

Today's topic:

- **Literacy worldwide**

Background:

(none)

0. Key points today

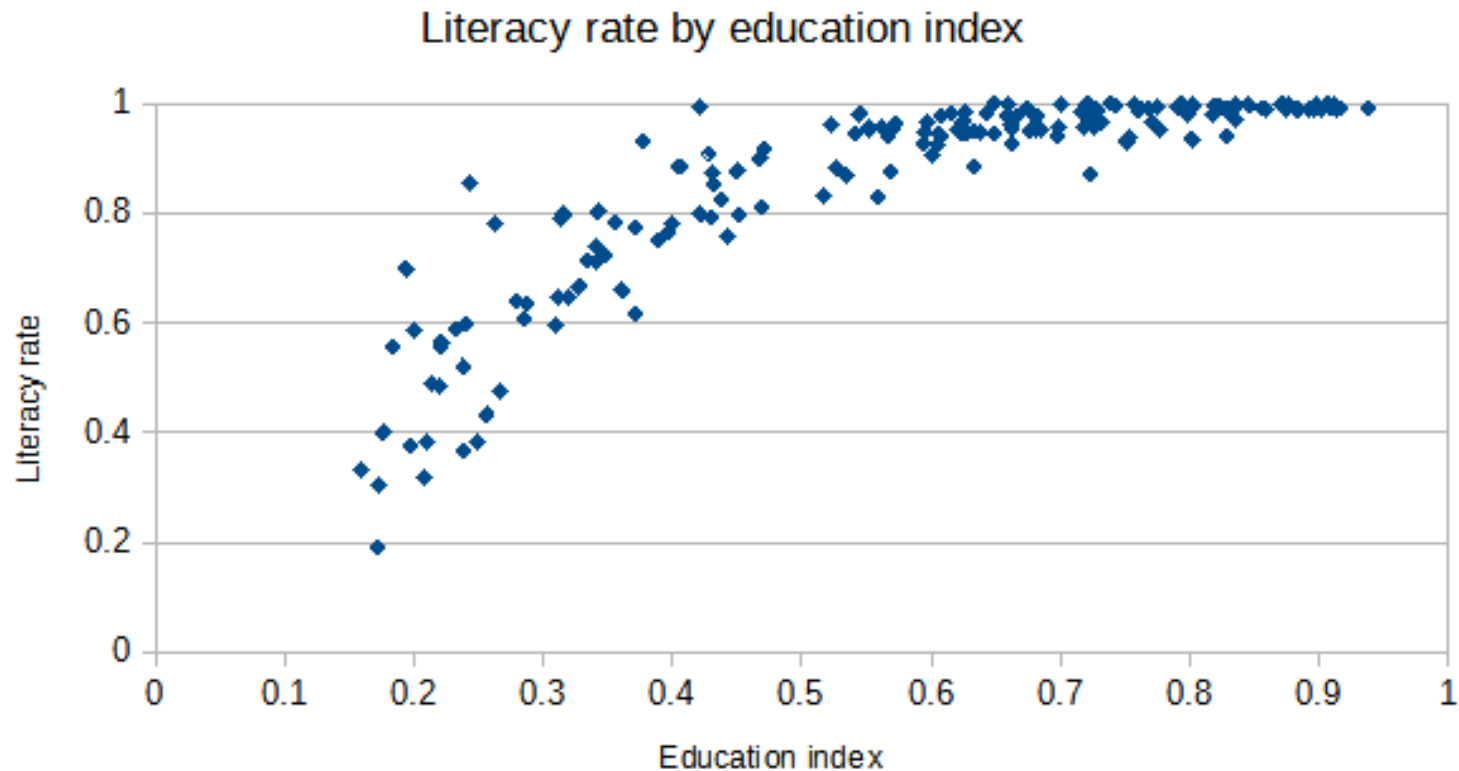
- Literacy rates around the world
- Early reading education in a few sample locations
- Literacy rates in the US, revisited
 - National Assessment of Educational Progress (NAEP)
- A look at the Cherokee writing system

1. Literacy rates worldwide

- Data and maps from [Data Pandas](#)
 - How is “literacy” **defined** here?
 - Is the definition satisfying?
 - What are some **factors** that appear to influence literacy rates in this data set?
 - Compare [this map](#)
 - Or this [map](#)

