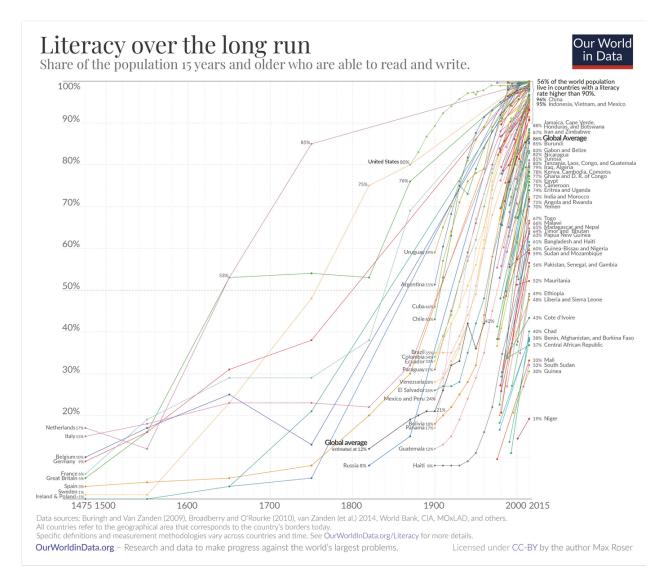
## Data Visualization – Project 2

## Carolyn Liu



# https://ourworldindata.org/better-learning

- 1. The title of the visualization is "Literacy over the long run," created by Max Roser from Our World in Data. They use data from several academic studies, the World Bank, CIA, and others.
- 2. The purpose of the visualization is to illustrate how different countries' literacy rates for populations over 15 have changed over the past ~500 years. The greater point within the article is to show how almost everyone was illiterate up until recently, and that it's possible for children in countries with lower quality of education to get a better education since there has been progress.

- 3. The visualization is a multiline chart, with each line representing the literacy rate of a country, with the exception of the global average line.
- 4. The visualization has a lot of lines, but that with the article passage and annotation make the message more clear. The article passage and title/description of the chart clearly state what the chart is intended to show:

Today a large share of the world's children gets a poor education. But until recently almost every child had a terrible education.

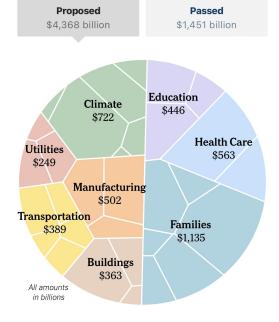
We know that change is possible because it has already happened. If we look at the places where children now get a good education, nearly everyone was illiterate until recently.

Even basic skills – such as reading and writing – were only attainable for a small elite. This chart brings together estimates of basic literacy from around the world to show how this has changed

The intended audience could be policymakers, researchers, lawmakers, and anyone interested in education policy.

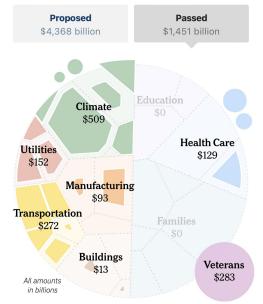
- 5. The visualization is quite overwhelming at first, in my opinion, due to the sheer number of lines on the chart. But once you look at it more carefully, it starts to be less overwhelming and I started to understand it more. The lines get very crowded towards the top right corner, but that's also an effective point the creator is trying to make (with an annotation) that over half the world population as of 2015 live in countries with literacy rates > 90% where as the averages for the available data dating back to the 1500s is less than 20% (as a world, we've improved a lot, so much so that so many people can read and write now, but there's also a lot of progress that has yet to be made).
- 6. I like and dislike the annotations of literacy rate for countries that start having data in the middle of the chart. On one side, it's helpful to see how far they have (or have not) come. On the other hand, it crowds an already crowded chart. I think some line smoothing would also help the visualization be less busy.

#### President Biden's Legislative Agenda



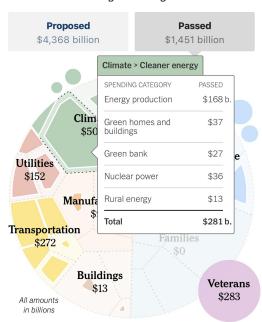
Sources: Office of Management and Budget; Congressional Budget Office; U.S. Senate Committee on Environment and Public Works; and Committee for a Responsible Federal Budget. \* Note: Figures combine estimates of direct spending and tax credits.

