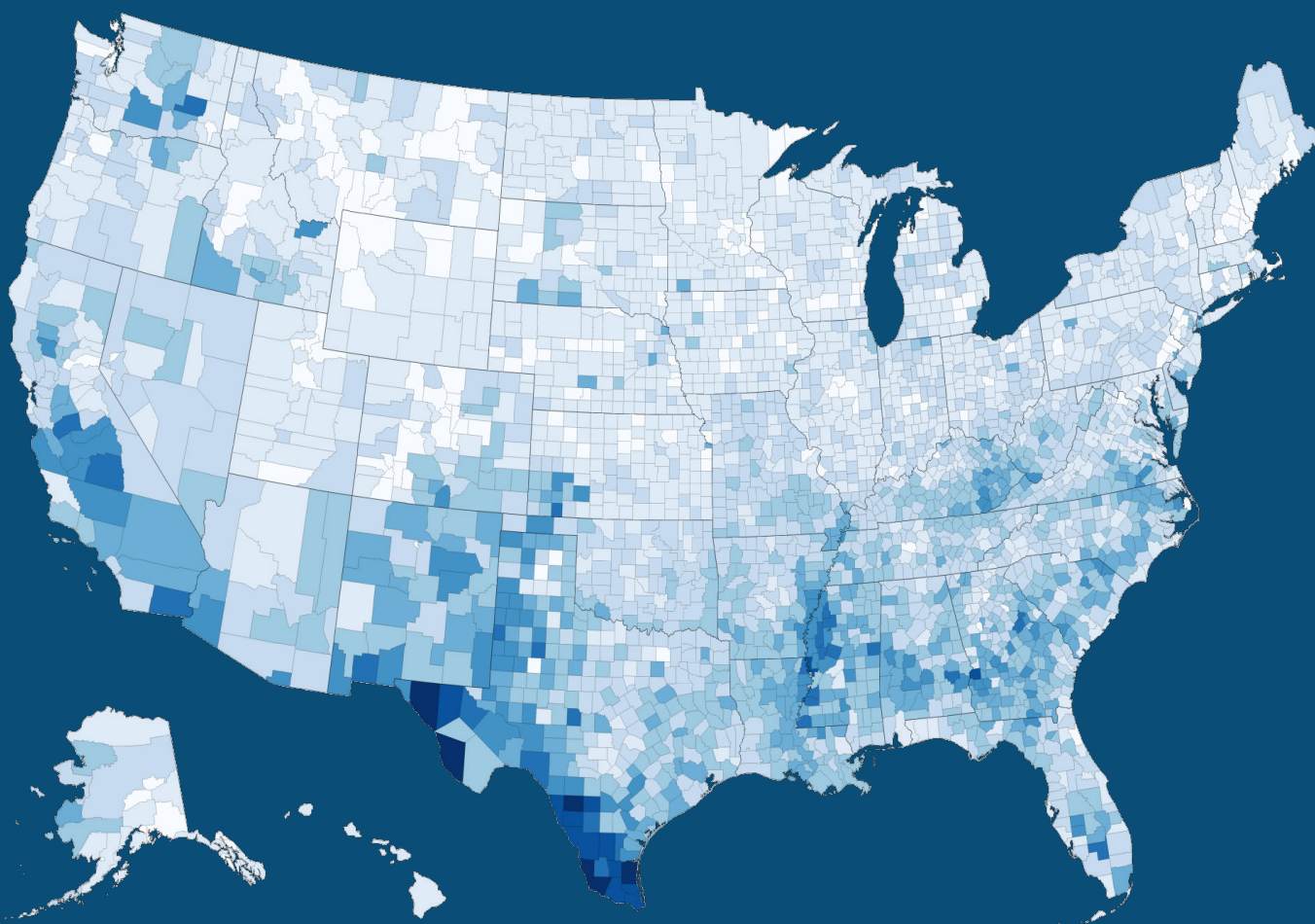


U.S. PIAAC Skills Map: State & County Indicators of Adult Literacy & Numeracy (Including Age and Education Groups)

Program for the International Assessment of Adult Competencies (PIAAC)



U.S. PIAAC Skills Map



What is PIAAC?

The Program for the International Assessment of Adult Competencies (PIAAC) is a **survey of adult skills** sponsored by the Organization for Economic Cooperation and Development (OECD). The survey examines a range of basic skills such as literacy, numeracy, and digital problem solving, and assesses these adult skills in a consistent manner across participating countries. In the United States, PIAAC is administered by the National Center for Education Statistics (NCES) as a nationally representative survey of the U.S. adult population 16–74 years old.

