EMPath
Economic Mobility Pathways

OUTCOMES WORKGROUP

meeting notes

March 9th, 2017

An... **Introduction to Data Visualization: Choosing the Right Chart**

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THIS SESSION

Choosing the Right Chart

Laura Beals—
Jewish Family and Children's Service

Barbara Perry—
Jewish Family and Children's Service

Eliana Wallack—
Jewish Family and Children's Service

SAVE THE DATES

Next Outcomes Workgroup Meeting:

June 1st, 2017

9:30-11:30AM

One Washington Mall, 3rd Floor, Boston, MA 02108

The March Outcomes Workgroup met at EMPath to focus on data visualization, specifically choosing the right chart for a particular set of data or purpose.. **Laura Beals, Barbara Perry, and Eliana Wallack of the Jewish Family and Children's Service** shared some of the ways in which they have used data visualization to communicate to a diverse audience both within and outside of their organization.

Visualization Overview

Laura Beals, Director of the Department of Evaluation and Learning at Jewish Family and Children's Service, began by giving the group an overview of data visualization. This included some of the challenges one might run into when visualizing information. The overview also included fascinating information regarding brain science and the way that self-proclaimed "data nerds" can use brain science to inform how data is presented to others.

Laura then gave the Outcomes Work Group members an incredibly useful set of questions that it is recommended researchers use when they are planning to share data. The first question is: how confident are you in the data? Our presenters reminded us how important it is to start there, ensuring that at a basic level you are confident in the data that you are planning to present to others. The next question is, what do you want to show? It is important that we take into account the specific pieces of our data that we want others to see, that we consider the questions that we want to answer and the stories that we are trying to tell to our audience. Speaking of audience, the next question is around who we are showing this data to. This question begins to tackle the fact that the presentation of information may change and shift based on who the audience will be. The question around audience is followed by a consideration of the medium with which data is communicated - does the researcher want to communicate information by paper, flyer, or another hand-out? Will it be digital? How will the information be shared? Lastly, and importantly for those who will be presenting this data, what resources are available? The presenters reminded members that they must take stock of the time they have available to complete the task, the tools that are available for use, and the skills they may (or may not) have to use the tools presented.

Small Groups: Working Together to Visualize Data

After reviewing this set of questions, the Outcomes Work Group was instructed to break into small groups for group activities. Each individual was given a packet which grouped different data visualization tools into the following categories: small numbers, percentages, and frequencies, time, survey response, and comparisons. The group was instructed to focus on a specific aspect of a data set within each data visualization category and attempt to visualize that data using the tools provided in the packet. When approaching each data visualization exercise, my group made full use of the five questions we had been provided during the overview, and they helped us immensely in terms of approaching how to visualize each data set. Collaborating with other group members proved invaluable as well since each individual provided a different perspective with which to approach the task at hand.

At the conclusion of our small group collaboration, we came back together as a group and had space for reflection about the tasks that had just been completed. Laura showed the group some examples of data visualization techniques that have worked for her in the past and the reasons why they may have worked. It is fundamentally important to consider audience, intent, and medium when considering how to best represent a given data set, and this Outcomes Work Group session reminded us of the importance of using the five data visualization questions each time we approach a new project. My team and I left buzzing about the possibilities which this data visualization presentation had afforded us, and we plan to use the data visualization questions and techniques as much as possible moving forward.

Data Visualization Tools

- **Tableau**
- **Databasic.io**
- **Infogr.am**
- **Chartblocks**
- **Datawrapper**
- **Charte.ca**
- **Plot.ly**
- **Piktochart**
- **Canva**
- **Rawgraphs.io**
- **Silk.co**
- **Data-Driven Documents**
- **Lucidchart**
- **Microsoft Visio**

We would like to thank everyone who took the time to fill the **Outcomes Workgroup 2017 Planning survey**! We deeply appreciate the thorough feedback you provided, and are working to tailor the upcoming sessions based on your input. Stay tuned!

FEATURED RESOURCES

- Chart Chooser Cards & Templates
- National Autism Indicators Report: if you want to see how the data used in this session was presented
- AEA365: American Evaluation Association Daily blog posts related to data visualization
- American Evaluation Association Coffeebreak and eStudy courses, Best of 2016 eStudy courses
- Ann Emery: Emery's Essential Chart Choosing Tool
- Stephanie Evergreen: Data Visualization Checklist, Evaluation Report Layout Checklist, Qualitative Chart Chooser.

  Books: Effective Data Visualization: The Right Chart for the Right Data

  Presenting Data Effectively: Communicating Your Findings for Maximum Impact
- Data Visualization Catalogue
- Cole Nussbaumer Knaflic: Storytelling with Data. (Wiley, 2015). Storytellingwithdata.com
- Calculators for Visuals
- The 10 Best Data Visualization Articles of 2016 (and Why They Were Awesome) (Evan Sinar, Medium)
- Visualizations that Really Work (Scott Berinato, HBR)