

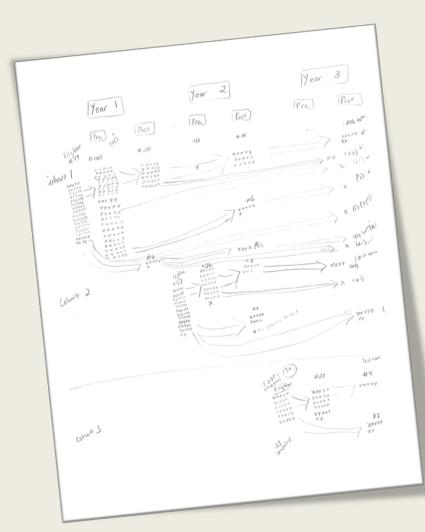
## Survey<br/>Says?

How to Visualize Survey Response Rates

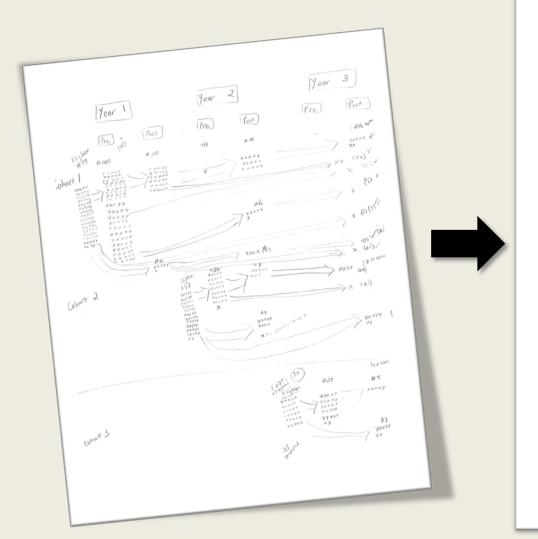
Ginger Fitzhugh
American Evaluation Association
October 18, 2013









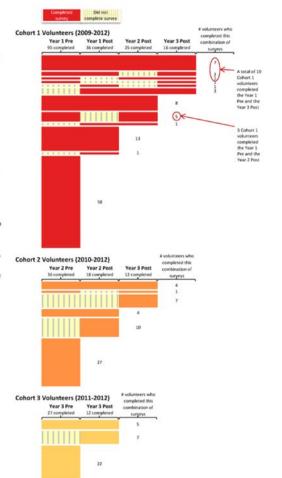


#### Survey Completion by Volunteer Educators in the Youth Development Training Project

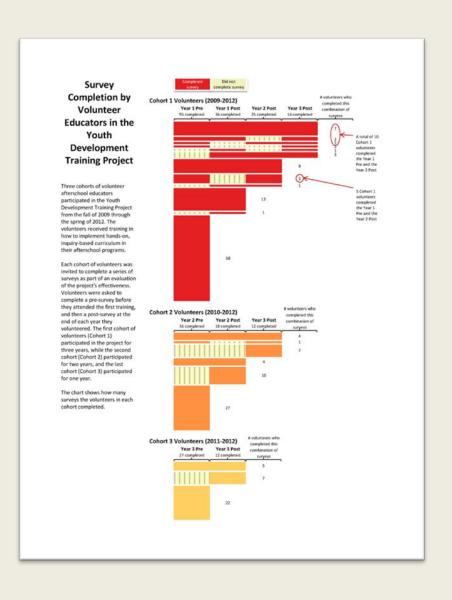
Three cohorts of volunteer afterschool educators participated in the Youth Development Training Project from the fall of 2009 through the spring of 2012. The volunteers received training in how to implement hands-on, inquiry-based curriculum in their afterschool programs.

Each cohort of volunteers was invited to complete a series of surveys as part of an evaluation of the project's effectiveness. Volunteers were asked to complete a pre-survey before they attended the first training, and then a post-survey at the end of each year they volunteered. The first cohort of volunteers (Cohort 1) participated in the project for three years, while the second cohort (Cohort 2) participated for two years, and the last cohort (Cohort 3) participated for one year.

The chart shows how many surveys the volunteers in each cohort completed.







