Why "International Benchmarking" is an Important Principle of a Comprehensive Assessment System

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American Institutes for Research February 25, 2010



The paradigm of the state testing system in America

- Each state develops its own academic content standards
- Each state develops its own *performance standards*
- Each state develops its own test
- Each state reports adequate yearly progress to the federal government based on
 - different content standards,
 - different performance standards,
 - different tests.



What is wrong with this picture?

- Data from the 50 states are not comparable.
 - No inference about national progress is possible.
 - We cannot tell if progress in one state is better than progress in another state.
- From a scientific point of view the system lacks transparency.
 - Transparency in measurement is the first and most fundamental requirement for progress in science.
 - Common metrics are needed for transparency.
 - The ability to derive comparable measures from different measuring devices is the very definition of transparency.



A lack of transparency...

- Leads to policy jabberwocky.
 - Without a common metric the word "proficiency" means whatever you want it to mean.
- Misleads the public.
 - Low performance standards can be used to artificially jack up adequate yearly progress.
- Denies students the opportunity to learn career ready and college ready skills.
 - If all students are proficient, what is the motivation to teach them a more challenging curriculum?



International benchmarking can be used to obtain transparency by deriving comparable measures from different measuring devices

- We compare each state achievement standard to a high common international standard.
- This gives us a comparable measure against which state standards from different tests can be compared.

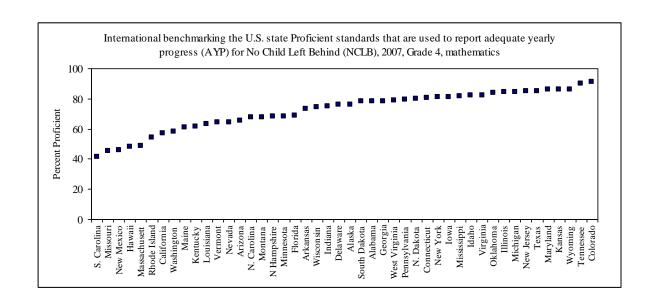


Using Grades to Communicate Common International Benchmarks

Benchmark	Cut-score on	Phillips (2009)
on TIMSS	TIMSS &	Benchmark
& PIRLS	PIRLS	Grade
Advanced	650	A+
	625	A
	600	A-
High	575	$\mathbf{B}+$
	550	В
	525	В-
Intermediate	500	C+
		C C-
	450	C-
Low	425	$\mathbf{D}+$
	400	D
	375	D-
Below Low		BD

