

Utah Legislature, State Board of  
Education, State Board of Regents



Ready for College and Career:  
How the US Compares to the  
Top-Performing Countries

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# Thanks to —



- Senator Millner, for inviting me to meet with you today and to
- Senator Stephenson, for his strong participation on in the work of the NCSL task force on international benchmarking in education, which has been meeting for almost a year on the subject of this meeting

# NCEE Community College Research



- 2 1/2 years of research on what it takes to succeed in 1<sup>st</sup> year of typical community college
- Involved some of the leading researchers in the US
- Looked at 8 of the most popular CC programs
- Analyzed reading level of most popular textbooks
- Gathered samples of assigned student work and grades
- Analyzed topics in math covered in 1<sup>st</sup> year
- Talked with instructors

# NCEE Community College Research



- Reading level of texts at 12<sup>th</sup> grade level
- Instructors must make Power Point summaries
- Typical high school text now at 7<sup>th</sup>-8<sup>th</sup> grade level
- “College Math” is Algebra I, and many cannot do it
- No high school math required in community college
- High school grads command of middle school math very shaky
- Community College instructors rarely ask students to write anything because they can't
- ACT told us that predictions for college success pretty much the same for 4 year colleges as for 2 year colleges

# The Truth About College Readiness

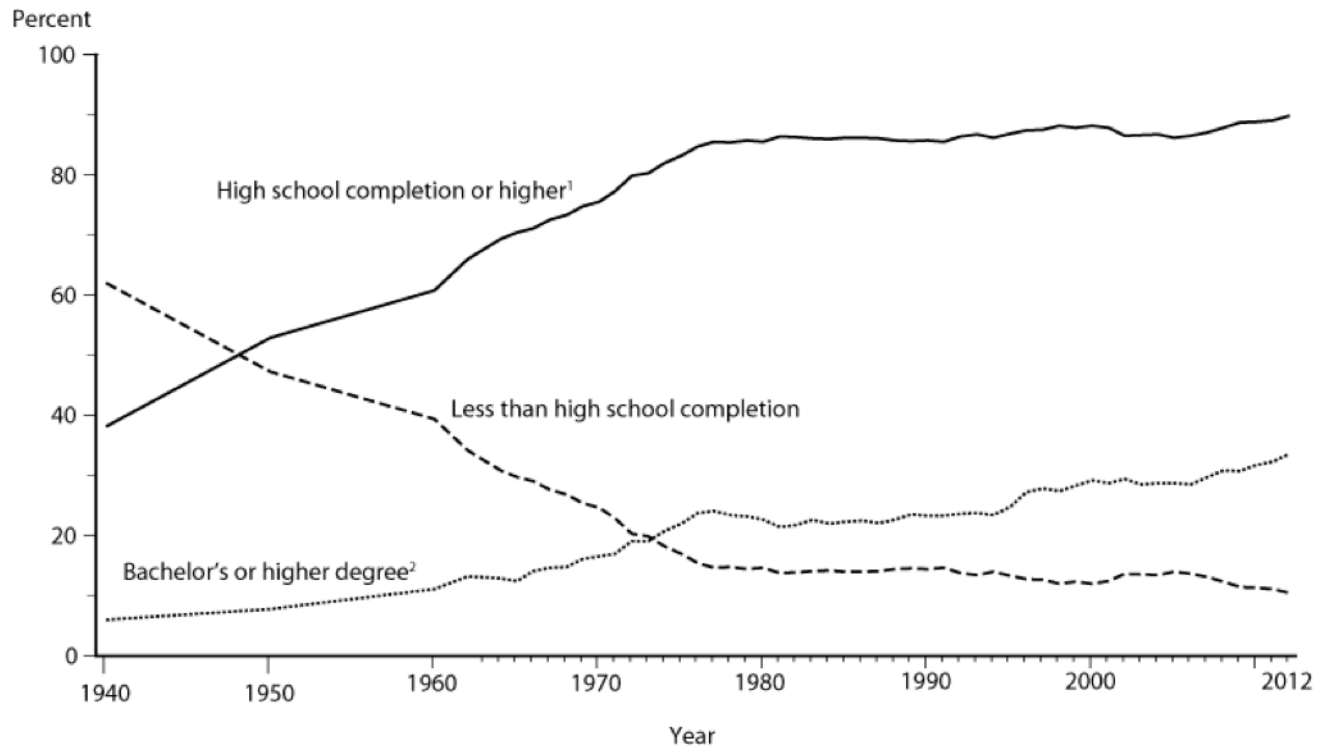


- Most college-bound high school grads are not going to college—they are enrolling in very expensive high schools
- A large fraction are not ready for that high school program
- Either way, they are not ready either for college or work
- HOW DID WE GET HERE?
- HOW DOES THAT PICTURE COMPARE TO OTHER COUNTRIES' SYSTEMS?