- 1. Learn about topic
- Identify goals and challenges
- 3. Sketch and prototype
- 4. Test and tweak
- 5. Share (and get feedback)

<sup>\*</sup>Alberto Cairo





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#### Data collection timeline

|          | Sept 2008          | May 2009              | Sept 2009          | May 2010              | Sept 2010          | May 2011              |
|----------|--------------------|-----------------------|--------------------|-----------------------|--------------------|-----------------------|
| Cohort 1 | Baseline<br>Survey | Year 1<br>Post-Survey |                    | Year 2<br>Post-Survey |                    | Year 3<br>Post-Survey |
| Cohort 2 |                    |                       | Baseline<br>Survey | Year 2<br>Post-Survey |                    | Year 3<br>Post-Survey |
| Cohort 3 |                    |                       |                    |                       | Baseline<br>Survey | Year 3<br>Post-Survey |



30 completed the first two surveys

|          | Sept 2008 | May 2009 | Sept 2009 | May 2010 | Sept 2010 | May 2011 |
|----------|-----------|----------|-----------|----------|-----------|----------|
| Cohort 1 | 95        | 36       | -         | 25       | -         | 16       |
| Cohort 2 | -         | -        | 36        | 18       | -         | 12       |
| Cohort 3 | -         | -        | -         | -        | 27        | 12       |



15 completed the first three surveys

|          | Sept 2008 | May 2009 | Sept 2009 | May 2010 | Sept 2010 | May 2011 |
|----------|-----------|----------|-----------|----------|-----------|----------|
| Cohort 1 | 95        | 36       | -         | 25       | -         | 16       |
| Cohort 2 | -         | -        | 36        | 18       | -         | 12       |
| Cohort 3 | -         | -        | -         | -        | 27        | 12       |



7 completed all four surveys

|          | Sept 2008 | May 2009 | Sept 2009 | May 2010 | Sept 2010 | May 2011 |
|----------|-----------|----------|-----------|----------|-----------|----------|
| Cohort 1 | 95        | 36       | -         | 25       | -         | 16       |
| Cohort 2 | -         | -        | 36        | 18       | -         | 12       |
| Cohort 3 | -         | -        | -         | -        | 27        | 12       |



|          | Sept 2008 | May 2009 | Sept 2009 | May 2010 | Sept 2010 | May 2011 |
|----------|-----------|----------|-----------|----------|-----------|----------|
| Cohort 1 | 95        | 36       | -         | 25       | -         | 16       |
| Cohort 2 | -         | -        | 36        | 18       | -         | 12       |
| Cohort 3 | -/        | -        | -         | -        | 27        | 12       |

10 completed all three post-surveys



|          | Sept 2008 | May 2009 | Sept 2009 | May 2010 | Sept 2010 | May 2011 |
|----------|-----------|----------|-----------|----------|-----------|----------|
| Cohort 1 | 95        | 36       | -         | 25       | -         | 16       |
| Cohort 2 | -         | -        | 36        | 18       | -/        | 12       |
| Cohort 3 | -         | -        | -         | -        | 27        | 12       |

10 completed at least the first and last surveys



30 completed the first two surveys

15 completed the first three surveys

7 completed all four surveys

|          | Sept 2008 | May 2009     | Sept 2009 | May 2010 | Sept 2010 | May 2011 |
|----------|-----------|--------------|-----------|----------|-----------|----------|
| Cohort 1 | 95        | 36           | -         | 25       | - (       | 16       |
| Cohort 2 | -         | -            | 36        | 18       | -         | 12       |
| Cohort 3 | -/        | <del>-</del> | -         | -        | 27        | 12       |
|          |           |              |           |          |           |          |

10 completed all three post-surveys

10 completed at least the first and last surveys



# Ack! What data can I compare?



- 1. Learn about topic
- 2. Identify goals and challenges
- 3. Sketch and prototype
- 4. Test and tweak
- 5. Share (and get feedback)

