

Virginia and Leading Industrialized Nations: Comparison Report

America: Success

Quality of Life
Economic Productivity
Nobel Prizes

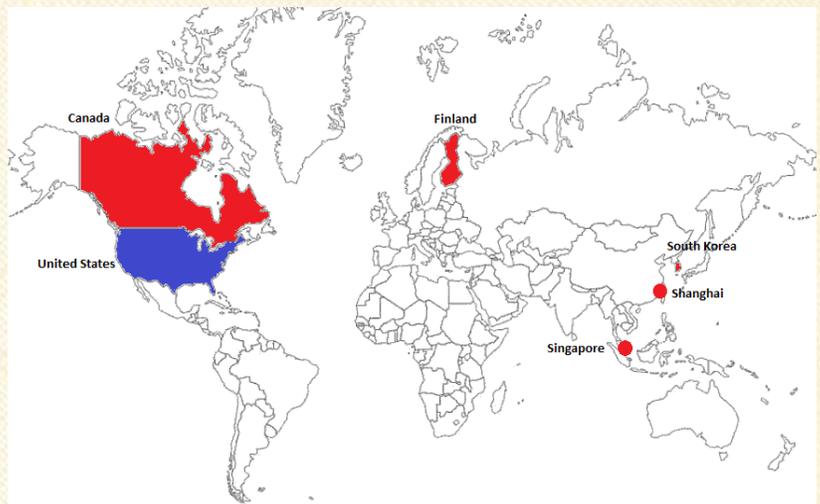
VIRGINIA: AT-A-GLANCE

- ❖ Population: 8 million
- ❖ GDP per capita: \$47,430
- ❖ Number of school divisions: 132
- ❖ Total Students: 1,258,521
- ❖ Total Teachers: 71,415

15 Years of Educational Initiatives

- ❖ Standards of Learning
- ❖ Data systems that measure student success
- ❖ New guidelines for school divisions to evaluate teachers and principals
- ❖ An integrated statewide system for improving teacher quality (e.g., Virginia Teaching Scholarship Loan Program, TeachVirginia, Clinical Faculty Grants)
- ❖ A statewide system of support low-achieving schools
- ❖ Rigorous graduation requirements and graduation rates – revisions of Standards of Accreditation
- ❖ Virginia Preschool Initiative
- ❖ Governor Magnet, charter, virtual, laboratory, and alternative schools
- ❖ Dual enrollment and year-round schools
- ❖ Career and technical education schools

Countries for Comparison



Why Canada?

- Proximity to U.S.
- Diverse student population
- Decentralized educational system

Why Finland?

- Consistently ranked top give on international assessments
- Representation of a European nation
- Less emphasis on standardized testing
- Fewer school resources

Why Shanghai?

- New to international assessments but outperformed top performing nations in all three categories

Why Singapore?

- Consistently ranks among the top countries across years, grades, and subjects based on TIMSS and PISA

Why South Korea?

- Ranked among top two in PISA Reading Grade 10 and TIMSS Math Grade 8
- Top four in PISA Math Grade 10 and TIMSS Science Grade 8
- Top six in PISA Science Grade 10



SUBMITTED TO VIRGINIA COMMISSION ON YOUTH

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Educational Inputs and Processes

How Long Do Students Attend School?

Country	Days in an Academic Year
Canada	Average: 188
Finland	187
Singapore	200
Shanghai	180
South Korea	204
United States	180

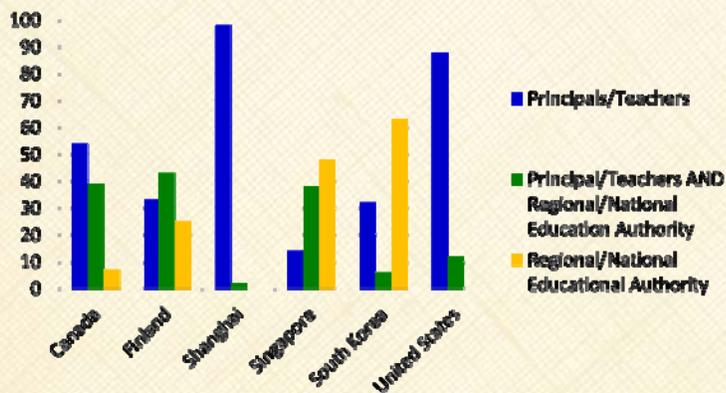
Country	Minutes in a School Day
Canada	304
Finland	240
Shanghai	390
Singapore	330
South Korea	264
United States	402

How Much Do We Spend?

