

Introduction to PISA



PISA Comes to Your School
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Overview

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What is PISA?

- An International assessment of reading, mathematics, and science literacy of 15-year-olds
- Focuses on the application of knowledge and skills acquired in and outside of school to problems with a real-life context

Differences Between PISA and NAEP

- Some differences are similar to those between PISA and TIMSS:
 - NAEP is curriculum-based, while PISA is a “yield” study.
 - PISA is age-based, while NAEP is grade-based.
- Other differences particular to PISA and NAEP:
 - PISA is designed to detect relatively large differences across countries; while NAEP is designed to detect smaller differences within the United States.

NCES International Assessments

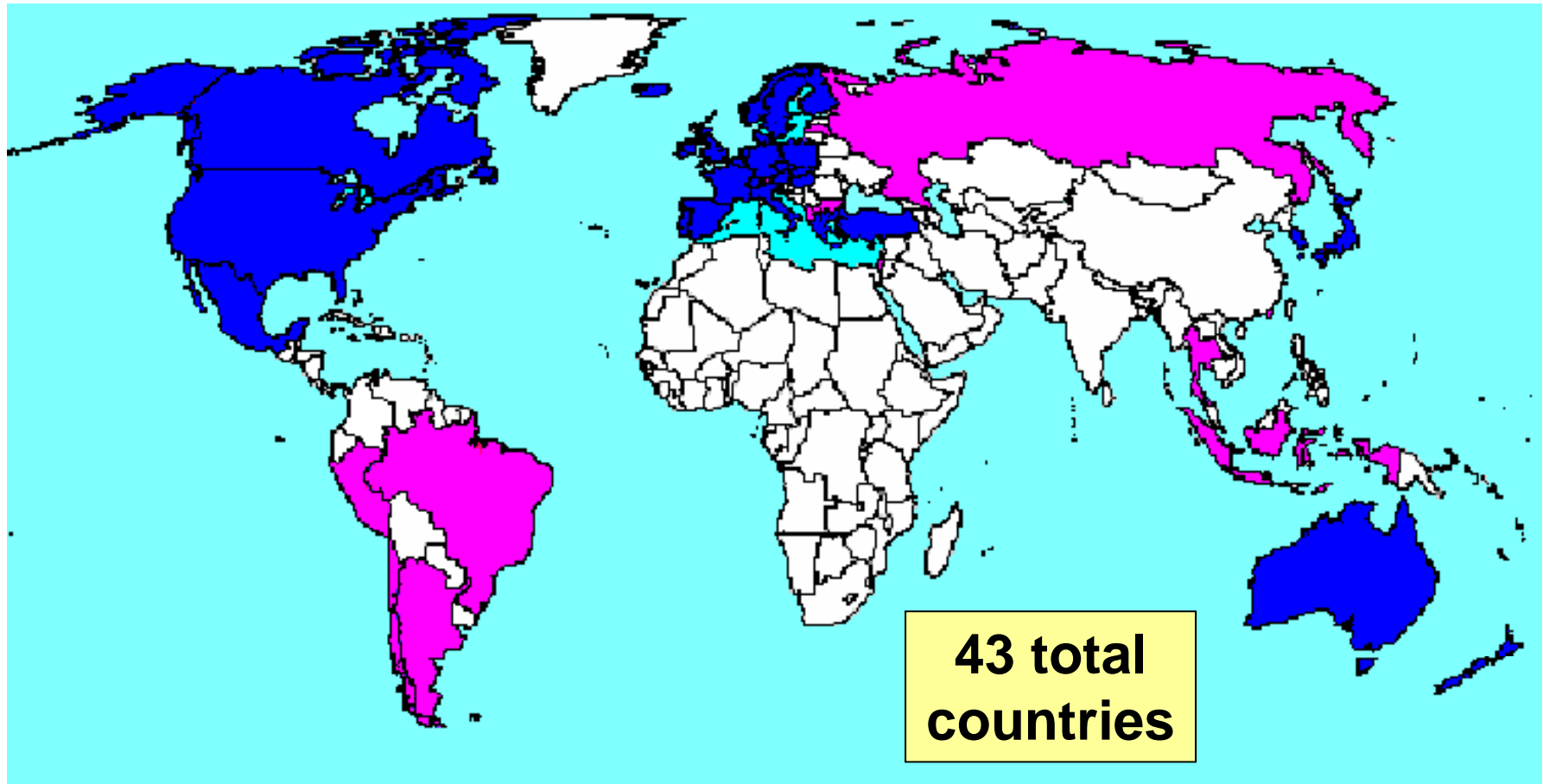
Study	Subject matter	Population	Cycle
PISA	Reading, mathematical, and scientific literacy	15-year-olds	3 years
PIRLS Progress in International Reading Literacy Study	Reading literacy	4 th -graders	5 years
TIMSS Trends in International Mathematics and Science Study	Mathematics and science	4 th - and 8 th -graders	4 years
PIAAC Program for the International Assessment of Adult Competencies	Literacy, numeracy, problem solving in a technology-rich environment, and reading components	16 – 65 year-olds	10 years