\*Alberto Cairo



### Goals **Challenges** Understand longitudinal data response rates for analysis



#### Goals







Understand longitudinal data response rates for analysis

Communicate low surveymatching rates to clients



#### Goals







Understand longitudinal data response rates for analysis

Complicated data

Communicate low surveymatching rates to clients

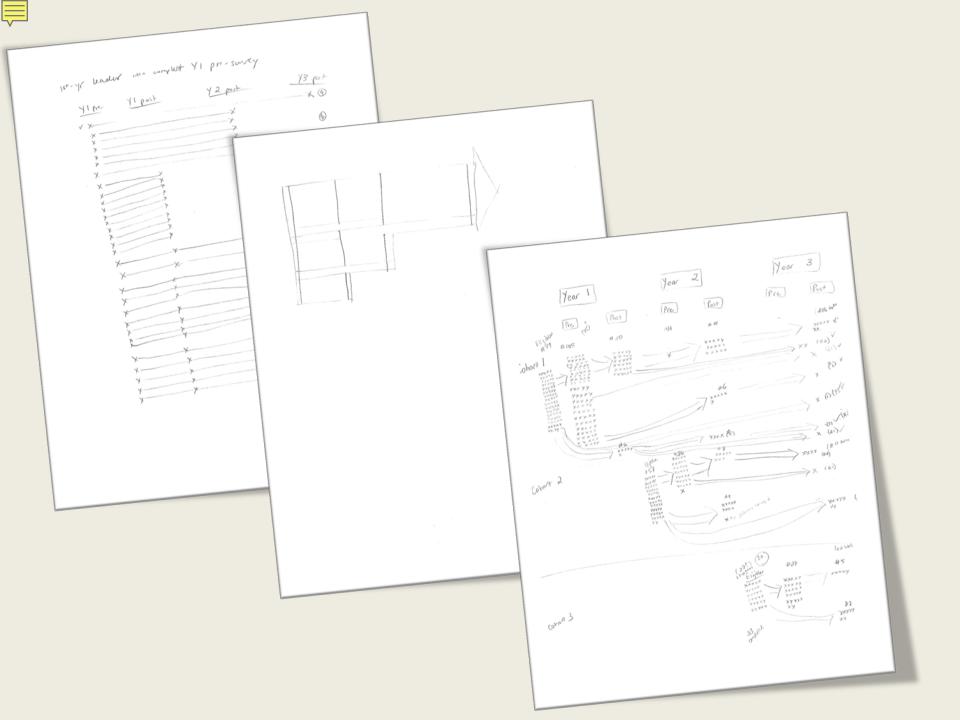


#### Goals **Challenges** Understand longitudinal data Complicated data response rates for analysis Communicate low survey-Need for a static graph to go matching rates to clients in written report

