

# Virginia Board of Education Agenda Item



**Agenda Item:** F

**Date:** June 25, 2015

<b>Title</b>	Final Review of Report on Virginia’s Possible Participation in the 2018 Administration of the Program for International Student Assessment (PISA) as an Independent Educational System in Accordance with the 2015 Appropriation Act		
<b>Presenter</b>	Dr. Cynthia Cave, Assistant Superintendent, Division of Policy and Communications		
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**Purpose of Presentation:**

Action required by state or federal law or regulation.

**Previous Review or Action:**

Previous review and action. Specify date and action taken below:

First Review May 28, 2015

**Action Requested:**

Final review: Action requested at this meeting.

**Alignment with Board of Education Goals: Please indicate (X) all that apply:**

	Goal 1: Accountability for Student Learning
X	Goal 2: Rigorous Standards to Promote College and Career Readiness
	Goal 3: Expanded Opportunities to Learn
	Goal 4: Nurturing Young Learners
	Goal 5: Highly Qualified and Effective Educators
	Goal 6: Sound Policies for Student Success
	Goal 7: Safe and Secure Schools
	Other Priority or Initiative. Specify:

**Background Information and Statutory Authority:**

**Goal 2: Rigorous Standards to Promote College and Career Readiness**

Considering Virginia’s participation in the 2018 Administration of the Program for International Student Assessment will continue to raise the bar on academic performance standards to ensure global competitiveness.

The 2015 Appropriation Act directed the Board of Education and the Secretary of Education to investigate the benefits and costs of Virginia participating in the 2018 Administration of the Program for International Student Assessment (PISA) as a “country” so that Virginia-specific

results could be obtained.

Item 127, Paragraph F. of the 2015 Appropriation Act contains the following requirement:

“The Secretary of Education, in consultation with the Board of Education, shall review, assess the value and cost of obtaining state-level results from the Program for International Student Assessment. The Secretary shall report the findings to the Chairmen of House Appropriations and Senate Finance Committees no later than July 15, 2015.”

**Summary of Important Issues:**

A report providing an overview of PISA and detailing the potential advantages and disadvantages of Virginia’s participation as an independent educational system in the 2018 administration of PISA is provided as Attachment A. Should Virginia not participate as an independent educational system in the 2018 PISA, Virginia students will be included in the sample for the United States but results specific to the performance of Virginia students will not be available. A presentation about PISA that was provided to the Board in 2013 is included as background information in Attachment B. Additional information about the costs of PISA is included in Attachment C. Since costs for the 2018 administration of PISA are not yet available, cost information for the 2015 administration has been provided.

Since this item was on first review in May 2015, additional information on the following topics has been added: 1) interest of the business community and policymakers in obtaining an international benchmark for the achievement of Virginia students. 2) possible funding sources to cover the cost of Virginia’s participation as an independent educational system, and 3) cost information for the 2015 administration of PISA.

**Impact on Fiscal and Human Resources:**

Costs for Virginia to participate in PISA as an independent educational system so that Virginia-specific results may be reported are estimated to be in excess of \$600,000. Existing funds are not adequate to cover these costs. Based on the interest of the business community and other education stakeholders in an international comparison of the achievement of Virginia students, it may be appropriate to seek funding from Virginia businesses or from educational foundations to assist in covering the costs.

**Timetable for Further Review/Action:**

The Secretary of Education will share the report with the Chairmen of House Appropriations and Senate Finance Committees no later than July 15, 2015.

**Superintendent's Recommendation:**

The Superintendent of Public Instruction recommends that the Board of Education approve the report on Virginia’s possible participation as an independent educational system in the 2018 administration of the PISA.

**Rationale:**

Approving the report at the June 25, 2015, meeting will provide the Secretary of Education with sufficient time to present the report to the Chairmen of the House Appropriations and Senate Finance Committees by the July 15, 2015, deadline contained in the 2015 Appropriations Act.

## **Report on Virginia’s Potential Participation in the Program for International Student Assessment as an Independent Educational System in 2018**

### Background

In the past several years there has been considerable interest in obtaining information about how the achievement of Virginia students compares to that of their peers in other countries. One way to obtain such information is for Virginia to participate as an independent educational agency in the 2018 Administration of the Program of International Student Assessments (PISA) so that Virginia-specific results may be obtained. PISA is the largest international education study in the world and is comprised of a set of tests administered to students 15 years of age

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Additional information about PISA and the potential advantages and disadvantages of Virginia’s participation as an independent educational system in the 2018 administration of PISA is provided in the remainder of this report. Should Virginia not participate as an independent educational system in the 2018 PISA, Virginia students will be included in the sample for the United States but results specific to the performance of Virginia students will not be available.

### Overview of the Program for International Student Assessment (PISA)

PISA, the largest international education study in the world, is a set of tests administered to students 15 years of age. PISA measures student performance in mathematics, reading, and science literacy. Conducted every three years, each PISA data cycle assesses one of the three core subject areas in depth (considered the major domain), although all three core subjects are assessed in each cycle. The other two subjects are considered minor subject areas for that assessment year. Assessing all three subjects every three years allows countries to have a consistent source of achievement data in each of the three subjects while rotating one area as the primary focus over the years. In 2018, the next year of administration for PISA, reading will be the subject area of focus. It is expected that PISA will be administered in October-November 2018, and results will be reported at the state level in December 2019. Results are not reported at the division, school or student level.

States can participate in PISA as independent educational systems. If Virginia chooses to participate as an educational system, results for Virginia students will be reported relative to other states and to the United States overall as well as to other participating countries.