### President Biden's Legislative Agenda



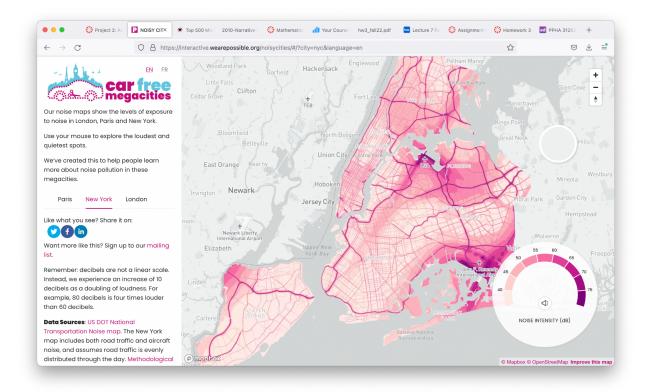
Sources: Office of Management and Budget; Congressional Budget Office; U.S. Senate Committee on Environment and Public Works; and Committee for a Responsible Federal Budget. \* Note: Figures combine estimates of direct spending and tax credits.

#### President Biden's Legislative Agenda



Sources: Office of Management and Budget; Congressional Budget Office; U.S. Senate Committee on Environment and Public Works; and Committee for a Responsible Federal Budget. \* Note: Figures combine estimates of direct spending and tax credits.

- 1. There are actually several visualizations in this article. I will focus my analysis on the first, which is titled "President Biden's Legislative Agenda." I'm not sure who exactly created the visualization, but the authors of the article are Aatish Bhatia, Francesca Paris and Margo Sanger-Katz. The visualization is from The New York Times (in TheUpshot section). The data come from the Office of Management and Budget, the Congressional Budget Office, U.S. Senate Committee on Environment and Public Works; and Committee for a Responsible Federal Budget.
- 2. The purpose of the visualization is to compare/contrast what the Biden administration wanted to accomplish in terms of funding for programs, infrastructure, etc. and what has actually been passed in the last 2 years.
- 3. This interactive visualization is composed of 2 main parts. At the top, there are tabs for what was proposed by the White House ("Proposed" tab) and what has been passed ("Passed" tab). For each tab, there's a pie chart (divided in different sections with proposed/passed budget for different programs such as climate, education, health care, etc. Within each section, there's information for sub-section categories and proposed/passed budget. For example, under Education, there's free community college, free pre-K and financial aid. Under the "Proposed" tab, all the sections are shaded in darker while sections that didn't get funding or not the full amount requested by the White House after going through the legislative branch get "un-shaded" or a smaller shaded area if approved with a smaller budget.
- 4. The message is very clear. Toggling between the tabs makes it very easy to see the differences in what Biden wanted and what he's gotten so far. Biden was ambitious and wanted funding for a lot of programs, but reality is harsher and bipartisan support is hard to get. The intended audience is readers of the NY Times or anyone interested in the state federal funding.
- 5. The visualization is effective, even as a variation of a pie chart. It's very easy to see how much wasn't passed and even differences in proposed vs. passed budget for each subsection. The interactive component also does a gradual shading/un-shading when toggling the tabs so it's even easier to see the difference in proposed vs. passed for the categories. Additionally, categories/sections that got funding but weren't in the original proposal show up outside the main pie chart, making it easy to distinguish that fact.
- 6. I'm not sure there's anything I can think of to change the visualization to make it more effective. I think this is quite a creative use of an interactive pie chart.



- 1. Not sure if the viz itself has a name, but the project is called Noisy Cities. It's created by Karim Douïeb, in collaboration with Possible. The project displays interactive noise maps of Paris, New York (shown above) and London. I will focus on analyzing the New York City map. The New York City data come from the US DOT National Transportation Noise map.
- 2. The purpose of this visualization is to map noise levels throughout the city and show what noise pollution is like in different parts of the city. As an additional feature, users can hover over different parts of the city to see and hear the noise level in decibels.
- 3. The visualization is composed of a map of the city. Areas that are darker have more noise pollution than areas that are lighter.
- 4. The visualization displays the noise pollution across the city very clearly, although it is difficult to say what the message the creators wanted to convey is exactly. Anyone who is interested in noise in these cities (and to an extent, to any large city) could be the intended audience. Policymakers, urban planners, and the other government entities could also be interested in this sort of visualization.
- 5. The visualization is extremely effective. I can clearly see the darker/lighter differences/gradient that correspond to the noise level. Busy roads and bridges are well defined by this noise level indicator and I also like how JFK and LGA are marked clearly on the map to indicate so-called "outliers." Obviously airports and aircraft are loud. Someone who wasn't the most familiar with NYC geography may not know where JFK and LGA are, so it's a nice feature to note on the map.

6. I think it would also be interesting to see how the surrounding areas are affected by the noise pollution coming from a large city, though those areas will also have their own noise pollution levels so that might be difficult. Other than that, I would want to add something to convey the message more (not sure what the message is here—perhaps noise pollution is bad and like air pollution, it spreads?), which you can see a bit of around the airports.