PIAAC on the Horizon

Stephen Provasnik & Holly Xie

National Center for Education Statistics

PIAAC Research Conference
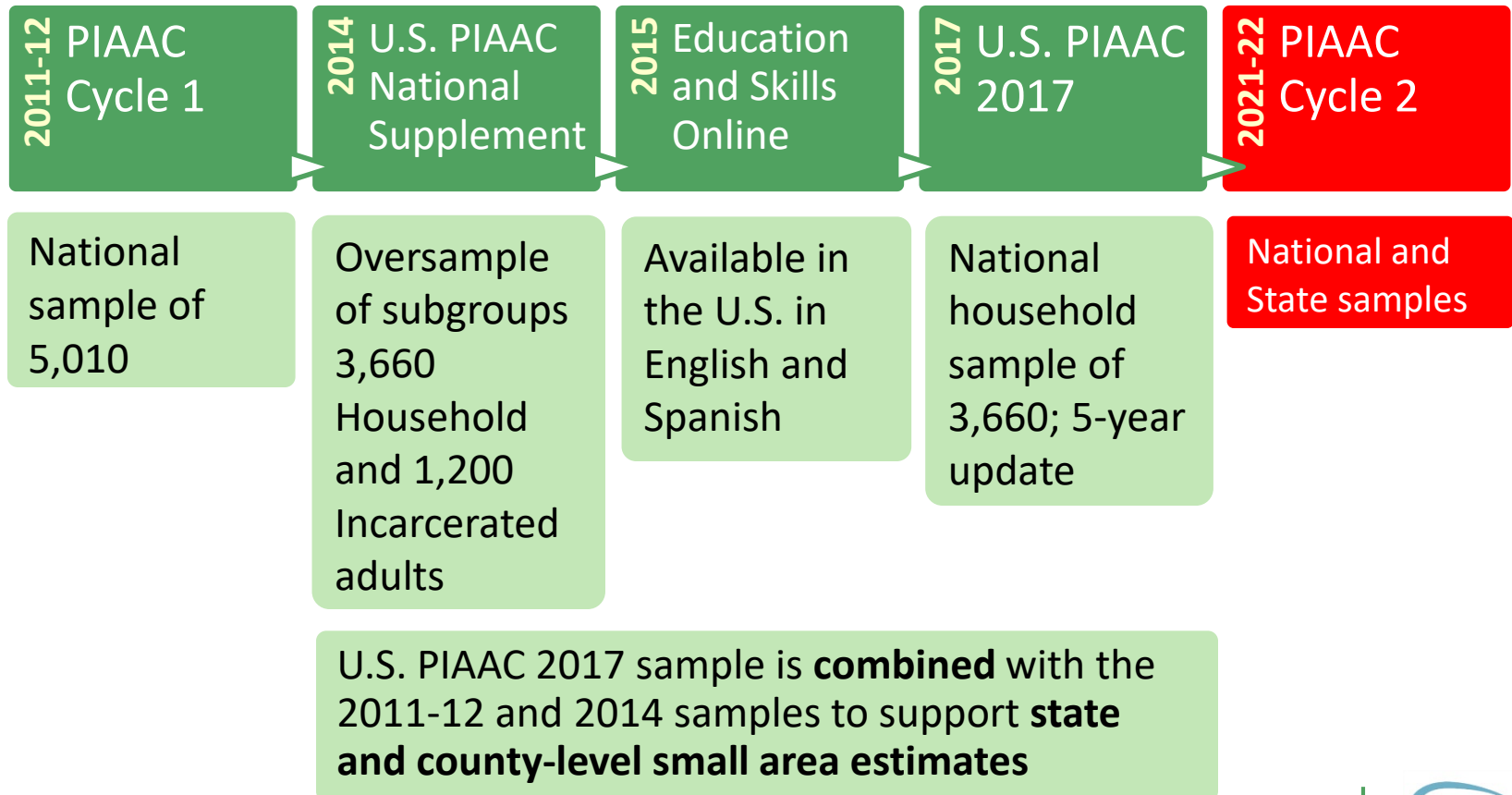
December 7, 2018

