



Texas Public Policy Foundation
Texas' Math/Science Deficit:
Changing the Equation

Rep. Dan Branch
Member, Texas House of Representatives

Chairman of Budget and Oversight
Public Education Committee

Appropriations Committee
Vice Chair, Education Subcommittee

February 8, 2007
Austin, TX



So Goes Texas...

- ★ **Texas is a large state with a fast growing economy**
 - ★ **10 million new Texans expected by 2026**
 - ★ **One of nation's fastest growing economies**
 - ★ **Top 10 international GDP if we were an independent nation**
 - ★ **Jobless rates at historic lows**
 - ★ **Nation's leading exporter of goods and services**



So Goes Texas...

- ★ **National and international implications if we fail to plan for the future**

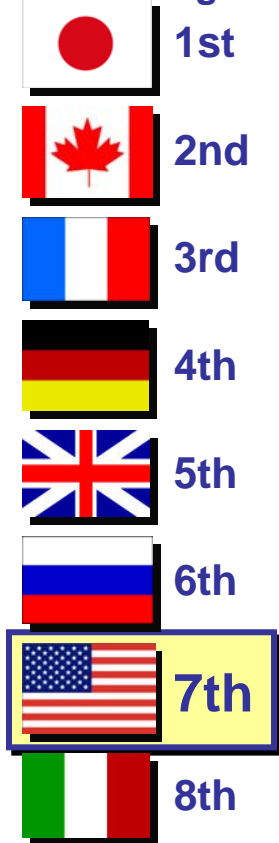
Critical Infrastructure Needs:

- ★ **Energy, water and environmental concerns**
- ★ **Mobility issues**
- ★ **Social safety nets**
- ★ ***Educated workforce***

