

Education Writers Association



International Comparisons of U.S. Education Performance: *What They Do (and Don't) Show, Why They Matter*

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How We Got The World's Best-Educated Workforce



- Step 1: *The 1800s*
 - Led the world in offering free elementary school education
- Step 2: *Turn of the 20th century*
 - Led the world in offering a free secondary education
- Step 3: *Post-World War II*
 - Led the world in expansion of higher education for the masses
- *These are all measures of QUANTITY of education*

OUR REWARD

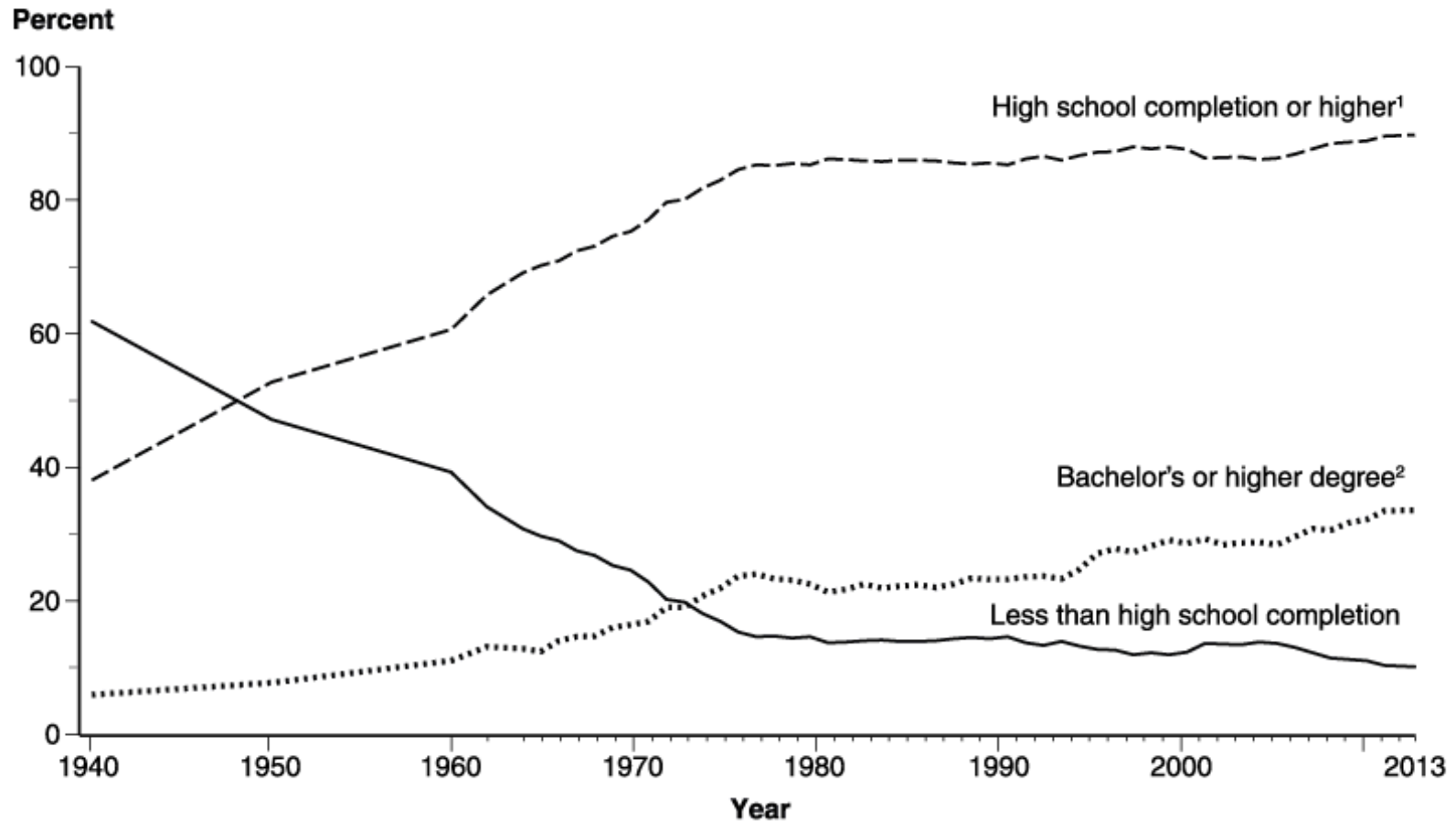


- Through the latter half of the 20th century:
 - The best-educated workforce in the world (as measured by attainment)
 - The most successful economy the world had ever seen
 - ✦ Average income
 - ✦ Distribution of income

Attainment: The Last 70 Years



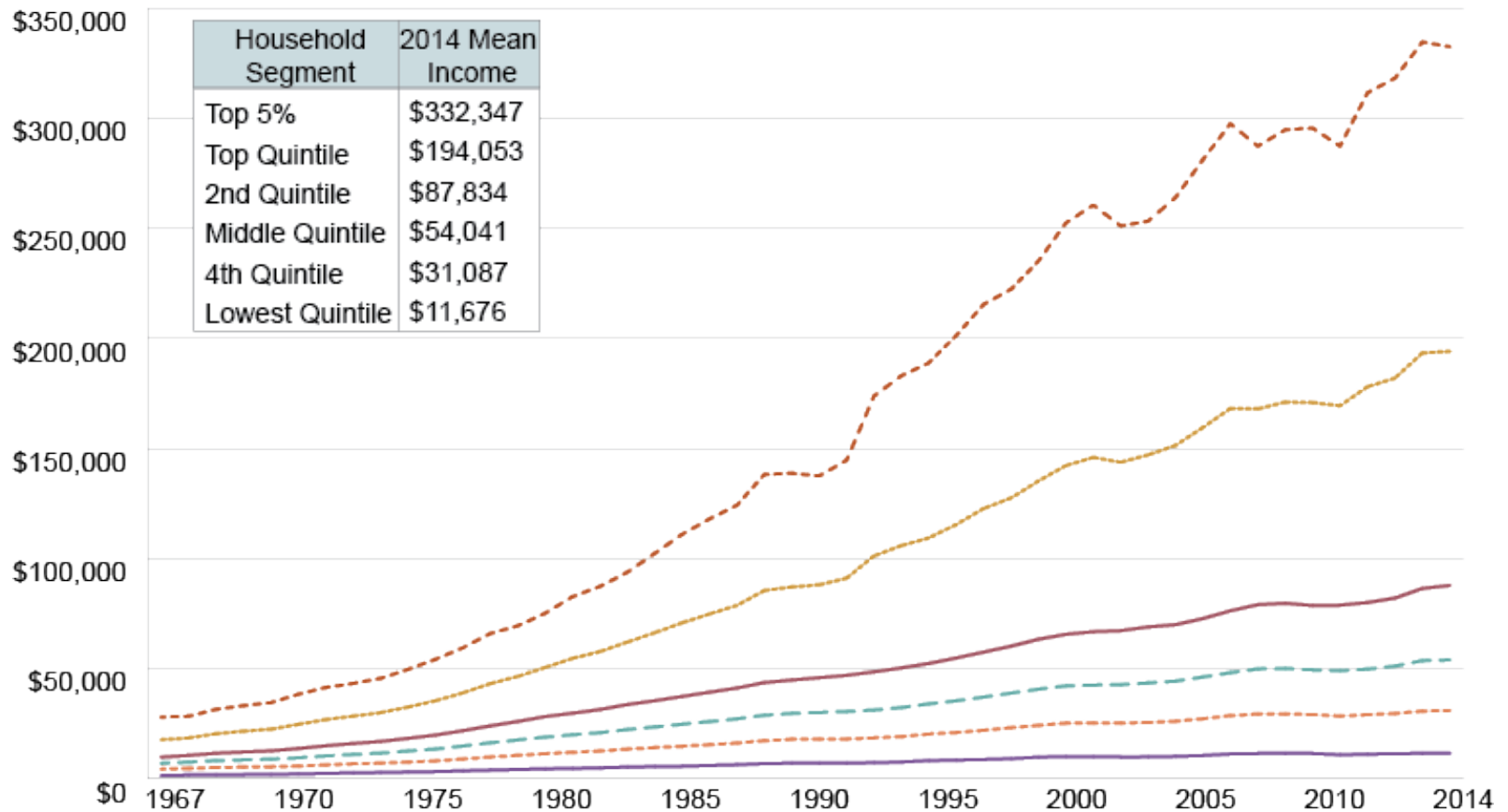
Figure 4. Percentage of persons 25 through 29 years old, by highest level of educational attainment: Selected years, 1940 through 2013