# Attainment: The Last 70 Years



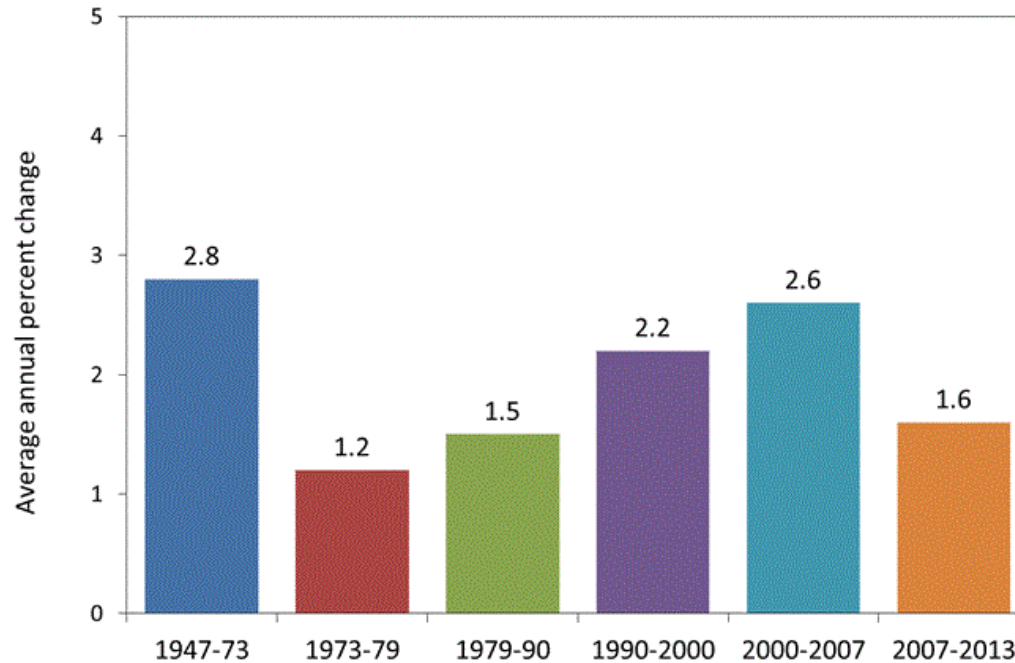
Figure 4. Percentage of persons 25 through 29 years old, by highest level of educational attainment: Selected years, 1940 through 2012



# Labor Productivity: The Last 65 Years



Productivity change in the nonfarm business sector, 1947-2013



Source: U.S. Bureau of Labor Statistics

# Income Distribution: The Last Half Century



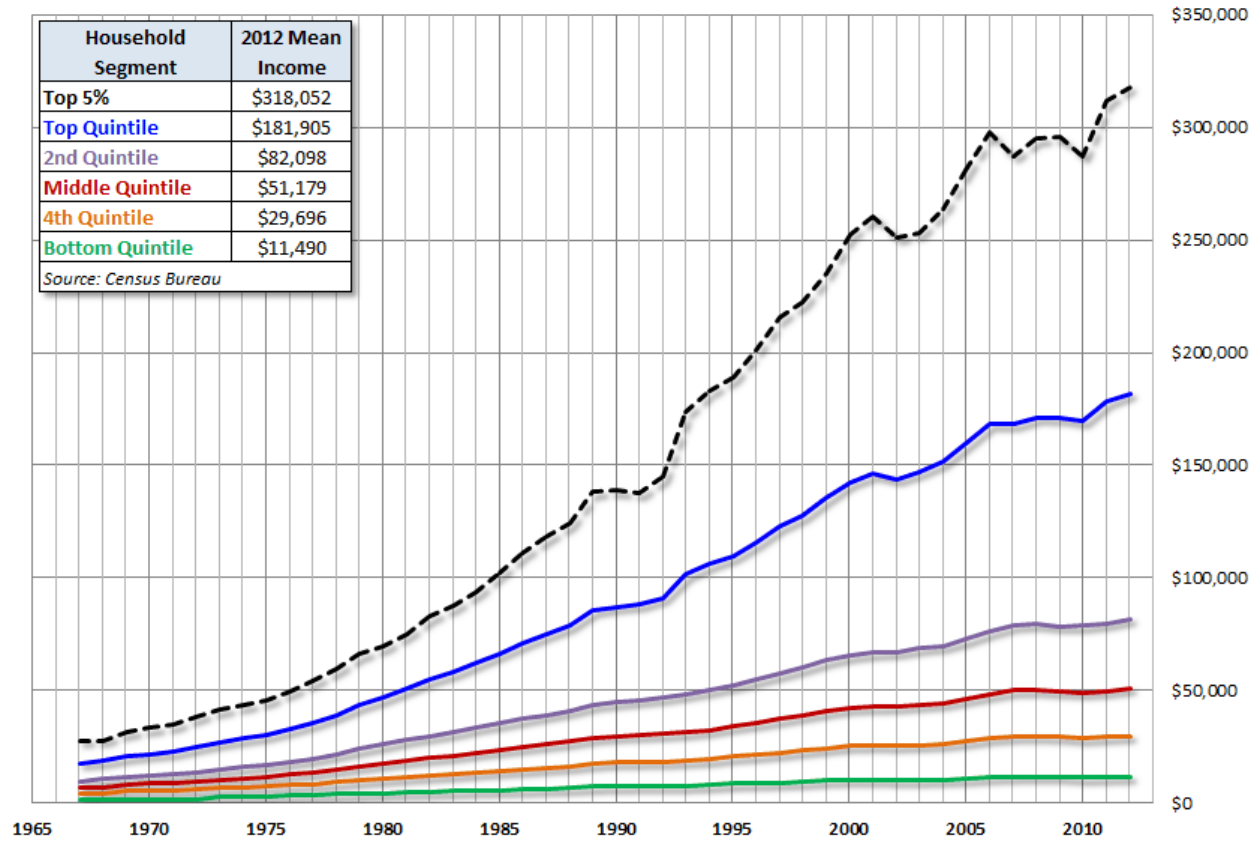
Source: Census Bureau  
Data from 1967-2011