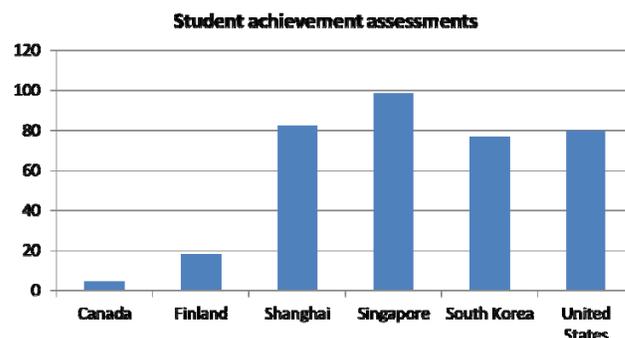
Country	Annual Expenditures Per Pupil
Canada	8,045
Finland	7,216
Shanghai	N/A
Singapore	N/A
South Korea	6,663
United States	10,259
Virginia	10,928

Who Hires Teachers?

Percentage in schools whose principals reported which agency has a considerable responsibility in making hiring decisions



Percentage of Students in Schools Where the Principal Reported Tests of Student Achievement to Monitor Teacher Instructional Practices



How Do We Select Teachers?

- **Canada:** Undergrad + 2nd degree (+1-2 years)
- **Finland:** 10% undergrad admitted; must have Master's degree to teach
- **Shanghai:** High societal regard, competitive income = attract and retain teacher candidates
- **Singapore:** Top 1/3 HS class recruited; final candidates 4-year paid education
- **South Korea:** Anyone can apply; only top 30% obtain teaching positions
- **United States:** Bachelors degree; not selective; only 40% of teacher prep

Teacher Salaries

NATION	Ratio: Primary Tch Salary after 15 Years to GDP	Ratio: Secondary Tch Salary after 15 Year to GDP
Canada	--	--
Finland	1.07	1.26
Shanghai	1.39	1.75
Singapore	1.67	1.67
South Korea	2.01	2.01
United States	0.97	1.01

Average Class Sizes

NATION	Average Student/Teacher Ratio
Canada	25
Finland	19
Shanghai	39
Singapore	35
South Korea	36
United States	24

Assessments are more likely to have a positive influence on student learning when they are—

- Aligned with learning targets and instruction
- Valid and reliable
- Used with frequent informative feedback
- Involve students in review and monitoring

Educational Outcomes

Virginia Reading Achievement

	4 th Graders: % Proficient on State Test (2009-10)	4 th Graders: % Proficient on NAEP: 2008-09	8 th Graders: % Proficient on State Test (2009- 10)	8 th Graders: % Proficient on NAEP (2008-09)
All	88.1	38	89.7	32
White	91.7	47	92.9	40
Black	79.7	18	82.9	14
Hispanic	84.7	26	84.9	22
Low Income	80.3	18	81.5	15

Virginia Math Achievement

	4 th Graders: % Proficient on State Test (2009-10)	4 th Graders: % Proficient on NAEP: 2008-09	8 th Graders: % Proficient on State Test (2009- 10)	8 th Graders: % Proficient on NAEP (2008-09)
All	88.1	43	86.9	36
White	92	54	90.8	44
Black	80.5	16	79.1	14
Hispanic	80.9	28	80.9	23
Low Income	80.8	23	78.4	15

High & Low Achieving Students: Reading

NATION	Percentage of Country's Students Not Reaching PISA Baseline (level 2)	Percentage of Country's Students in PISA Top Performing Groups (level 5 & 6)
Canada	10%	13%
Finland	8%	15%
Shanghai	4%	19%
Singapore	12%	16%
South Korea	6%	13%
United States	18%	10%

to have a positive influence

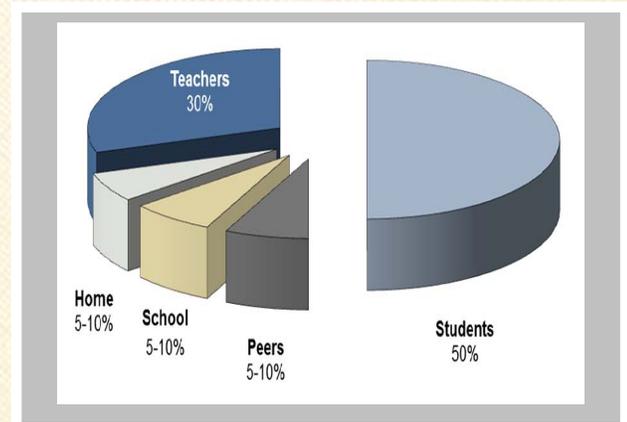
The Global Achievement Gap

- Of all students who enter college, 40% must take remedial classes
- 65% of college professors report students aren't prepared; blame focus on 9th and 10th grade achievement tests
- We're preparing our students for achievement tests—not real world skills

Discussion & Recommendations

Recommendations

- Recruit potentially effective teachers and principals
- Provide quality professional development
- Valid and credible evaluations
- Equal resource allocation for all
- Educational policy that nurtures quality teachers
- STEM focus



*Quality Teachers:
Influences on Student Achievement Explained*

“The quality of an education system cannot exceed the quality of its teachers.”

—How the World's Best-Performing School Systems Come Out on Top