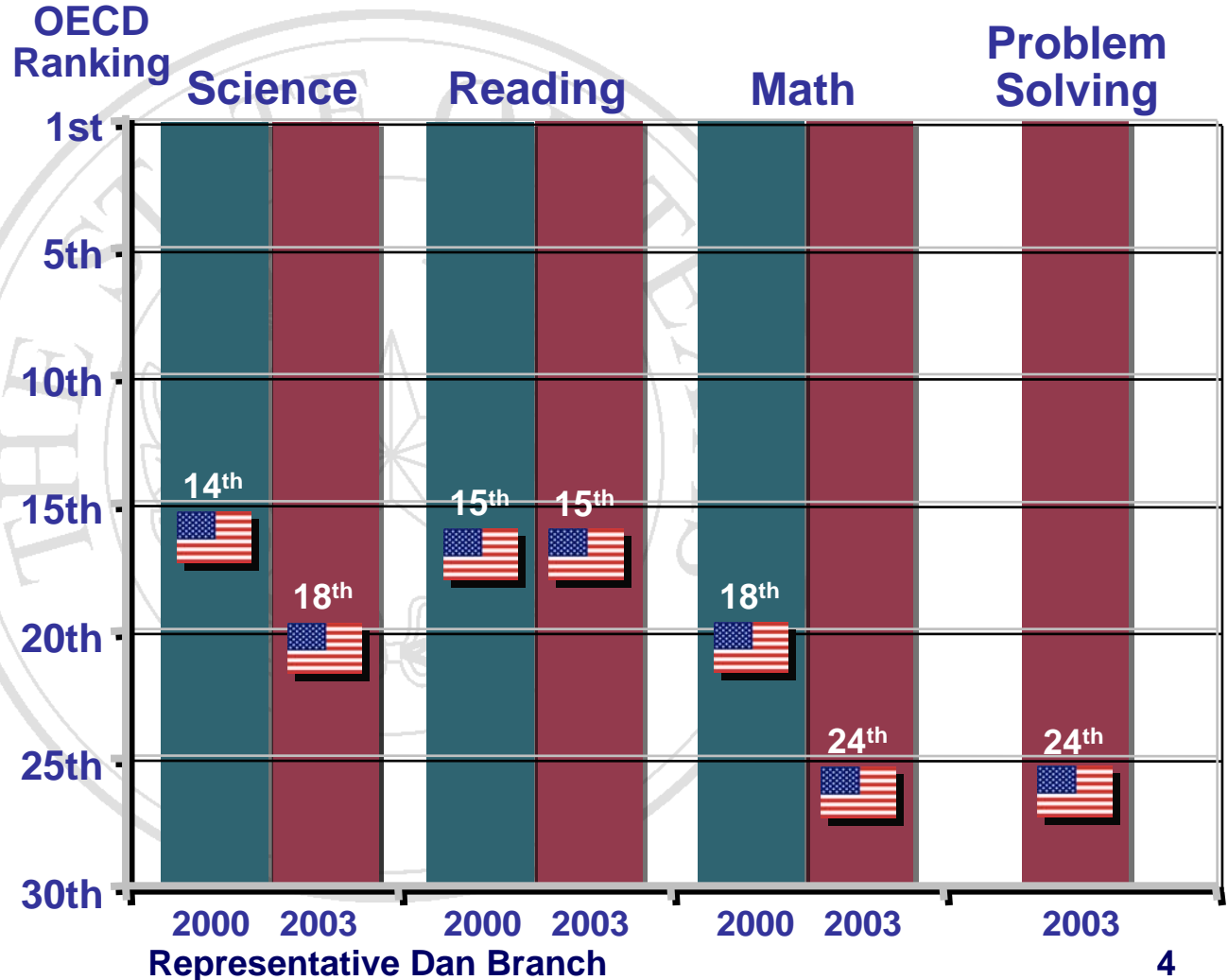


International Competition

Ranking of G8 countries:
10th grade math & problem solving



February 2007





Degrees Conferred in Math & Engineering Texas Public Universities

	American Math & Engineering	International Math & Engineering	Total Math & Engineering Degrees	All Degrees Awarded	% Math & Engineering
FY 2004	5674	2595	8349	90490	9%
FY 2005	6006	2772	8861	94790	9%
FY 2006	6512	2297	8971	98123	9%

***FY includes Bachelor's, Master's and Doctoral Degrees**

*** Does not include unknown ethnicity**

**** Source: THECB**



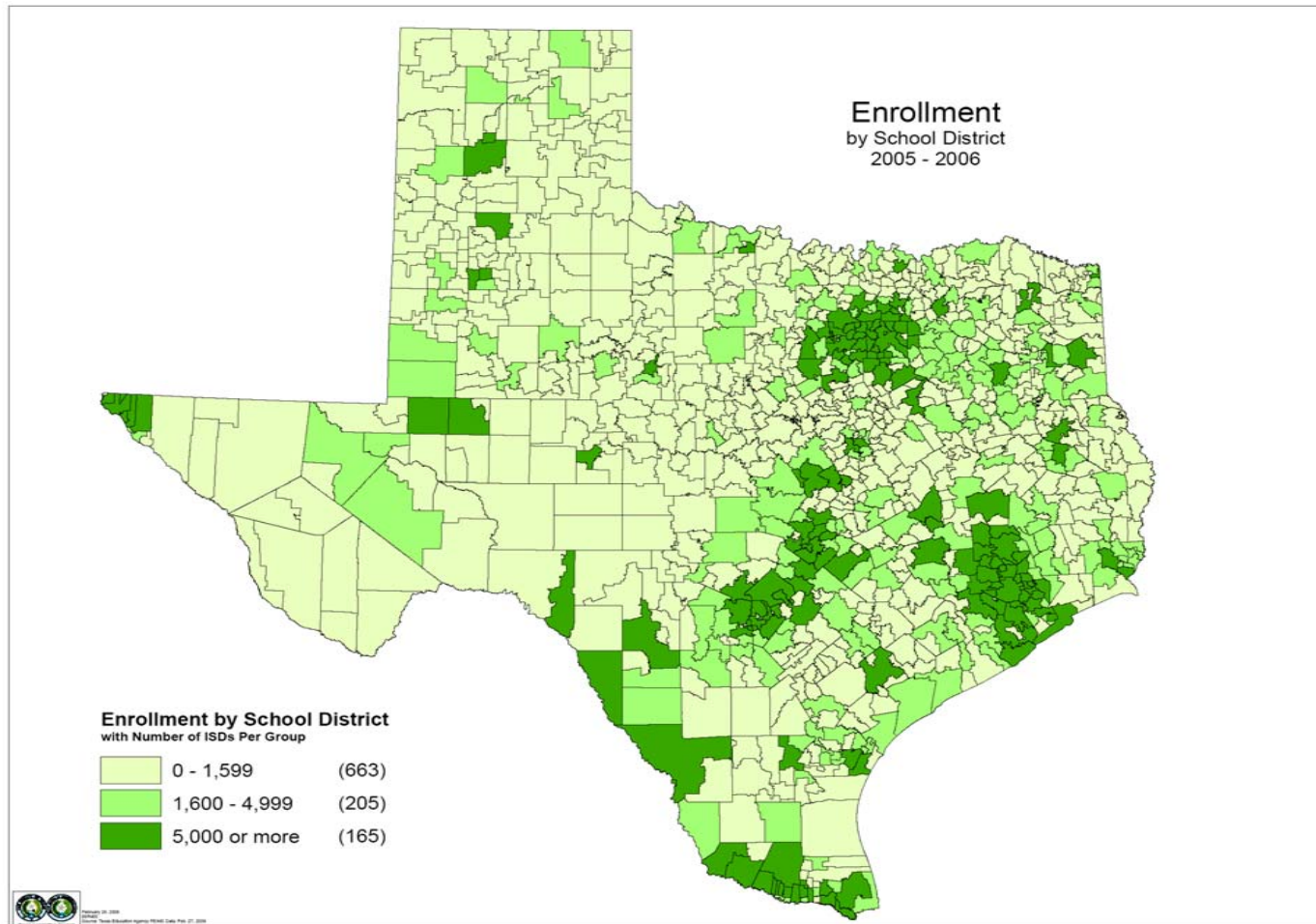
Competition is Changing...