Overview

- PIAAC National Data Collection

- PIAAC Products Since Cycle I (2011-12)

- Upcoming PIAAC 2017 Products

- PIAAC Small Area Estimates (SAE)

- PIAAC Cycle II (2021-22)

U.S. PIAAC 2011-2021

Cycle 1 **Cycle 2**

2011-12 PIAAC Cycle 1	2014 U.S. PIAAC National Supplement	2015 Education and Skills Online	2017 U.S. PIAAC 2017	2021-22 PIAAC Cycle 2
National sample of 5,010	Oversample of subgroups 3,660 Household and 1,200 Incarcerated adults	Available in the U.S. in English and Spanish	National household sample of 3,660; 5-year update	National and State samples

U.S. PIAAC 2017 sample is **combined** with the 2011-12 and 2014 samples to support **state and county-level small area estimates**

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PIAAC Products Since 2011

- **PIAAC First Look Reports**

  – Literacy, Numeracy, and Problem Solving in Technology-Rich Environments Among U.S. Adults: Results from the Program for the International Assessment of Adult Competencies 2012 (2013)

  – Skills of U.S. Unemployed, Young and Older Adults in Sharper Focus: Results from the Program for the International Assessment of Adult Competencies (PIAAC) 2012/14 (2016)

  – Highlights from the U.S. PIAAC Survey of Incarcerated Adults: Their Skills, Work Experience, Education and Training (2016)

- **Technical/Methodological Reports**

  – Program for the International Assessment of Adult Competencies (PIAAC) 2012: U.S. Main Study Technical Report (2014)

  – U.S. Program for the International Assessment of Adult Competencies (PIAAC) 2012/2014: Main Study and National Supplement Technical Report (2016)

  – Analyzing U.S. Young Adults' Skills by Student and Employment Status: Methodology for a New PIAAC Variable with Initial Results (2018)

PIAAC Products Since 2011-12 (cont.)

- **Shorter Publications**
  - Adult Education Attainment & Assessment Scores: A Cross-National Comparison (2017)
  - A Description of U.S. Adults Who Are Not Digitally Literate (2018)
  - Literacy and Numeracy Skills of U.S. Men and Women (2018)
  - Adult Literacy in the United States (*to be released in Spring 2019*)

- **Data Sets**
  - 2012 Public and Restricted-use Data Files--Household (2014)
  - 2012/14 Public and Restricted-use Data Files--Household (2016)
  - 2014 U.S. National Supplement Public and Restricted-use Data Files--Prison (2016)

- **International Data Explorer (IDE)**
  - Data update (2018)

- **Distance Learning Dataset Training (DLDT)**
  - Content update (2017)

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U.S. PIAAC

Upcoming PIAAC 2017 Products

NEW

- **Web Report**

  – PIAAC U.S. national "First Look" web report with 2017 data (Sept. 2019)

    • Focus on trends of the U.S. adult skills

NEW

- **Mapping website**

  – PAAC Small Area Estimation (SAE) Mapping Website (Feb. 2020)

    • Provides modeled estimates of adult skills (literacy and numeracy) at the state and county levels.

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Upcoming PIAAC 2017 Products (cont.)

- **Data sets**
  - 2017 Public and Restricted-use data files (Feb. 2020)
  - PIAAC 2012/14/17 Restricted-use data files (Feb. 2020)

- **Technical Reports**
  - SAE Methodology Report (Dec. 2019)
  - PIAAC 2012/14/17 Technical Report (Feb. 2020)

- **International Data Explorer (IDE)**
  - Data update (Nov. 2019)

PIAAC Small Area Estimation (SAE)

- PIAAC is designed to produce internationally comparable and nationally representative direct estimates of skills with adequate levels of precision for the nation as a whole and for major population subgroups

- NCES is interested in creating proficiency estimates for smaller geographical areas (states and counties) for which the PIAAC sample size is insufficient to produce direct estimates

- To do this, NCES is using SAE which "borrows strength" across related small areas through auxiliary information (mostly ACS data) to produce reliable "indirect" estimates for those small areas

