 8:1, 10:1
• NEVER waive the standards in face of shortages
• Do not focus on getting rid of their worst teachers because they have surplus of great teachers

• Several top-performers have very tough unions

• No correlation between strength of the union and student performance

• But most of their unions have adopted a professional—not industrial—model of work organization
INDUSTRIAL MODEL

• High volume, low cost, low quality, high waste, skill in the machine
• Workers treated like interchangeable parts, not expected to have great skill
• Accountability to supervisor
• Unions expected—even required—to defend workers, irrespective of the quality of their work
PROFESSIONAL MODEL

- High quality, low waste, skill in the worker
- Used when each situation is different/great discretion for the worker
- Worker expected to have high skills
- Primary accountability to colleagues
- Collaborative, not conflictual, union model
• How the parts and pieces fit together
• We just keep adding laws, regulations, programs
• Often in conflict with one another
• U.S. does not have a system
Recommendations are for states

Start with the Ontario model

- Reached out to teachers and their unions
- Focused on providing support to teachers
- Brought bottom up a long way, but must adopt the rest of the agenda to meet top performers
- Had already made finance transition, had teacher training in high status institutions
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2-Step Implementation

• Create new Race to the Top for states that want to implement this agenda
  - Each to approach this agenda in their own way, building on their own strengths
  - Demonstrate their commitment to building on what the top-performing countries have learned about top performance
• THEY set high standards to enter teaching and never waive them; WE set low standards and waive them whenever we have a teacher shortage

• WE require very little by way of mastery of math and science of our elementary school teachers; THEY demand a lot, and we wonder why we can’t move the needle on student performance in these subjects
• WE are unhappy with the quality of teacher education, and decide that “alternative routes” requiring very little instruction in pedagogy are the answer; THEY make sure that their teachers have a much better command of the subjects they teach than ours do AND they require that they get extended instruction in pedagogy.
WE pour our treasure into a program that recruits a small number of students from top colleges to teach only two years in our schools; THEY change their policies so that they recruit their entire teaching force from top college grads and they make sure they get the skills needed to teach really well. Why should we be surprised that they do better?
• THEY pay their teachers the same way they pay their engineers. WE don’t pay them enough to support a family.

• WE think its OK to let people in wealthy communities get the best teachers and finest facilities, and give the kids in the low income communities the least capable teachers and the worst facilities, while THEY put more money
behind their hardest-to-educate students than those who are easiest to educate.

- WE talk about quality teachers, but we seem to believe that the way to get them is to fire the worst ones, without doing much to greatly improve the quality of their replacements. Why are we surprised when there are no replacements? THEY are not focused on their worst teachers because they have a surplus of great teachers.
• We behave as if we can fix this system without paying the price, as if it can be fixed surgically, with $10,000 signing bonuses, “alternative routes” and sexy programs to attract a handful of elite teachers to short term stints in our schools.

• The experience of our top competitors clearly shows that is not true.

• It is not rocket science. It’s time to get serious and get to work.
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7 Strategies for Success

- Aggressive international benchmarking
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