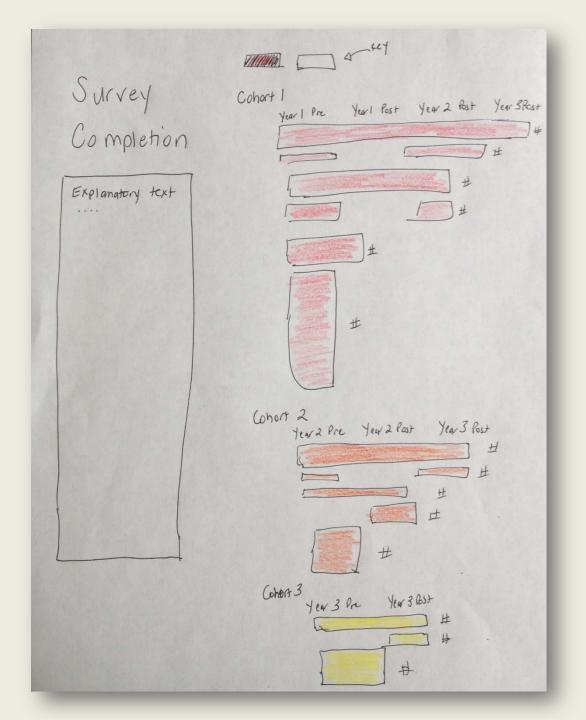


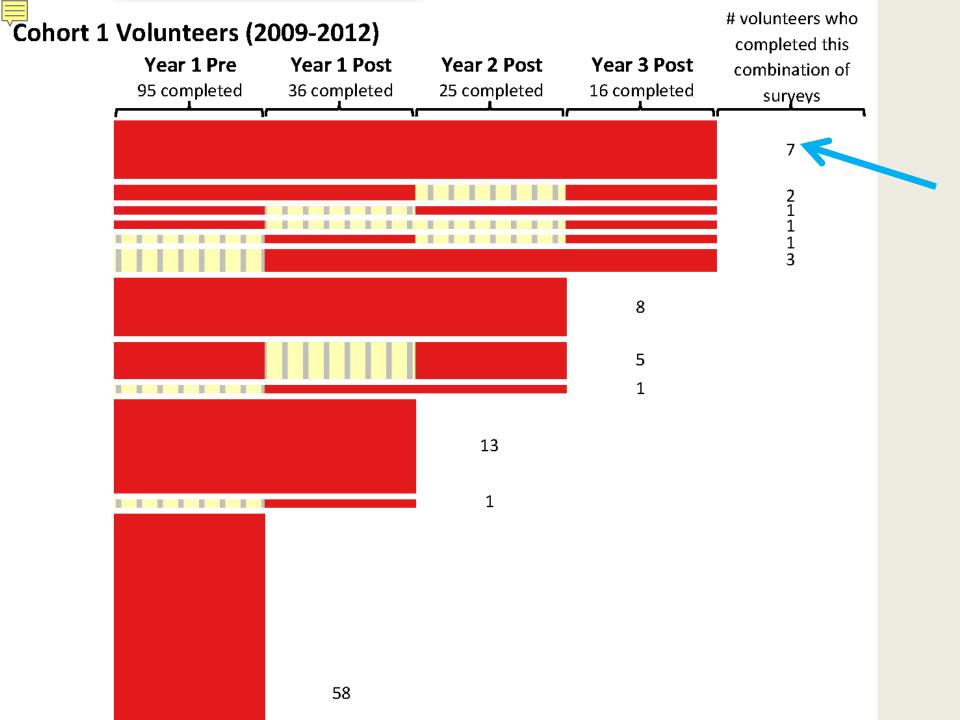
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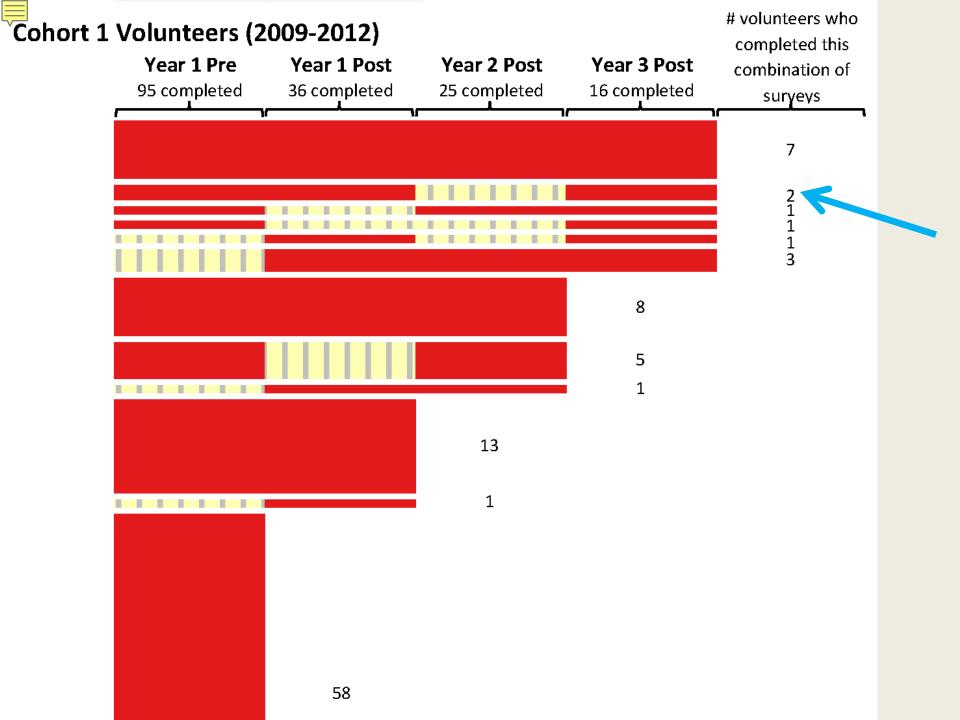
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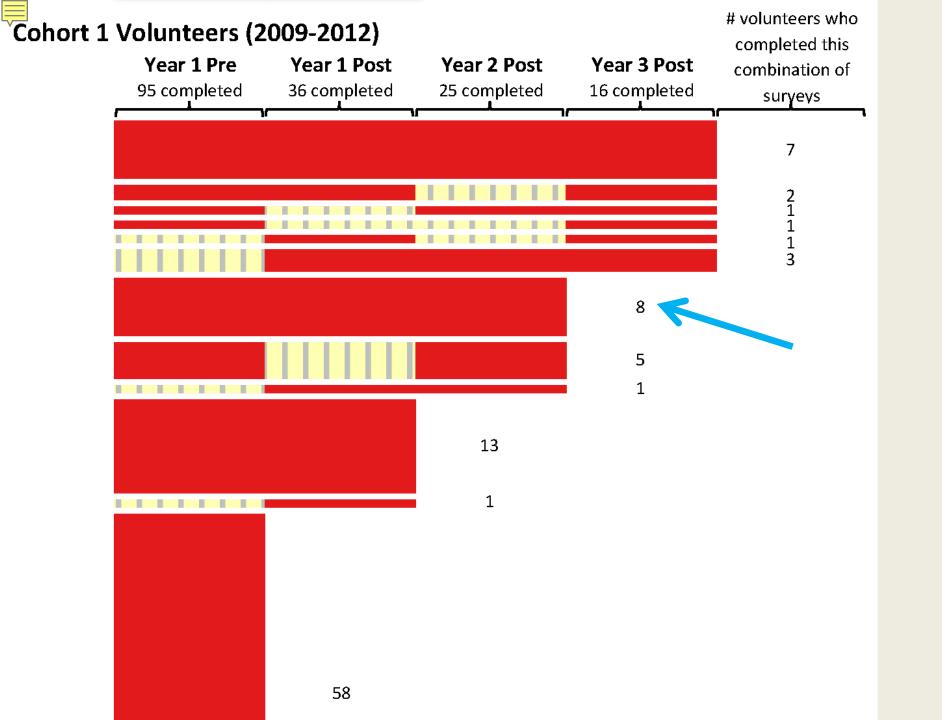