What is the U.S. PIAAC Skills Map?

The U.S. PIAAC Skills Map is an interactive data tool that provides state- and county-level data on the literacy and numeracy proficiency of adults ages 16–74 in all 50 states, all 3,141 counties, and the District of Columbia. The tool reports estimates of adult skills as an average score on the PIAAC scale (0-500) and as the proportion of adults at the lowest levels of proficiency (at or below Level 1), medium proficiency (at Level 2), and the highest levels of proficiency (at or above Level 3). These estimates were produced using a statistical technique called small area estimation and are based on combined PIAAC data from 2012, 2014, and 2017 and data from the American Community Survey (ACS). The Skills Map also includes state-level model-based estimates for six age groups and four education groups.

How To Use The U.S. PIAAC Skills Map (Example Of County View)

The screenshot shows the U.S. PIAAC Skills Map interface. The main map displays the percentage of adults at or below Level 1 literacy proficiency for each county. A callout for Knox County, OH shows 15% for the county, 18% for the state, and 22% for the nation. The interface includes a search bar, map filters for proficiency measures and confidence levels, and a legend for the color coding.

Search for county

Toggle between state & county maps

Hover over county to see details

Zoom in or center map

Select the proficiency measure

Expand to change confidence levels

Download data or see user guide

Compare two counties

Color coding key for selected proficiency measure

What You Can Do

Explore

See state or county estimates of literacy or numeracy proficiency.



Compare

Compare a county to a state, a state to the nation, or compare counties (or states) to each other.

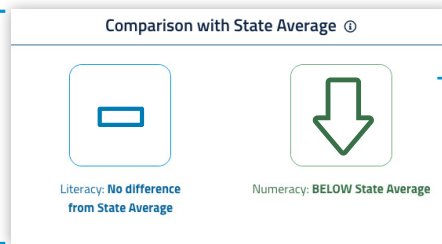


Analyze

Investigate demographic data to provide context for the state or county estimates.

Compare to state averages

See how an individual county compares to the state (or see how a state compares to the nation).



Comparison insights

The icons are a result of statistical testing of whether the county average is above or below the state average (or whether the state average is above or below the national average).

Testing results

Text summarizes the results of statistical testing.

Data for county 1

Data for county 2



State data

Compare the county's estimates to the state estimates.

Outcomes

See the county-level estimates for two counties at a glance.

Variables

Add up to 8 variables to see the demographics for a county.