PIAAC SAE Timeline

- Development phase through March 2019
- Production phase through June 2019
- SAE Website release February 2020

Development
March 2019

Production
June 2019

SAE Website
February 2020

Planned Location of the Mapping Tool

Mapping Tool Landing Page

County Summary Information

- Location of area
- Estimates for 8 outcomes
  - Proportions
    1. At or below Level 1
    2. At Level 2
    3. At or above Level 3
  - Averages
  - For literacy and numeracy
- Shows state estimates
- Precision indicators provided

Park County

Colorado

Literacy

Hide State Data ▲

≤Level 1	Level 2	≥ Level 3
31%	20%	49%

State Data: 27% 35% 38%

Average

236

0 230 500

Literacy:
Above State Average
Precision: Precise

Numeracy:
Below State Average
Precision: Moderately Precise

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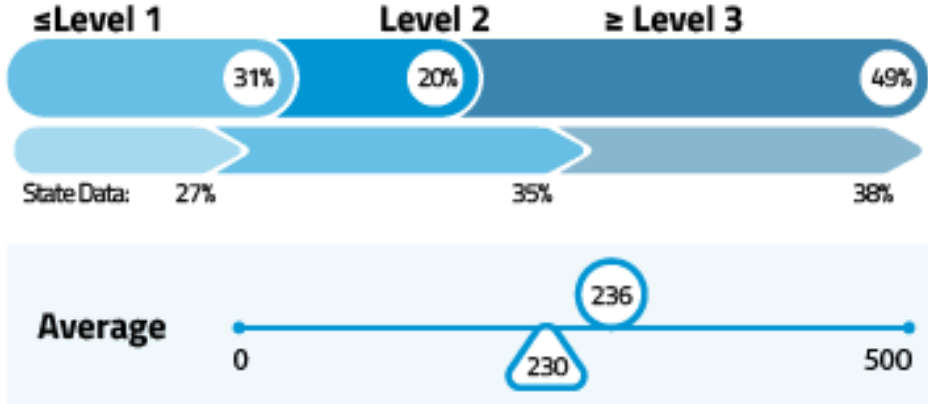**PIAAC**

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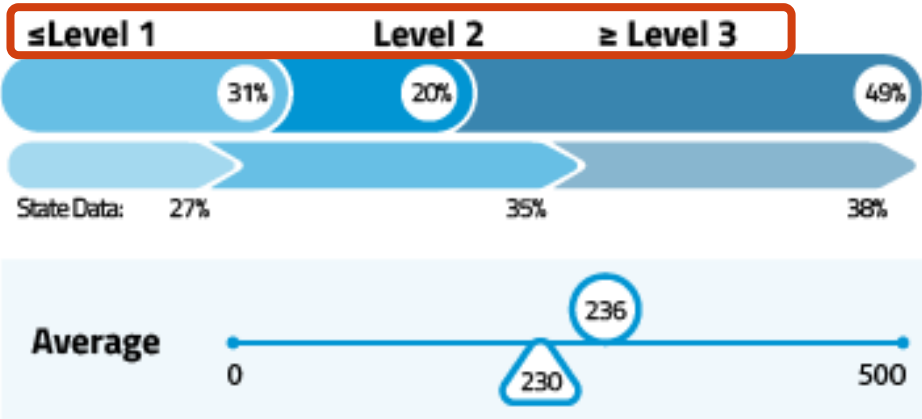
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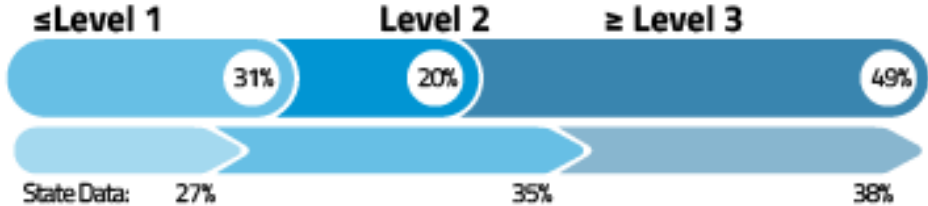
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Institute of Education Sciences | PIAAC