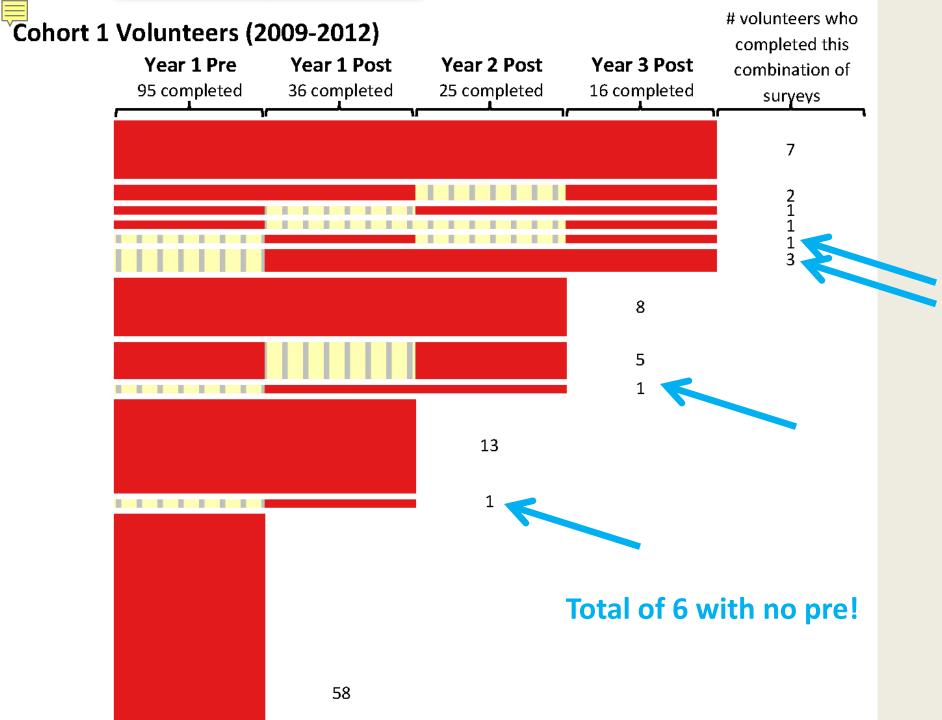








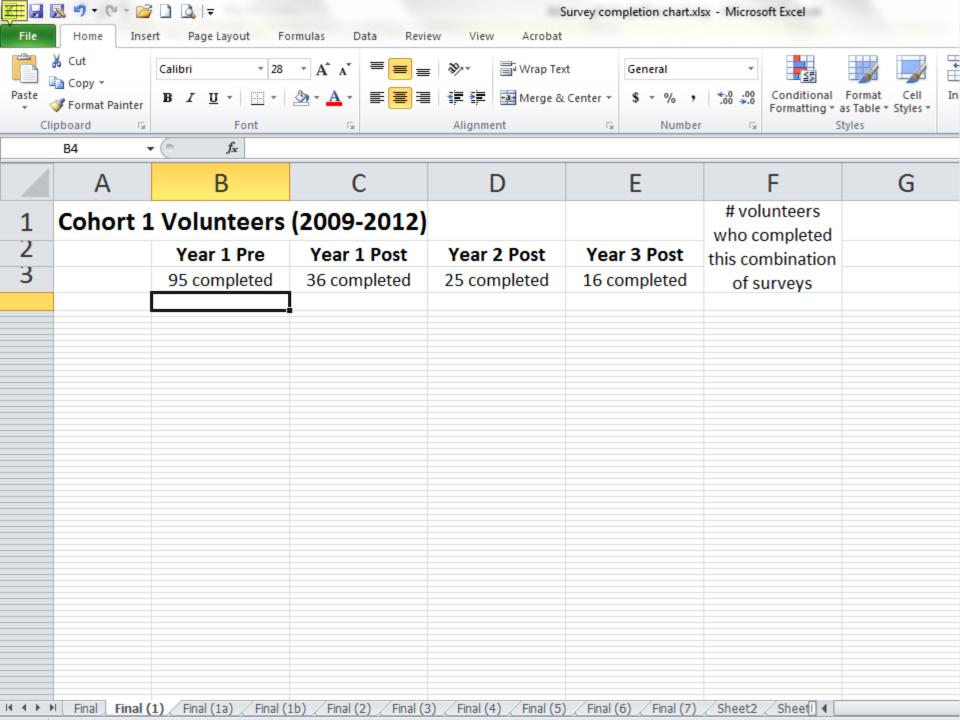


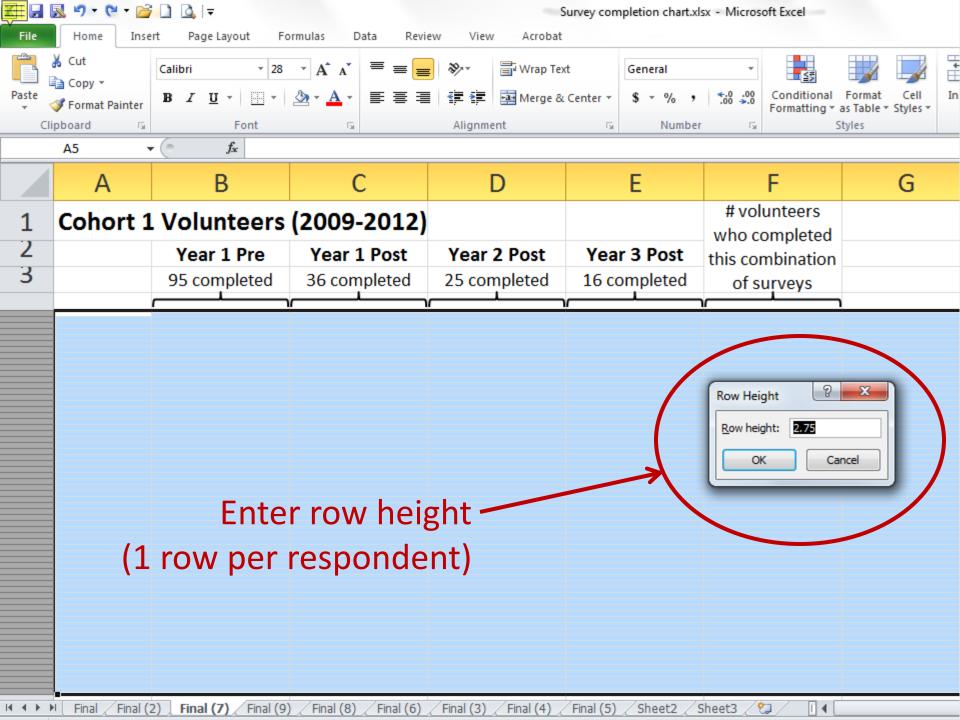