1. Literacy rates worldwide

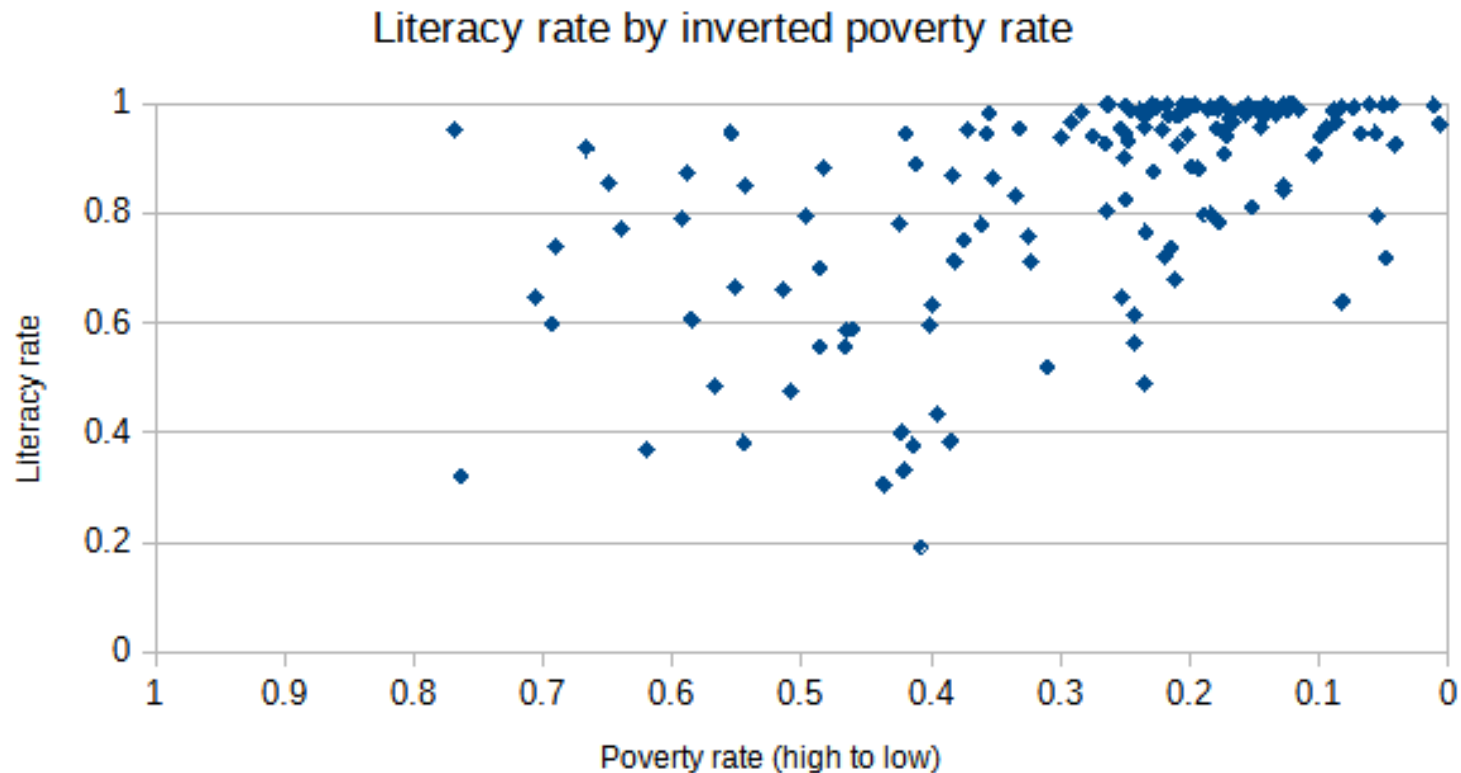
- How highly does literacy correlate with **education**?



[education index](#) data from Data Pandas

1. Literacy rates worldwide

- How highly does literacy correlate with **poverty**?



[poverty rate](#) data from Data Pandas

2. Orthographic depth, revisited

Country	Majority language	Orthographic depth	Education index	Literacy rate
Alphabetic writing systems				
Finland	Finnish	shallow	0.91	100%
Spain	Spanish	shallow	0.72	98%
Guatemala	Spanish	shallow	0.31	79%
France	French	deep	0.76	99%
USA	English	deep	0.88	99%
Non-alphabetic writing systems				
Japan	Japanese	deep	0.83	99%
China	Mandarin	deep	0.57	96%

Literacy rate, education index data from Data Pandas

2. Orthographic depth, revisited

- Amount of time spent on different school subjects in elementary school, in [Japan](#)
- In Finland, reading instruction begins at age 7
 - 6-year-olds do [phonological awareness](#), though

3. Literacy rates in the US

- We've seen claims about how many fourth graders read at a basic or proficient level in the US
 - Example from [Hanford \(2018\)](#)
- What is the data behind these claims?
 - [NAEP](#) (National Assessment of Educational Progress) web site — lots of data and graphics
 - Some [controversy](#) about NAEP benchmarks?

4. Cherokee

- Cherokee: an endangered language
 - Indigenous to western NC
 - Now spoken in Oklahoma (Western Cherokee) and NC (Eastern Cherokee)

4. Cherokee

- What kind of **writing system** does Cherokee use? (see [handout](#))
 - Some possibilities: Each glyph (symbol) represents...
 - a phoneme (consonant or vowel)
 - a syllable
 - a morpheme
- Can you make a “key” that matches the units of the Cherokee writing system to their transliteration into the Roman (English) alphabet?