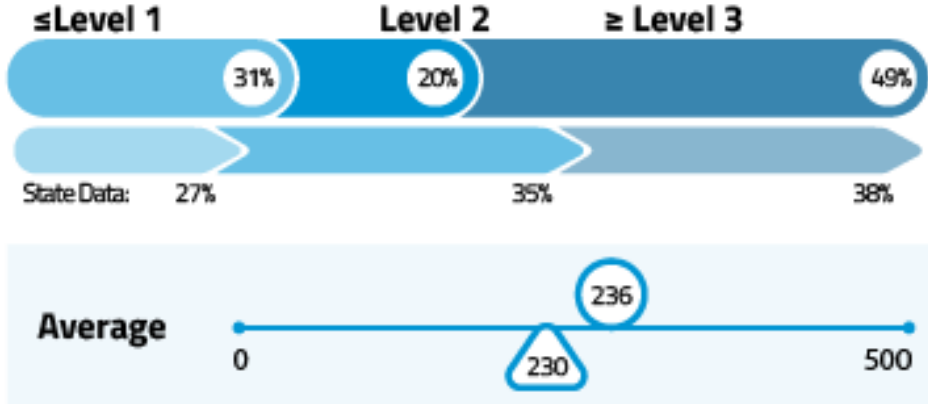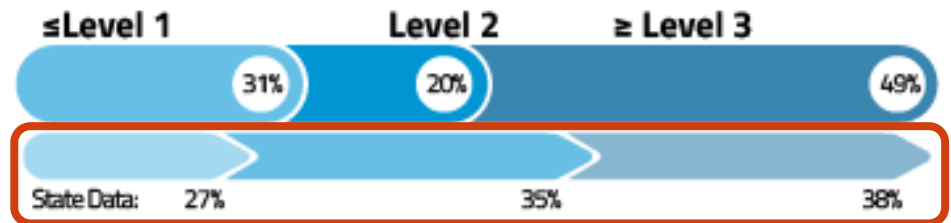# County Summary Information

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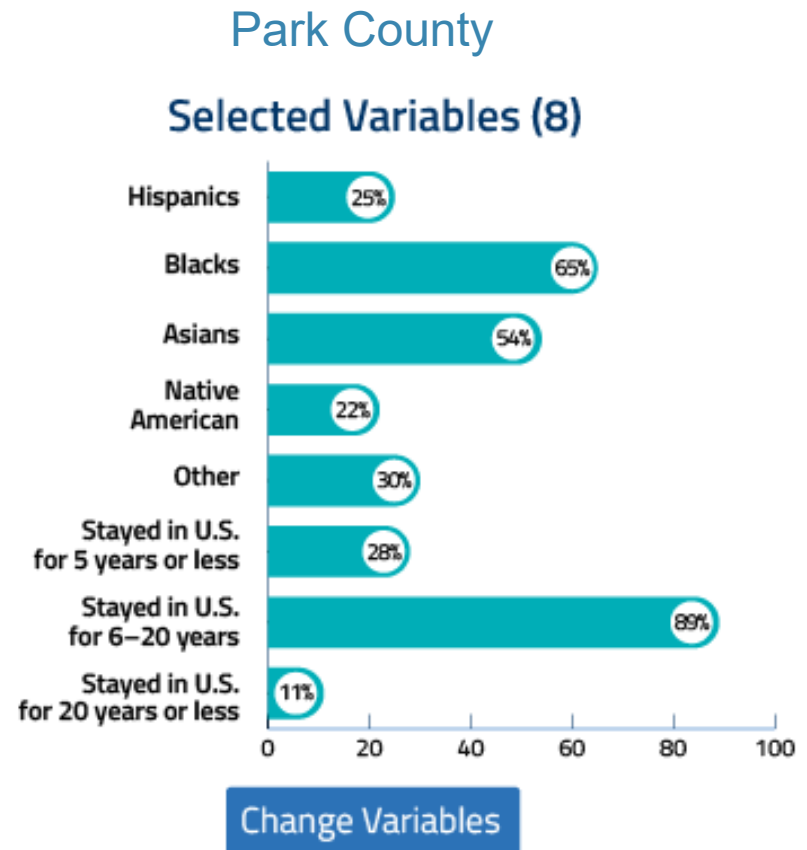
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County Summary Information (cont.)

