

Comparison of Academic Achievement in Virginia to Leading Industrialized Nations

December 19, 2011

Patricia A. Popp, Ph.D.

Clinical Associate Professor,

School of Education, College of William & Mary

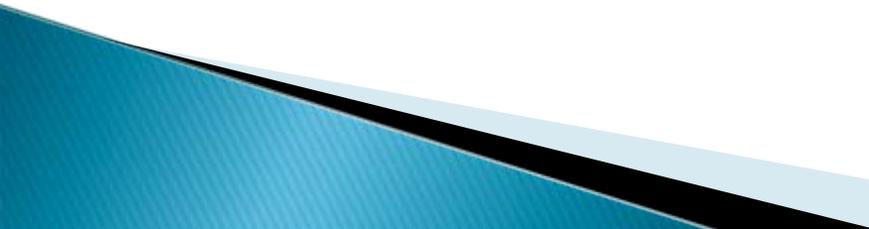
Presentation Outline

- ▶ Study Mandate
 - ▶ Methodology
 - ▶ Findings
 - ▶ Recommendations and Next Steps
- 

Study Mandate

- ▶ Senate Joint Resolution 320 – did not pass however;
- ▶ COY adopted two-year work plan
 - Compare academic achievement for past 5 years, especially in reading, math, and science
 - Identify features in education systems ranking higher than the U.S. on international assessments
 - Determine potential applicability of features to Virginia
 - Consider other issues and recommend options

Year I Methodology

- ▶ Nine countries consistently ranked high on international assessments
 - ▶ Five were selected for in-depth analysis
 - Geographic diversity
 - Data availability
 - ▶ Descriptive statistics and qualitative case study approach
- 

Targeted Nations

- ▶ Canada
 - ▶ Finland
 - ▶ Singapore
 - ▶ South Korea
 - ▶ China – Shanghai, specifically
 - ▶ United States, specifically Virginia
- 

Primary Data Sources

- ▶ Organisation for Economic Co-operation and Development (OECD)
 - ▶ Trends in International Mathematics and Science Study (TIMSS)
 - ▶ 2009 Programme for International Student Assessment (PISA)
 - ▶ American Institutes for Research
 - ▶ National Center for Education Statistics
 - ▶ Studies published in educational research journals
- 

Types of Data Reviewed

- ▶ Information about Country
 - ▶ Student Demographics
 - ▶ System Attributes
 - Student/teacher ratio (and class size)
 - Time per week teacher is engaged in instruction and planning
 - Expenditures/funding– per pupil cost; funding source
 - Time spent learning
 - Teacher preparation, licensure, selection, retention, compensation, evaluation
 - Professional development
 - Curriculum
- 

Cautions and Challenges

- ▶ Difficulty in ensuring alignment of data
 - ▶ Other measures of success and competitiveness
 - ▶ Houston: The U.S. should “rediscover its competitive edge, not by becoming more like the Asians, but by becoming more like Americans.”
- 

Sampling of Findings

- ▶ Policies with detailed implementation plans that include capacity building and time to learn new behaviors
 - ▶ Teacher quality – training, competitive pay, time for professional learning
 - ▶ Principal quality
 - ▶ Equal allocation of educational resources
- 

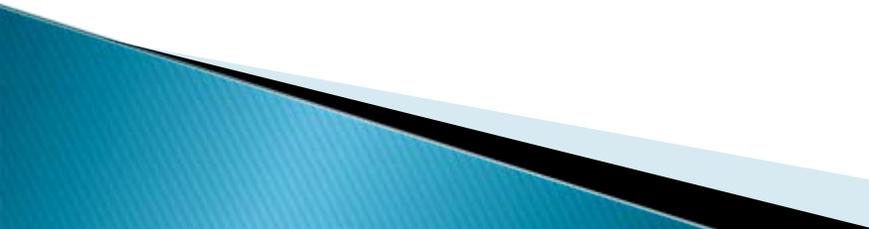
Features to Consider

- ▶ Instruction focusing on a strong knowledge base and higher-level thinking skills
 - ▶ Recruitment and retention of teachers who are among our most talented
 - ▶ Preparation of teachers in subject matter and pedagogy
 - ▶ Policies that provide accountability and autonomy
 - ▶ Professional development that foster collaboration
- 

Michael Fullan on Educational Reform

Do Driver	Wrong Driver
Capacity building and fostering intrinsic motivation of teachers and students	External accountability
Group solutions to engage educators and students in continuous improvement of instruction and learning	Individual teacher and leadership quality
Pedagogy	Technology
Systemic or integrated strategies	Fragmented, piecemeal, ad hoc strategies

Next Steps

- ▶ Continue to analyze comparability of data and seek additional data points
 - ▶ Convene a diverse discussion group to
 - Identify further questions for analysis (i.e., What additional questions do the current data suggest?)
 - Identify features would be appropriate for Virginia to explore
 - Develop a menu of actions for consideration
- 

Education is the key to
unlock the golden door of
freedom.

George Washington Carver