Age and Education Groups

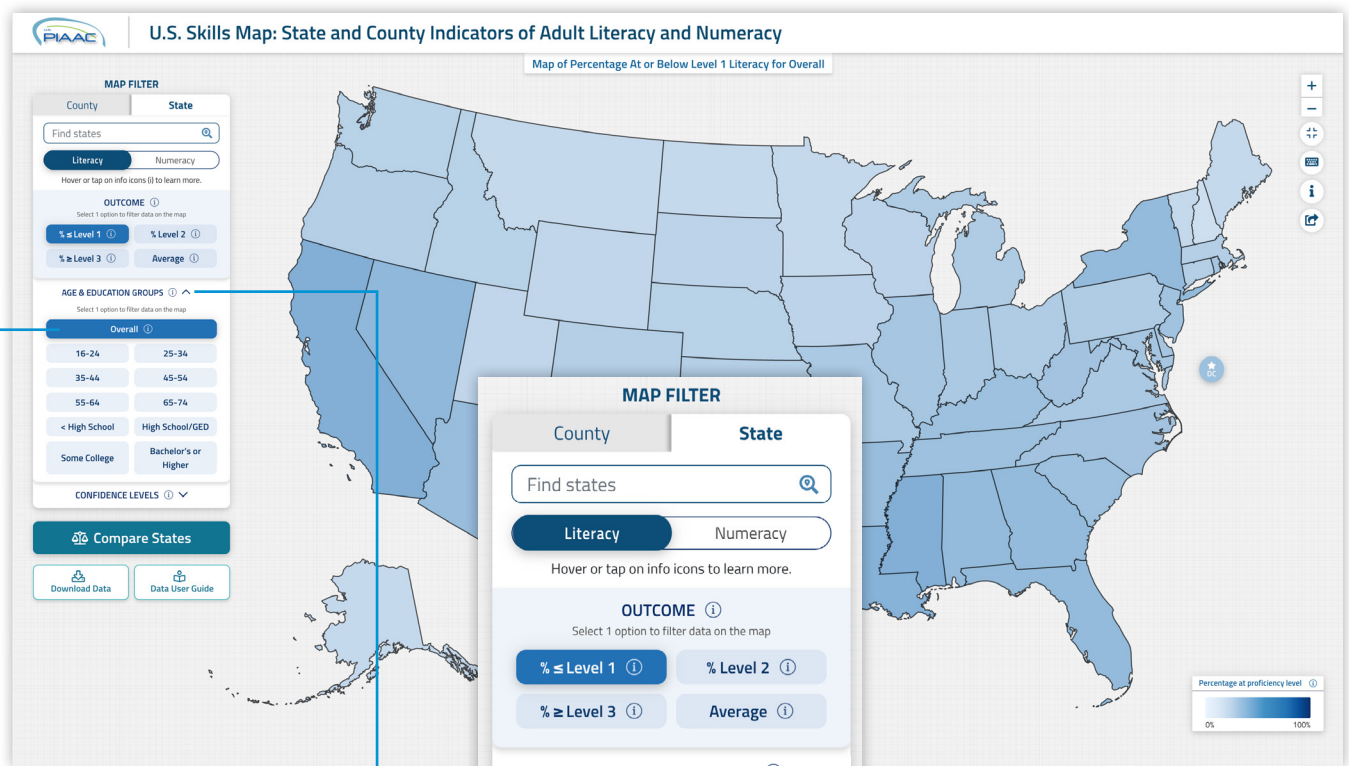
About the Age and Education Groups

PIAAC data are used by state adult education and labor departments to plan interventions, allocate scarce resources and provide information on adult skills. To support states in improving their targeted interventions, the set of model-based estimates in the Skills Map has been expanded to include state-level estimates for six age groups and four education groups. The age groups are 16–24, 25–34, 35–44, 45–54, 55–64 and 65–74. The education groups are less than high school, high school diploma or GED, some college (no degree or attained associate’s degree), and bachelor’s degree or higher.



How to Use the Age and Education Groups (Example Of State View)

The estimates present the percentage of adults at or below Level 1 in literacy among 16-24 year olds



See Groups

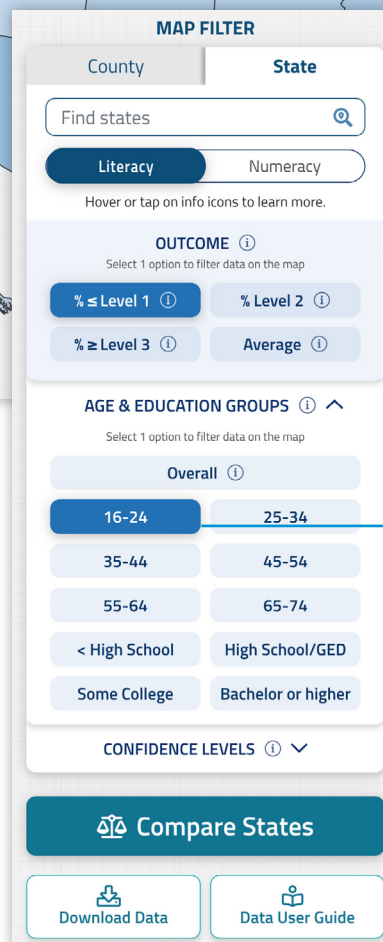
Expand “Age & Education Groups” for options to see estimates for age or education groups.

Overall Estimates

Select to see overall state estimates.