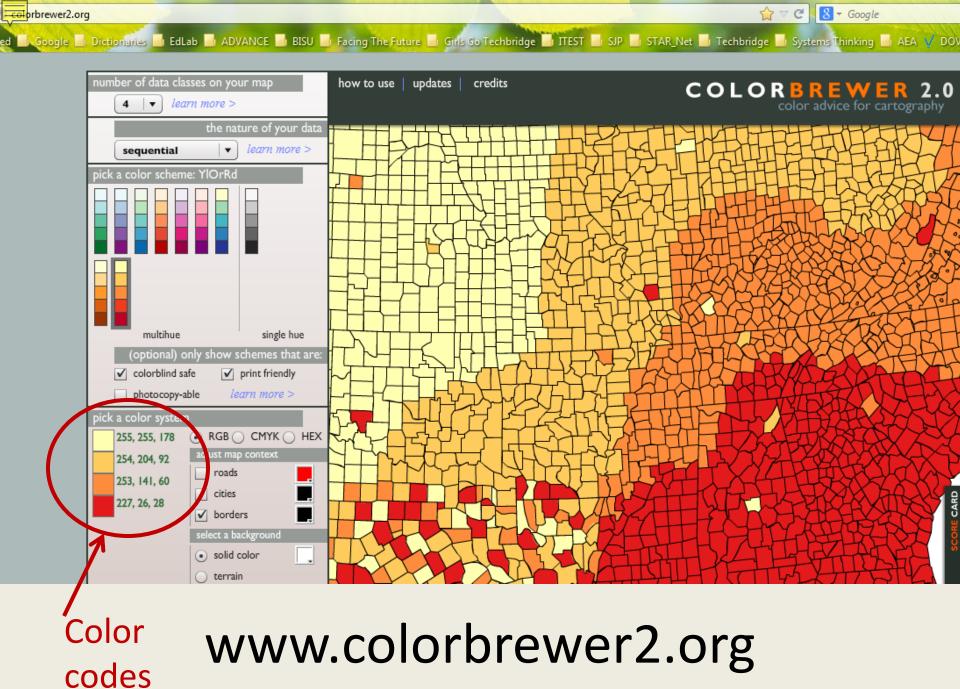


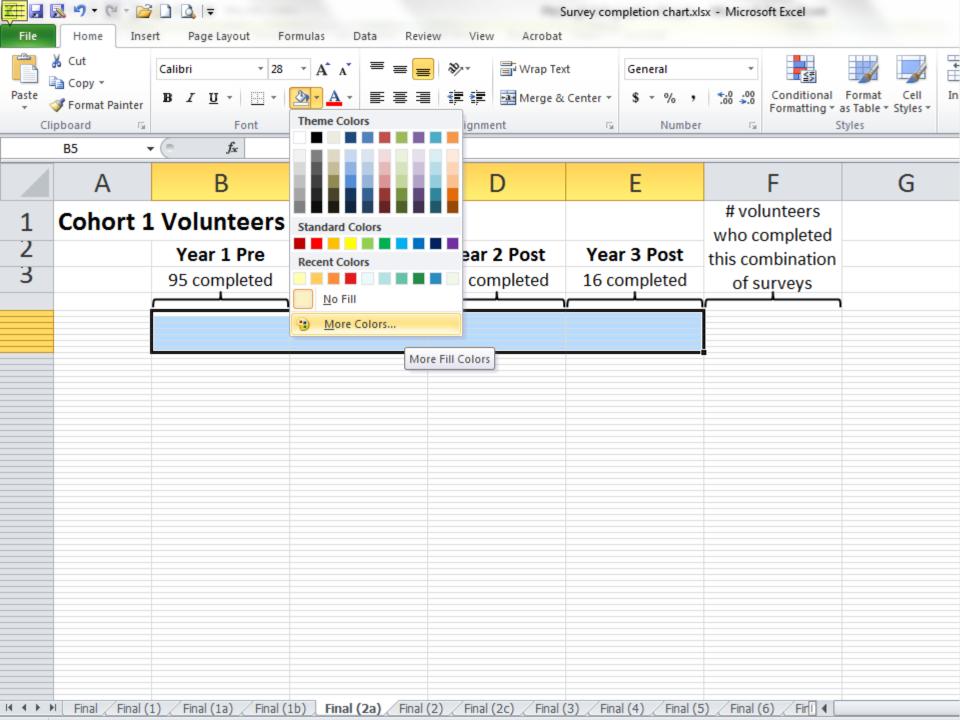
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