### Mean (Average) Household Income By Quintile and Top 5%

dshort.com

Household Segment	2012 Mean Income
Top 5%	\$318,052
Top Quintile	\$181,905
2nd Quintile	\$82,098
Middle Quintile	\$51,179
4th Quintile	\$29,696
Bottom Quintile	\$11,490

Source: Census Bureau





# *Race Between Education and Technology*

Goldin and Katz



- From Mid-19th Century, US paces the rest of the world in attainment
  - 19<sup>th</sup> Century: universal primary school education
  - Early 20<sup>th</sup> Century: universal secondary school education
  - Mid-20<sup>th</sup> Century: access to postsecondary education
- Sustained growth of American economy; *most even* distribution of income in industrialized world
- Attainment growth *stops* in the 1970s
- 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

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



- More money (more than 250% growth in last 20 years)
- Lower class size
- School competition (charters and vouchers)
- Technology
- Tough test-based teacher-accountability systems

# What We Spent; What We Got For It



## Per Pupil Spending and NAEP 4th Grade Reading Scores, 1971 to 2008



Spending shown in constant 2013-2014 dollars

Sources: The Nation's Report Card "NAEP 2012 Trends in Academic Progress"  
NCES Digest of Education Statistics 2014

# Our Competitors Had a Different Analysis



- Did not double down on the old model (cheap teachers; low standards)
- That model designed to produce majority of graduates with little more than an 8<sup>th</sup> 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

# 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
- US scores *declined* since last PIAAC survey

# Education Reform Agenda of the Top-Performing Countries



- More \$ behind hard to educate than easy to educate
- Strong support for young children
- Strong, coherent instructional systems
  - Standards, curriculum, examinations
  - No more than 3 high stakes (for students, not teachers) exams
  - Exams at key “gateways”



# Education Reform Agenda of the Top-Performing Countries



- **High quality teachers arriving at the school house door**
  - Recruit from top 1/2 of college-going high school grads
  - Stringent admissions process
  - Mastery of content at high level (including elementary)
  - Mastery of craft (at least one year)
  - Research skills and emphasis on diagnosis and prescription
  - Teacher education done in research universities
  - High licensing standards/No emergency certificates

# Education Reform Agenda of the Top-Performing Countries



- **Professional school organization and management**
  - Aggressive career ladders (teaching, management)
  - Comp based on advancement up ladder, not seniority or credits
  - Much more time for teachers to work together in groups to:
    - Develop engaging lessons, research their effectiveness
    - Develop proving questions for students
    - Critique each others' practice
    - Mentor one another—hold each other accountable
  - Principals trained to create environment for disciplined impr't

# The Conclusion



- There are no shortcuts, no silver bullets
- To get elite results for all students at no increase in cost, we need a new system
- We need to learn from the best, and copy no one

# The Excuses



- We are “exceptional.”
- “It can’t be done here.”

# “We are Exceptional”



- Those nations only educate an elite; we educate everyone.
- They are homogeneous; we are uniquely diverse
- Their cultures are different; nothing they do can be transferred
- The US would be competitive with the top performers if our lowest income students were not counted

# “It Can’t Be Done Here”



- Gross inequities in finance can’t be fixed because  
Americans will never give up local control
- We can’t build strong state instructional systems  
for the same reason
- We can’t get rid of even the worst schools of education  
because they all have elected reps in the legislature
- We don’t have enough money to buy everybody off

# Let's Be Honest



- One nation after another is outperforming us on student performance, equity and cost
- Nothing we've done has worked
- No strategy we have bet on—except student performance standards—is used by the top performers
- We've run out of excuses
- Economic tensions are almost certain to drive this country apart unless we find a way to radically improve the performance of our education system
- A blue collar model of the teaching profession based on cheap teachers who stay in teaching only a few years will not work.

## A Question



**Isn't it time for us to adopt a bit of humility, drop reforms for which there is no evidence, and replace our out-of-date system with a modern one, based on what is working the top-performing countries?**



## Our Offer



**NCEE has been researching the top performing education systems worldwide for 26 years. We are looking for two to three states interested in building one of the most successful education systems in the world. Would Utah like to be one of them?**