Income Distribution: The Last Half Century



Mean (Average) Household Income by Quintile and Top 5%



Source: Census Bureau

1970s *INFLECTION POINT*



- Attainment growth *stops*
- Productivity growth *slows*
- Family income *flattens*
- Distribution of income becomes *least* equal

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

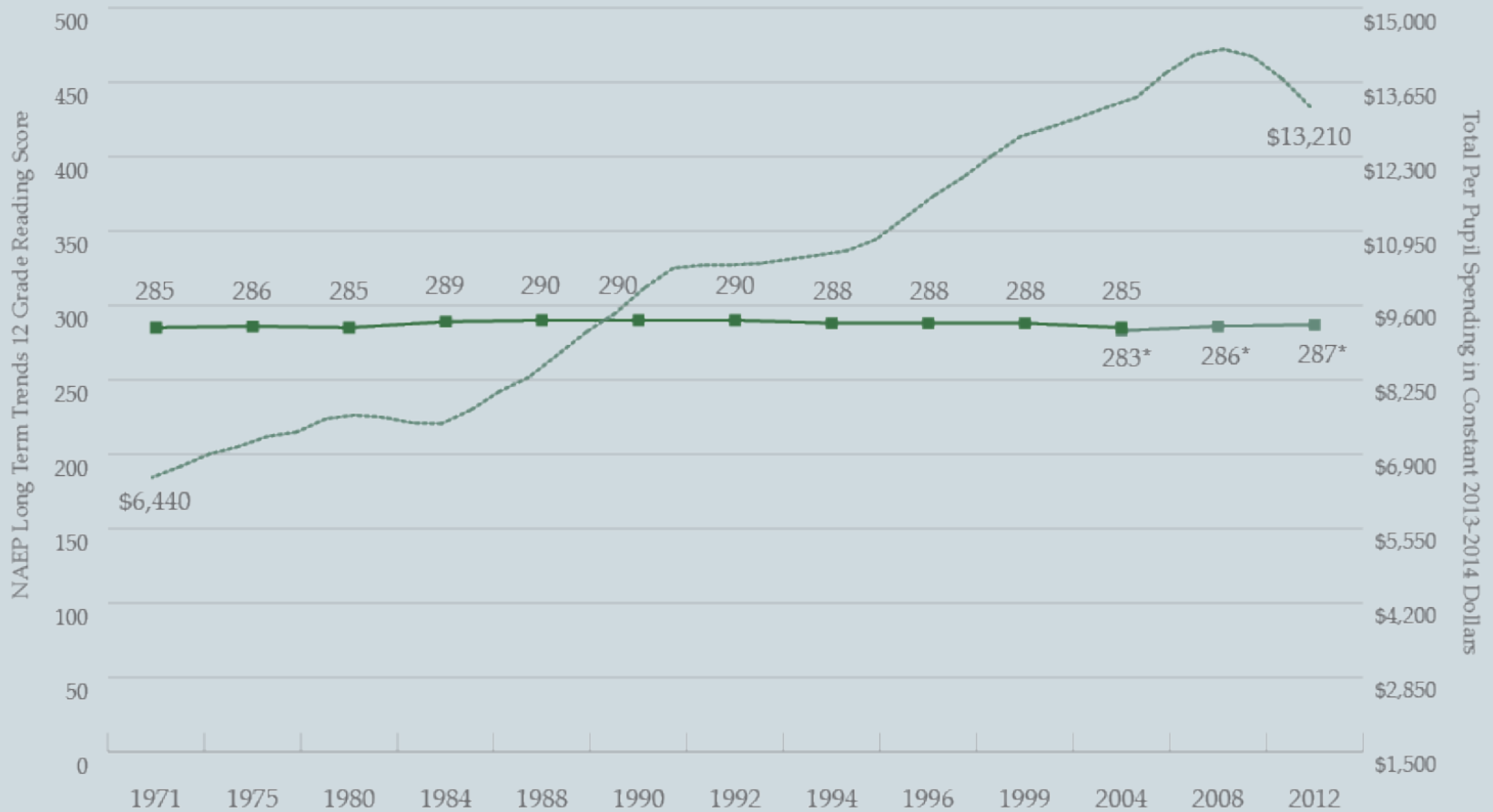


- Low wage competition
 - Low skill
 - High skill
 - All skill levels
- Automation of jobs involving routine work
- Vast extinction of low-skill, routine work jobs in high-wage countries
- Wages of highly skilled soared, because of a shortage; wages of low-skill fell like a rock, because of a surplus relative to demand
- This was when **QUALITY** became just as important as **QUANTITY** of education; **US FAILED TO ADAPT**

What We Spent; What We Got For It



Per Pupil Spending and NAEP 12 Grade Reading Scores, 1971 to 2012



*Revised assessment format

Their Model vs. Our Model: The Results



US Rankings on PISA

	Reading	Mathematics	Science
2000 (32)	15	19	14
2003 (41)	18	28	22
2006 (57)	NR	34	28
2009 (65)	17	30	22
2012 (65)	24	36	28

US Results on PIAAC (ETS Analysis)



- OECD survey of math, reading & problem solving
- ETS analysis of 16 to 34-year-olds in survey
 - Reading: Only Spain and Italy lower
 - Numeracy: Last, with Italy and Spain
 - Problem solving: Last again
- U.S. scores *declined* since last PIAAC* survey

*Program for the International Assessment of Adult Competencies 2012, OECD

Why are International Comparisons Important?



- Because they are the only way you can find out how you are doing relative to your competitors
- This often produces profound changes in national education systems (e.g., Germany, China, Singapore, Japan) but this is no guarantee
- Data no guarantee of action –to what:
 - On education: The left
 - On climate change: The right

Why PISA?



- PISA asks not whether you mastered the curriculum (like TIMMS), but