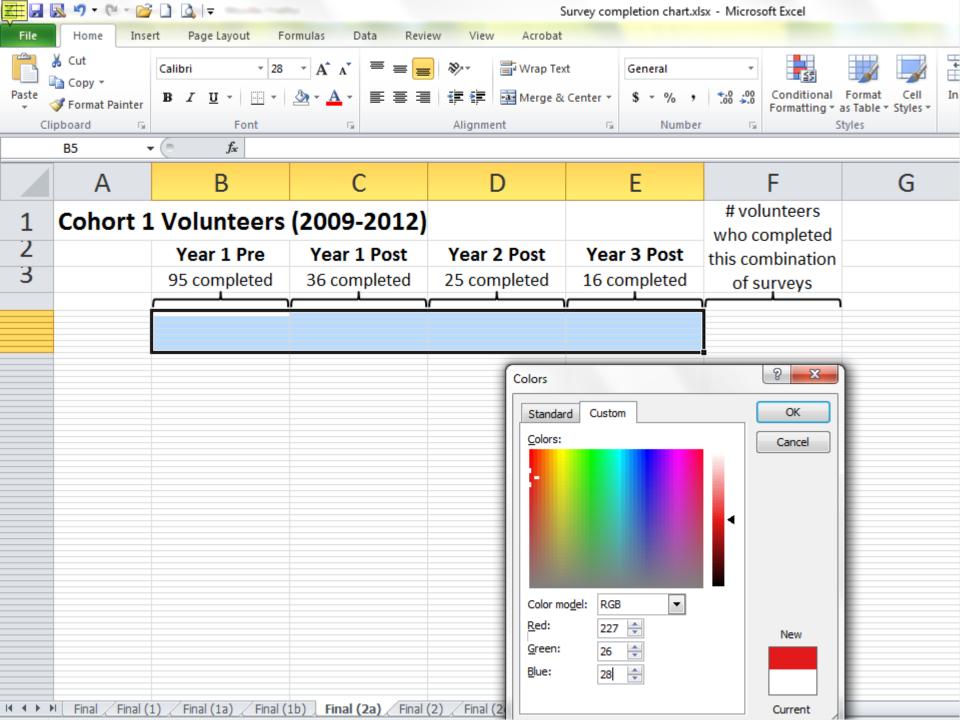
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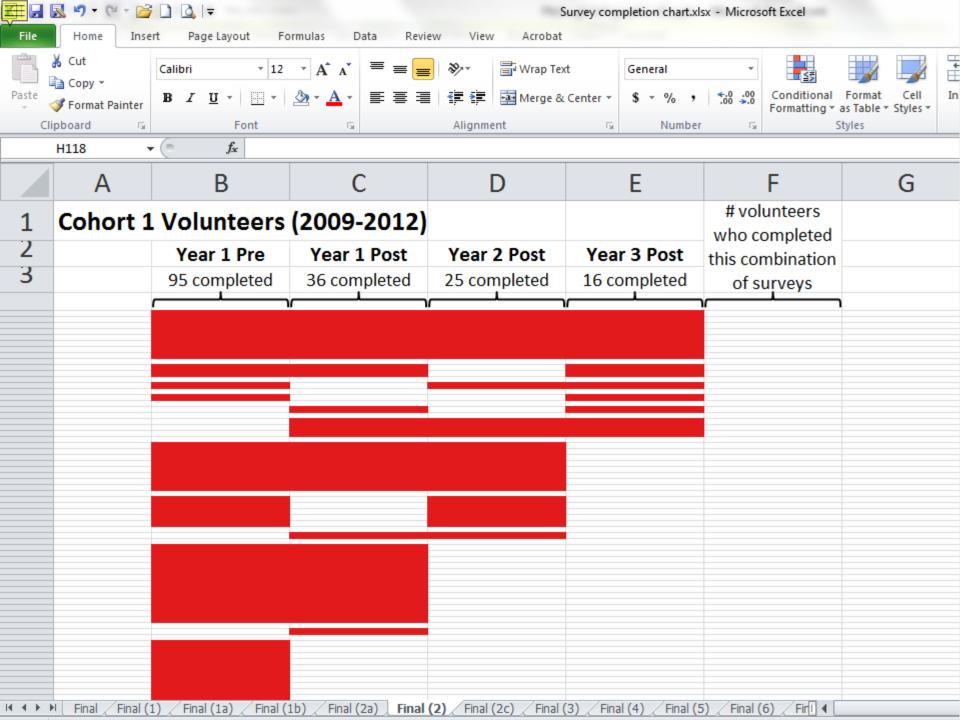