PISA Background

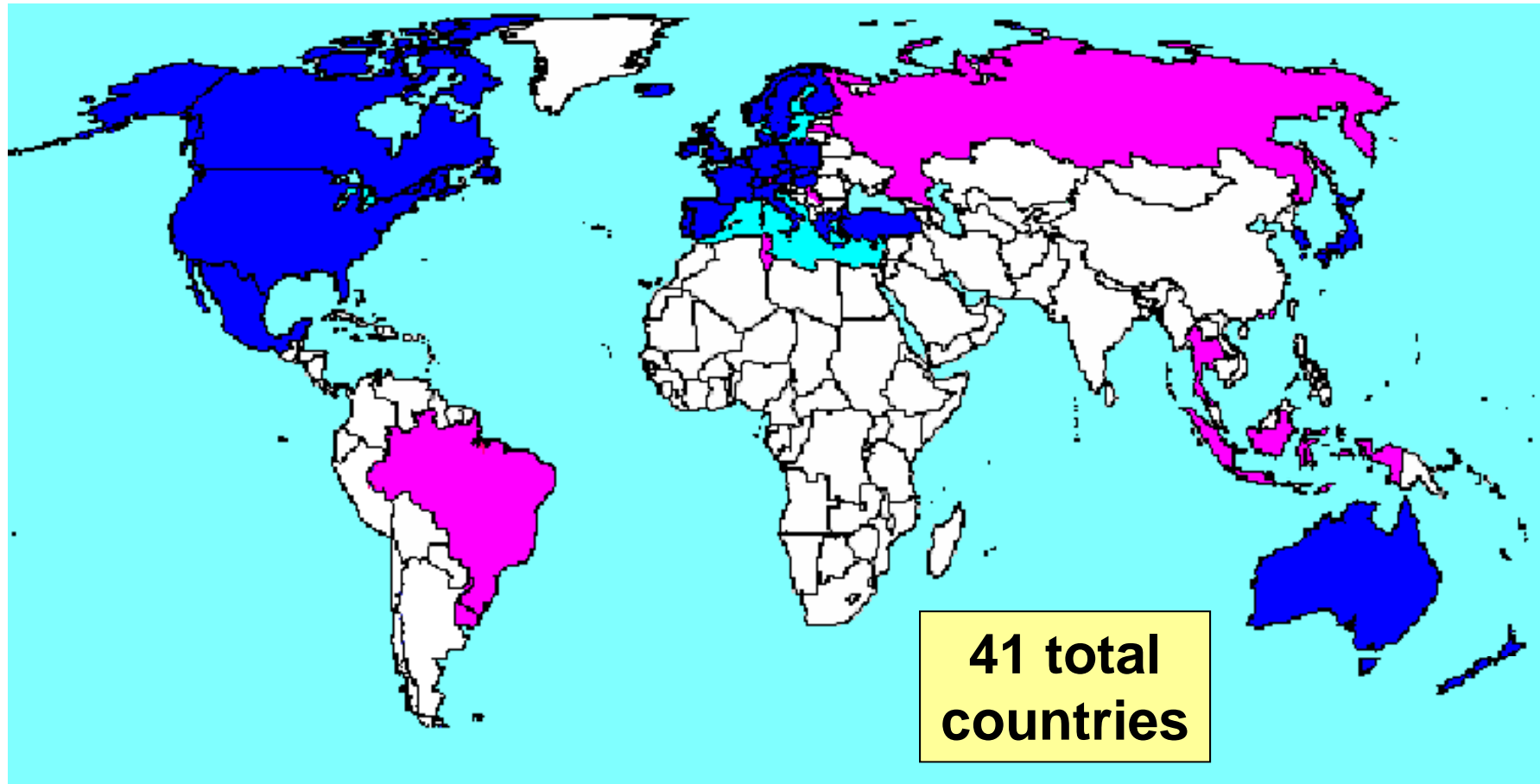
Players:

- **OECD** (Organization for Economic Cooperation and Development) coordinates PISA
- **PISA Governing Board** (PGB), a board made up of representatives of participating countries, sets policy for PISA
- **ACER** (the Australian Council for Educational Research) and a consortium of contractors design and implement PISA at the international level
- **National Project Managers** (NPM) coordinate administration within the countries
- **NCES** is U.S. coordinating and funding organization
- **Windwalker Corporation, Westat, and Pearson** are U.S. national contractors for PISA 2009

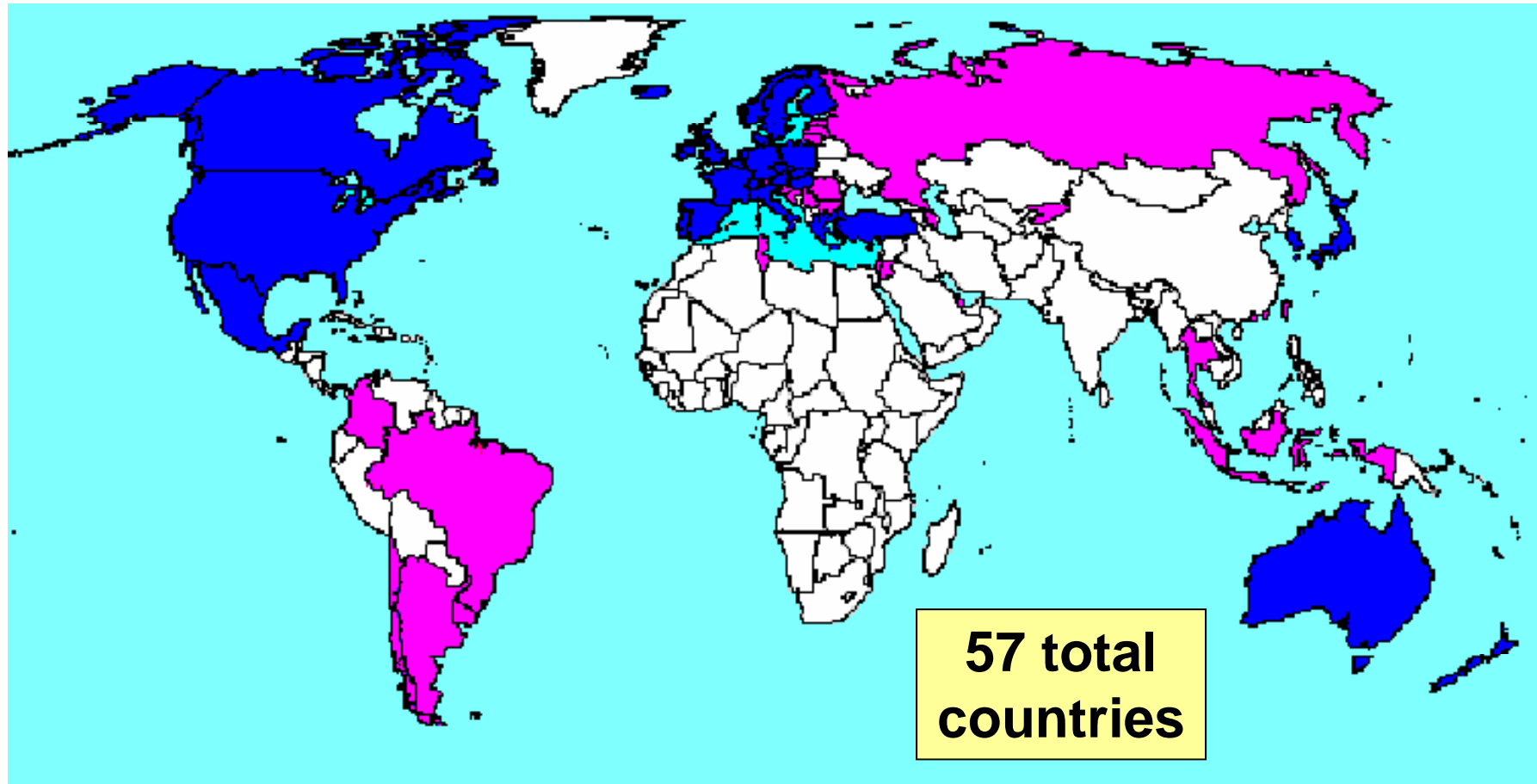
PISA 2000 Country Participation



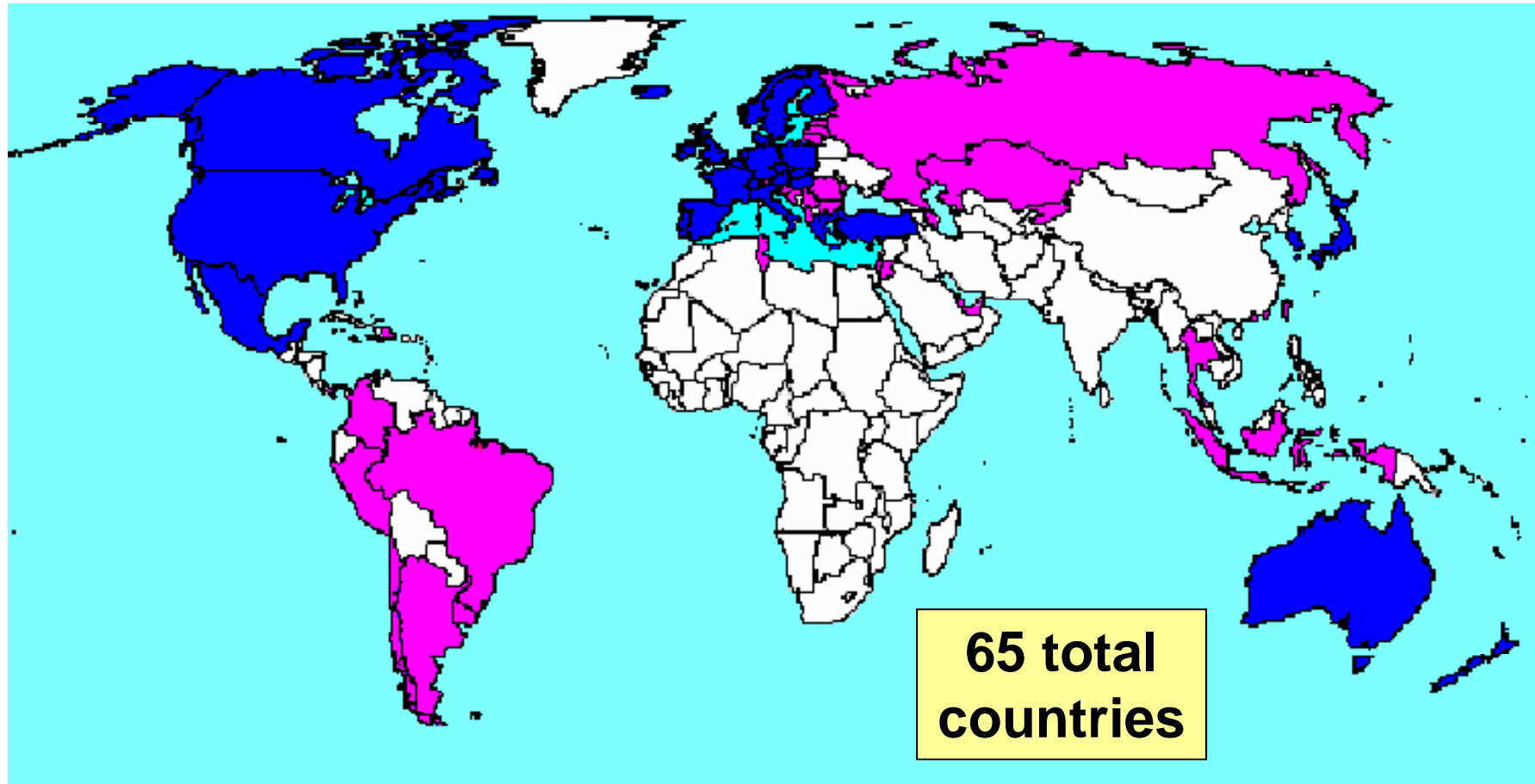
PISA 2003 Country Participation



PISA 2006 Country Participation



PISA 2009 Country Participation



PISA Administration Cycle

Assessment year	2000	2003	2006	2009	2012	2015
Subjects assessed	Reading Mathematics Science	Reading Mathematics Science Problem solving	Reading Mathematics Science	Reading Mathematics Science	Reading Mathematics Science	Reading Mathematics Science

PISA Assessment Design

- 2-hour paper and pencil assessment
- 30-minute student background questionnaire
