SDLC Module: Investigating Income Inequality in the U.S.

This module consists of applied data investigations related to income inequality and focuses on describing, comparing, and making sense of quantitative variables.

Income Inequality Investigations:
- What is income inequality?
- How do we learn about people’s incomes in the U.S.?
- What was the average income in the U.S. in 2017, and how accurately can we estimate it?
- How have middle-income earners in the U.S. been doing over time?
- How have higher- and lower-income earners in the U.S. been doing over time?
- How much income inequality exists between males and females in the U.S.?
- Does education explain the wage gap between males and females?

SDLC Module: Investigating Immigration to the U.S.

This module consists of applied data investigations related to immigration and focuses on describing, comparing, and making sense of categorical variables.

Immigration Investigations:
- Who are immigrants in the U.S.?
- What can we learn about immigration from the American Community Survey (ACS)?
- What percentage of the U.S. population are immigrants?
- Are there more immigrants in the U.S. today than in previous years?
- Where have immigrants settled in the U.S.?
- Are immigrants as likely as the U.S. born to be in the labor force?

Initial Findings
Pre/post findings from Income Inequality beta module, Fall 2019
- Overall score (19 items, n=196; effect size d=0.25)
- Other affective measures grew but not significant at p<0.05

Growth in Student Interest and Affect
- Overall scale (9 items, p<0.001), understanding of measures of center (5 items, p<0.001), data representation (4 items, p<0.05), and multicategorical thinking (3 items, p<0.001) improved post module
- Other measures improved but not significant at p<0.05

Pre- and post-module understanding of statistics concepts: Summary of score differences

Growth in Student Learning
- Items drawn from the LOCUS (Jacobbé et al., 2014) and CAOS (Garfield et al., 2006)
- Overall scale (19 items, p<0.0001), understanding of measures of center (5 items, p<0.001), data representation (4 items, p<0.05), and multicategorical thinking (3 items, p<0.001) improved post module
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