- It asks what you can *do* with what you have learned
- In an antecedent to PIAAC, respondents who could add a column and take a percentage could not add up a restaurant check and figure out the tip
- TIMMS surveys a very limited list of strong economic performers compared to PISA

What Can You Learn From PISA?



- How students compare by country on common measures of mathematics, science, reading and problem solving
- How those results are correlated in their survey with many other variables of interest to policy-makers and practitioners
- How student performance and the related variables change over time

What *Can't* You Learn From PISA?



- What caused some nations to do very well and others to do less well (though the correlations are a very rich source of *clues* as what MIGHT be causing these things)
- What policy makers intended, the strategies they used, how those strategies changed as they gained experience, how and why various stakeholders responded, which things things policy makers did because they thought it was the best strategy and which they did because they were blocked.

What You Should Be Trying to Learn From Other Countries



- **NOT:** which one to copy (different countries are good at different things and no context is just like yours)
- **INSTEAD:** which strategies found in the top performing countries can be combined with compatible homegrown strategies into a powerful, internally coherent and aligned strategy that will fit my context and objectives? (which is why conventional education research techniques can't do the job)

What is the Best Way to Pick the Strategies you Want to Use?



- Identify the top performers
- Look for patterns of policy and practice that are common across top performers and largely absent among low performers
- Identify common or underlying principles
- Test your findings by looking at which countries are rising and which are falling
- Never stop doing this