- 30-minute school questionnaire for principals

PISA Assessment Development

- **Frameworks created by international experts**
- **Original materials**
 - Submitted by countries
 - Developed by research consortium
 - Screened for cultural bias
 - By countries, experts, international panel
 - Items with prima facie cultural bias removed at this stage
 - Translated from English & French originals; national adaptations
 - Field trial conducted; new items tested

PISA Assessment Development

- **Final assessment**
 - Items shown in trial to be culturally biased are removed
 - Best items chosen for final tests
 - Balanced to reflect framework
 - Range of difficulties and item types (constructed response, multiple choice)
 - National manuals adapted and approved

PISA Sampling Requirements

- Population: all 15-year-olds in school
- Sample
 - Minimum of 150 schools per country
 - Up to 42 students randomly selected per school
 - Two random samples: schools and replacement schools
 - If school declines, replacement school is invited
 - Response rates set by international guidelines (85% of selected schools, 80% of selected students within schools)

United States PISA Sample

Assessment year	Number of participating students	Number of participating schools	Overall student response rate (percent)	School response rate (percent)	
				Before replacement	After replacement
2000	3,700	145	85	56	70
2003	5,456	262	83	65	68
2006	5,611	166	91	69	79

PISA 2009 Timeline

TASK	DATE
Year 1: Preparation Questionnaire/assessment item submission, review, and finalize; documents and manuals review/adaptation and finalizing, sample selection for Field Test	Feb 2007
Year 2: Field Test Data collection (35 schools), coding, data cleaning, data submission, verification and analysis	March - May 2008
Preparation for Main Study: School Recruiting Contact sampled schools for main study; finalize assessment/questionnaire items for main study; preparations of national adaptations	Aug. 2008
PISA Summer Conference	June 2009
Year 3: Main Study Data collection (Sept. 21-Nov. 13, 2009), coding, data cleaning and submission, data verification and approval, and data analysis	Sept 2009 - Nov 2010
Year 4: Reporting Release of PISA 2009 national and international reports	Early Dec 2010

Thank you for your participation
in PISA 2009!