Select Group

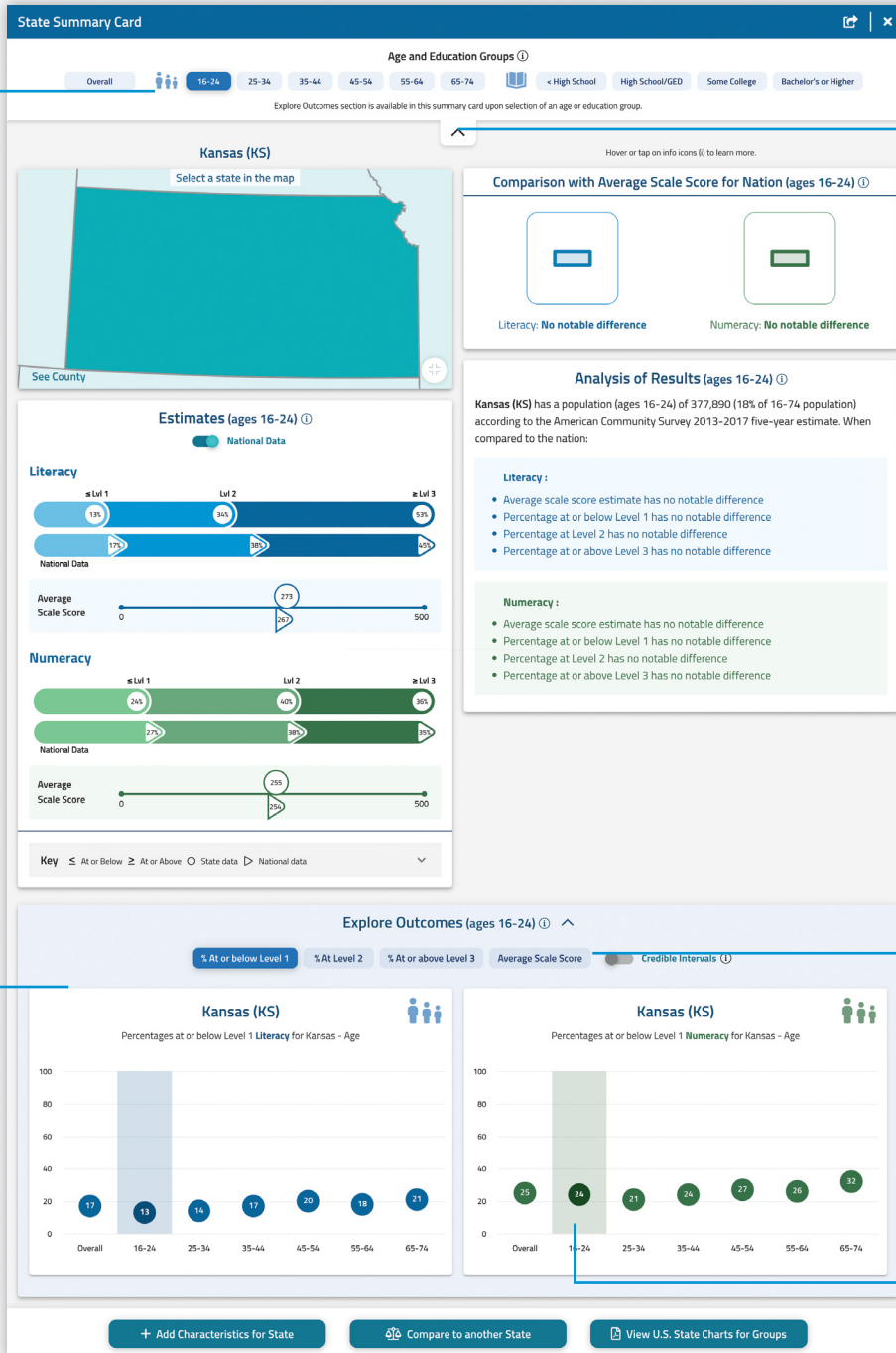
Select one age or education group to see an updated map and state details.



See Details Related to Age or Education Groups

Age & Education Groups

Select one option to adapt the summary card to either an age group or education group of interest.



Groups

Select to show or hide age or education group options.

Results

The results update depending on the age or education group selected.