- ★ No longer competing with CA and FL, we're competing globally
- ★ 2 billion new consumers & 2 billion new competitors added by India, China and eastern Europe
- ★ Innovative breakthroughs are coming from all over the world-- fueling economic competition





Texas Public Education at a Glance





Texas Public Education at a Glance

GRADE	ENROLLMENT	% OF STUDENTS	GRADE	ENROLLMENT	% OF STUDENTS
Early Education	25,650	0.60%	Sixth Grade	323,962	7.20%
Pre-kindergarten	182,293	4.00%	Seventh Grade	338,827	7.50%
Kindergarten	350,108	7.70%	Eighth Grade	335,708	7.40%
First Grade	359,210	7.90%	Freshman Year	392,051	8.70%
Second Grade	344,603	7.60%	Sophomore Year	322,817	7.10%
Third Grade	340,635	7.50%	Junior Year	281,366	6.20%
Fourth Grade	329,946	7.30%	Senior Year	256,799	5.70%
Fifth Grade	337,068	7.50%	TOTAL	4,521,043	100%

*Source: 2004-2005 TEA Data



Texas Public Education at a Glance

Students by Ethnicity and Economic Status

Ethnicity	Percent of Total	Percent change since 2004
African American	14.7%	6.8%
Hispanic	45.3%	4%
White	36.5%	-0.5%
Other	3.5%	6.3%
Total	100.0%	2.8%
Economically Disadv.	55.6%	4.6%

*Source: 2005-2006 TEA Data



Texas Public Education at a Glance

Class of 2005 Graduates

Ethnicity	Graduates*	% of All Graduates
African American	32,811	13.69%
Hispanic	84,566	35.28%
White	113,212	47.23%
Other	9,127	3.81%
Total	239,716	100.00%

*Including Special Education

*Source: 2005-2006 TEA Data



Texas Public Education at a Glance

TAKS Met Standard by Subject Area

Subject Area	Passage Rate
Reading/ELA	87%
Mathematics	75%
Writing	91%
Science	70%
Social Studies	87%
All Tests	67%

*Source: 2005-2006 TEA Data *Including Special Education

*Excludes Grade 8 Science



Legislative Remedies

★ HB 1 from 79th 3rd Called Session

★ 4 x 4 curriculum

- ⇒ 4 years of math and science required
- ⇒ 2007 freshman class first class under new requirements

★ High School Allotment

- ⇒ \$275 per high school student (ADA)
- ⇒ Used for dropout prevention, but many at-risk students struggle with math & science



Texas Public Policy Foundation
Texas' Math/Science Deficit:
Changing the Equation

Rep. Dan Branch
Member, Texas House of Representatives

Chairman of Budget and Oversight
Public Education Committee

Appropriations Committee
Vice Chair, Education Subcommittee

February 8, 2007
Austin, TX