Global math education stagnations in the developed countries series

& how to overcome them by empowering the math poorest half of the student population, starting with the MMU1 (Mini Mini USL1)
By Dongchan Lee

Part 2: MMU1 pilot studies with the states of the USA (January 31st, 2017)

Youtube video version of this is at https://www.youtube.com/watch?v=qiZW2GnNLXQ
Updates can be found from www.uslgoglobal.com
MMU1 (Mini Mini USL1) proposals to the cities 2017-2020 (2-4 years)

www.uslgoglobal.com
With Dongchan Lee

Ending Math Poverty

Very quickly

25%
The Best math 50% (with the school teachers)

25%
as appetizers

~ 1.35 STDEV advances

25%
The Worst math 50% with Dongchan Lee

25%

Follow the Yellow Arrows that indicate the expected MMU1 impacts.

To see is to believe:
Follow the 15 year trajectories by NAEP's math National Report Card

To ignore this is not only the economic ignorance of a nation, but also to betray the future generations of all around you.

www.uslgoglobal.com
Key points:

1) Most of the states of the USA have shown the indications that their state math average have reached the saturation points of growths similar to the results from the math results of the PISA and TIMSS between 2011 and 2015.

2) For the math poor states, still there are more space of the growths, but most of the participating cities seem to have quasi-saturated for the math average growths.
Quasi-horizontal TIMSS math growths past 20 years and what MMU1 is equivalent to do if implemented (Yellow Arrows)

**AUSTRALIA: PISA math trajectories: Math poverty levels & percentile distributions 2000-2015 (entire history)**

Source: OECD, PISA data 2017

The red arrow is the math chasm between the top math countries and poorest math countries in the entire PISA and TIMSS tests.
MMU1 (Mini Mini USL1) proposals to the states 2017-2020 (2-4 years)
To the 3 categories of math growth states in the USA
Based on NAEP (National Report cards) data 2003-2015
Hawaii
California
Utah
New Mexico
Texas
Oklahoma
Missouri
Arkansas
Tennessee
Louisiana
Mississippi
Georgia
Florida
West Virginia
Virginia
North Carolina

Massachusetts
New Hampshire
Vermont
Maine
Rhode Island
Wisconsin
Michigan
Indiana
Illinois
Ohio
Oregon
Idaho

Colorado
Kansas
South Carolina
Pennsylvania
NY
Maryland
Delaware
New Jersey
Connecticut

Alaska

Source:
https://nces.ed.gov/nationsreportcard/states/
For those grew much initially, but about to saturate or have been saturating...
Outside the main land
Average Scale Score over time for Hawaii

Mathematics (0-500)

- National public
- Hawaii

Grade 4 | Grade 8

Average Scale Score over time for Alaska

Mathematics (0-500)

- National public
- Alaska

Grade 4 | Grade 8
Mid-West to West
Average Scale Score over time for California

Grade 4

Grade 8

Average Scale Score over time for Utah

Grade 4

Grade 8

Average Scale Score over time for Arizona

Grade 4

Grade 8

Average Scale Score over time for New Mexico

Grade 4

Grade 8
Average Scale Score over time for Texas

Mathematics (0-500)

Grade 4

Grade 8

National public

Texas
South-East to East
New England & North East
Average Scale Score over time for Pennsylvania

Mathematics (0-500)

Grade 4

Grade 8

Average Scale Score over time for New York

Mathematics (0-500)

Grade 4

Grade 8

Average Scale Score over time for Maryland

Mathematics (0-500)

Grade 4

Grade 8

Average Scale Score over time for Delaware

Mathematics (0-500)

Grade 4

Grade 8
North Central-East
Average Scale Score over time for Ohio

Mathematics (0-500)

Grade 4 | Grade 8