- Show all county estimates in a state

- Text will automatically be generated and appear for results compared to state

- Display estimates from the American Community Survey to help understand the SAE results

Park County

Selected Variables (8)

Hispanics — 25%
Blacks — 65%
Asians — 54%
Native American — 22%
Other — 30%
Stayed in U.S. for 5 years or less — 28%
Stayed in U.S. for 6–20 years — 89%
Stayed in U.S. for 20 years or less — 11%

(axis: 0 20 40 60 80 100)

Change Variables

Comparing Areas

- Side-by-side display
  - Locations
  - Estimates from 8 outcomes
  - Icon displays
  - Summary of results automatically generated from statistical testing

Park and Northampton County
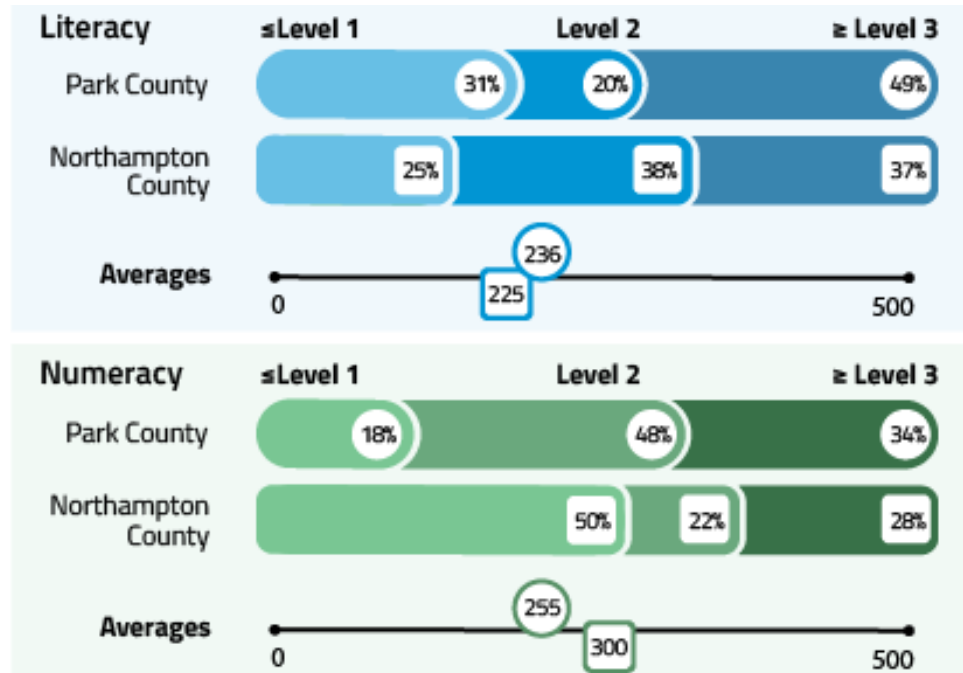
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Upcoming PIAAC International Cycle II

- 33 countries including the U.S. participating in PIAAC 2021-22.

- Domains: Literacy, Numeracy, Adaptive Problem Solving

- Data Collection

  - Field Trial (Apr. to Jun. 2020)

  - Main Study (Aug. 2021 to Mar. 2022)

- PIAAC 2021-2022 international report release (Fall 2023)

- NCES is promoting state participation in PIAAC Cycle II

Thanks!

Questions?

Suggestions?

For more information on PIAAC

- NCES PIAAC Home Page
  http://nces.ed.gov/surveys/piaac/
- PIAAC Gateway
  http://piaacgateway.com/

NCES Contacts
- **Stephen Provasnik**
  Stephen.Provasnik@ed.gov
- **Holly Xie**
  Holly.Xie@ed.gov