Participation in 2018 PISA administration requires a commitment by March 2016. Participants must have the technical expertise necessary to administer an international online assessment and must be able to meet the full costs of participation.

#### Advantages of Virginia's Participation in PISA as an Independent Educational System

- Results would provide a comparison of Virginia students' learning in reading, mathematics, and science to that of students in other countries, as well as a comparison to the performance of students in other states that choose to participate and to the United States overall. Subgroup performance comparisons will be reported if the sample is large enough to be statistically significant for gender, race/ethnicity, and socioeconomic status.
- Members of the business community and policymakers have expressed considerable interest in how Virginia students compare to those in other countries.
- Participation is age-based rather than grade level or course so the results would provide a measure of the cumulative learning outcomes of Virginia students rather than attainment of a specific curriculum.
- PISA focuses on literacy or the use of mathematics in real-world situations. All problems are context-based and would provide information about Virginia students' application of skills in contexts that are likely to be new for students.
- PISA is the only international assessment that offers an international comparison of students in the United States at the high school level. If Virginia participates as an independent educational system, state results relative to international results will be reported.

#### Disadvantages of Virginia's Participation in PISA as an Independent Educational System

- Participation in PISA as an independent educational system requires a minimum sample of 50 schools and 1500 students. However, the Organization for Economic Co-operation and Development, the organization responsible for PISA, recommends larger sample sizes of approximately 4,500 students in order to get finer-grained breakouts.
- Funds must be appropriated for participation. The cost for participating in PISA 2015 was about \$630,000. A final cost estimate will be available once the national contractual agreement is in place and the final design for 2018 has been established. This information should be available toward the end of 2015 or in early 2016.
- PISA requires approximately 3 hours to administer and does not replace other required tests. As described above, at least 1500 students in a minimum of 50 schools must be tested so the impact on schools and divisions would be considerable.
- Results are not reported until a full year after the assessment is administered and are not reported at the division, school, or student level.
- Students are informed of their selection to participate ON assessment day, and their participation is voluntary. Since student participation is voluntary, Virginia's participation could be nullified (not reported) if less than 80% of those sampled participate.

- A percentage of the sample of tested students from each school will be required to respond to a 20 to 30 minute questionnaire providing information about themselves, their attitudes to learning, and their homes. Questions might include parent occupation, the highest level of parent education, and an index of home possessions related to family wealth and home educational resources. Some parents may object to the content of these questions.

### Next Steps

Participation in the 2018 administration of PISA would require a commitment by March 2016. While existing funds are not available to cover the costs of Virginia's participation in PISA, because of the considerable interest in an international achievement measure for Virginia's students, the business community and educational foundations could be approached as potential funding sources. If this strategy were not successful, a budget initiative might be needed.

# **BACKGROUND ON PISA PRESENTATION TO THE BOARD In APRIL 2013**

## **Program for International Student Assessment (PISA)**

Dana Kelly

Dan McGrath

April 24, 2013

# Program for International Student Assessment (PISA)

- PISA is an international assessment that measures 15-year-old students' reading, mathematics, and science literacy.
- Each PISA data-collection effort assesses one subject area in depth. All three subject areas are assessed in each cycle so that participating countries have an ongoing source of achievement data in every subject area.
- Also includes measures of general or cross-curricular competencies, such as problem solving.

# PISA

- A study of the Organization for Economic Cooperation and Development (OECD), an intergovernmental organization of 34 industrialized countries.
- Conducted in the United States by NCES
- First administered in 2000 and conducted every three years. Most recent was fall 2012. Next is 2015.
- 65 countries and education systems in 2012.

# PISA 2012

- National sample for United States + 3 states
  - Connecticut, Florida, and Massachusetts
- What was assessed?
  - Mathematics (focus area), science, and reading literacy
  - Computer-based mathematics, reading, problem solving (national only)
  - Financial literacy (national only)

# PISA 2012

- Results for participating nations and states to be released December 3, 2013
  - Problem solving and financial literacy reported in 2014
- OECD international reports
- NCES national report
- NCES International Data Explorer
- School-level reports – interactive website
  - Preliminary summer 2013
  - Final January 2014

# State Participation in PISA 2012

- Folded into national administration
- Reporting:
  - Included in OECD's international report and database
  - Included in NCES' U.S. national report and International Data Explorer
  - School-level reports

# PISA 2015

- Fall 2015
- Assessment: science, reading, mathematics and collaborative problem solving.
  - Science: new framework, major domain
  - Collaborative problem solving is new
- Questionnaires: student, school, teacher (new)
- All computer-based

## PISA Payment Schedule for 2015 Administration

<b>Payment Schedule and deliverables</b>		
<b>Task</b>	<b>Date</b>	<b>Amount</b>
1. DRAW SAMPLE Deliverable: Sample of schools	12/15/2014	118,509
2. PREP ASSESSMENT SYSTEM Deliverable: Memo notifying completion of assessment instruments	3/15/2015	22,607
3. DATA COLLECT TRAIN Deliverable: Memo notifying completion of data collection training	9/30/2015	49,477
4. COLLECT DATA Deliverable: Memo notifying completion of data collection	11/30/2015	284,165
5. SCORING Deliverable: Final inter-rater reliability report	12/30/2015	27,574
6. PRODUCE DATASET Deliverable: Memo stating delivery of data to the international consortium	2/15/2016	51,866
7. PRODUCE REPORTS Deliverable: Survey operations report	5/30/2016	21,055
8. PUB USE DATAFILE Deliverable: Notification that the restricted-use data files have been approved by NCES	2/28/2017	24,747
<b>Total</b>		<b>600,000</b>