All Groups

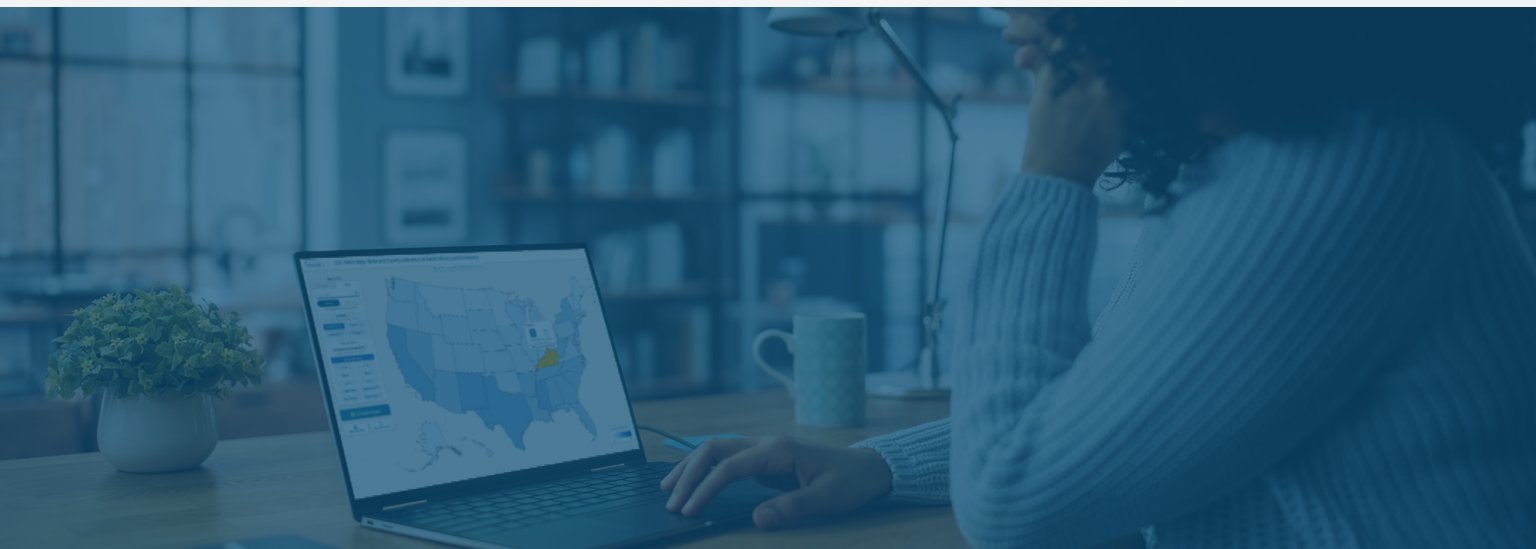
The graphs for literacy and numeracy show all age groups together if an age group is selected, and all education groups together if an education group is selected.

Outcomes

Select from four main outcomes.

Highlights

The selected group of interest is highlighted.



How were these estimates determined?

The term small area estimation (SAE) refers to a variety of methods or statistical techniques used to estimate information for sub-populations or smaller areas of interest.

The statistical models used to calculate the small area estimates use PIAAC survey data in conjunction with data from the U.S. Census Bureau's American Community Survey (ACS) to produce reliable estimates. The estimates are predictions of how the adults in a state or county would have performed had they been administered PIAAC.

PIAAC Proficiency Measures	Literacy	Numeracy
At or below Level 1 0–225 points	Adults at this level can be considered at risk for difficulties using or comprehending print material. Adults at the upper end of this level can read short texts and understand the meaning enough to perform simple tasks. Adults below Level 1 may only be able to understand very basic vocabulary or find very specific information on a familiar topic. Some may struggle with this and may be functionally illiterate.	Adults at this level can be considered at risk for difficulties with numeracy. Adults at the upper end of this level can understand how to add, subtract, multiply, and divide, and can perform basic one-step mathematical operations with given values or common spatial representations. Adults who are below Level 1 may only be able to count, sort, and do basic arithmetic operations with simple whole numbers and may be functionally innumerate.
Level 2 226–275 points	Adults at this level can be considered nearing proficiency but still struggling to perform tasks with text-based information. Such adults may be able to read print and digital texts, relate multiple pieces of information within or across a couple documents, compare and contrast, and draw simple inferences. However, more complex inferencing and evaluation may be too difficult.	Adults at this level can be considered nearing proficiency but still struggling to perform numeracy tasks. Such adults can successfully perform tasks requiring two or three steps involving calculations with whole numbers and common decimals, percentages, and fractions. They can conduct simple measurement and interpret simple data and statistics. However, more complicated problem solving may be too difficult.
At or above Level 3 276 points or more	Adults at these levels can be considered proficient at working with information and ideas in texts. They have a range of higher literacy skills from the ability to understand, interpret, and synthesize information across multiple, complex texts to the ability to evaluate the reliability of sources and infer sophisticated meanings and complex ideas from written sources.	Adults at these levels can be considered proficient at working with mathematical information and ideas. They have a range of numeracy skills from the ability to recognize mathematical relationships and apply proportions to the ability to understand abstract representations of mathematical concepts and engage in complex reasoning about quantities and data.
Average Score	Mean for all adults on the PIAAC scale of 0 to 500 points .	

LEARN MORE

NCES international programs


nces.ed.gov/surveys/international/index.asp

PIAAC Website

nces.ed.gov/surveys/piaac

nces.ed.gov/surveys/piaac/state-county-estimates.asp

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