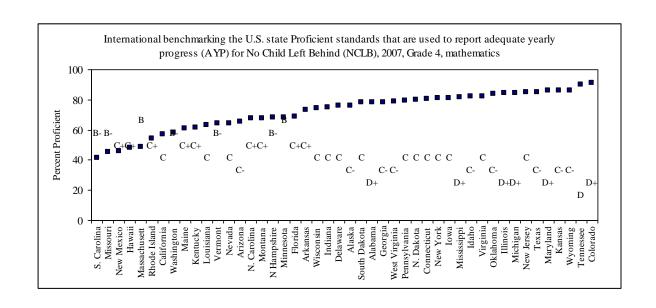


International Benchmarking with TIMSS: Grade 4, Mathematics



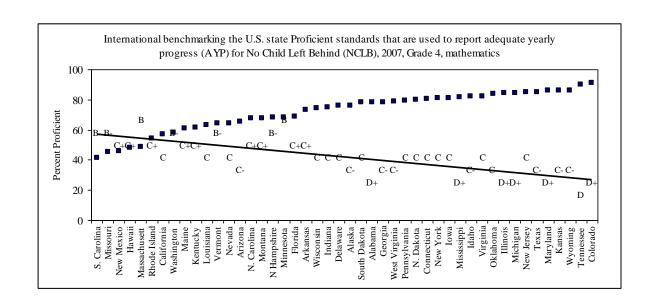


International Benchmarking with TIMSS: Grade 4, Mathematics



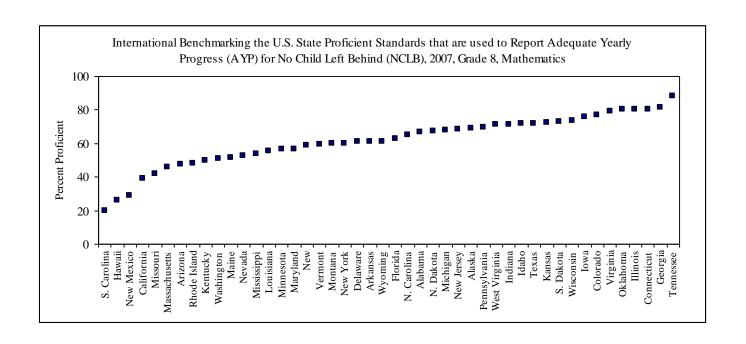


International Benchmarking with TIMSS: Grade 4, Mathematics



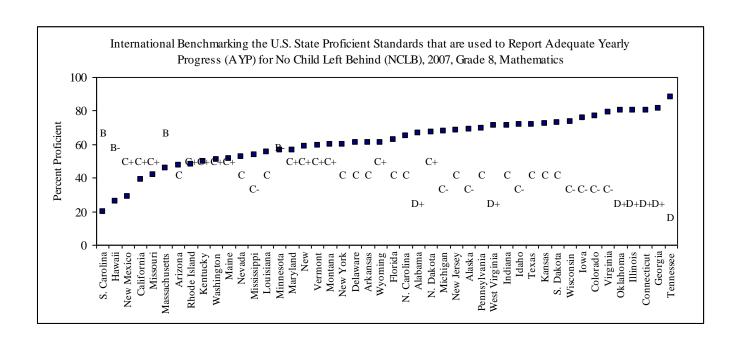


International Benchmarking with TIMSS: Grade 8, Mathematics



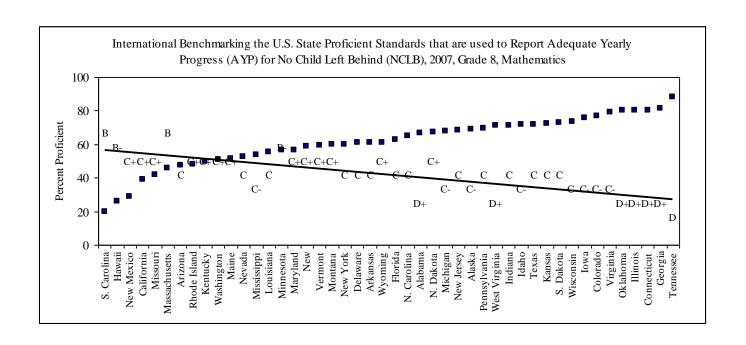


International Benchmarking with TIMSS: Grade 8, Mathematics





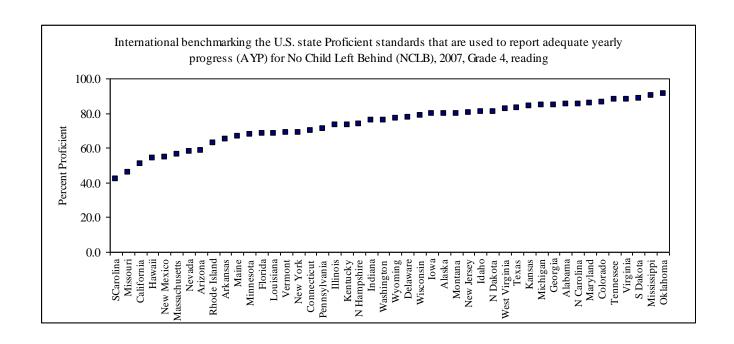
International Benchmarking with TIMSS: Grade 8, Mathematics





International Benchmarking with PIRLS: Grade 4, Reading

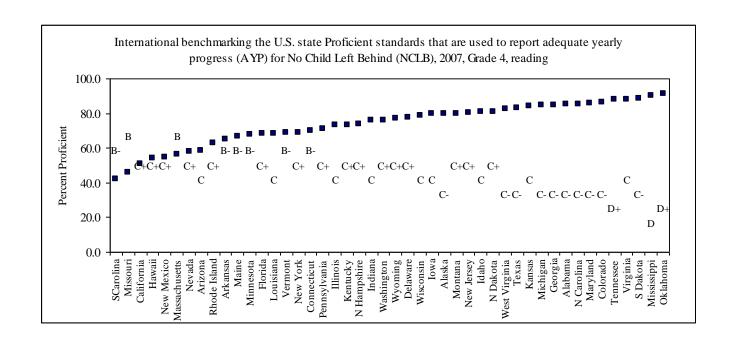
References: (1) Bandeira de Mello, V., Blankenship, C., & McLaughlin, D. H. (2009). *Mapping state proficiency standards onto NAEP scales: 2005-2007* (NCES 2010-456). Washington, DC: National Center for Education Statistics, IES, U.S. DOE, and (2) Figure provided by Phillips, 2010, American Institutes for Research, Washington DC.





International Benchmarking with PIRLS: Grade 4, Reading

References: (1) Bandeira de Mello, V., Blankenship, C., & McLaughlin, D. H. (2009). *Mapping state proficiency standards onto NAEP scales: 2005–2007* (NCES 2010–456). Washington, DC: National Center for Education Statistics, IES, U.S. DOE, and (2) Figure provided by Phillips, 2010, American Institutes for Research, Washington DC.





International Benchmarking with PIRLS: Grade 4, Reading

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