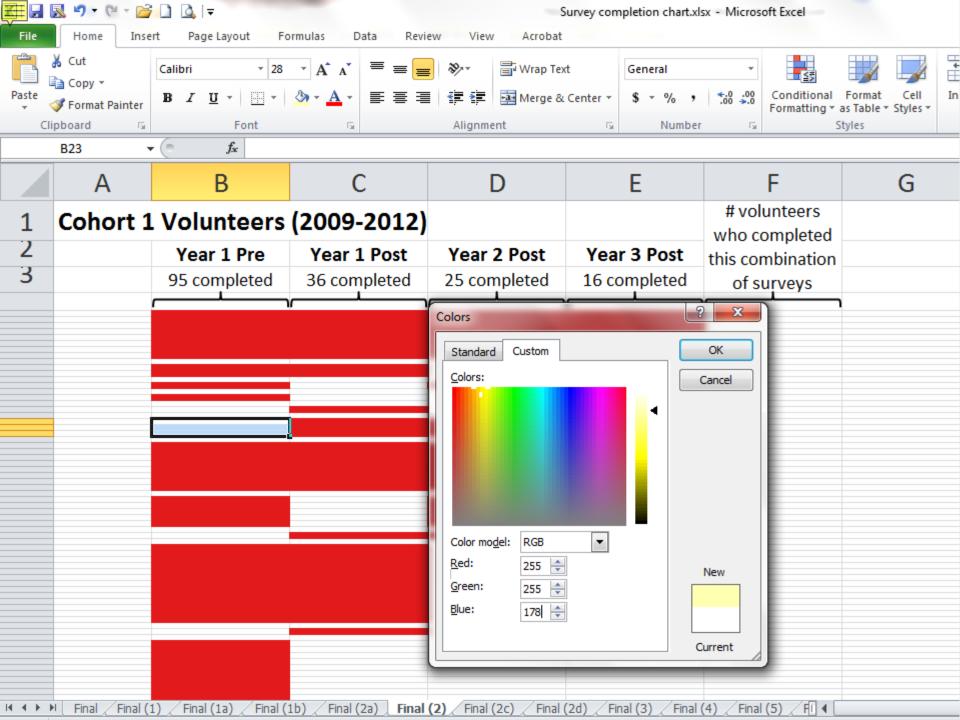


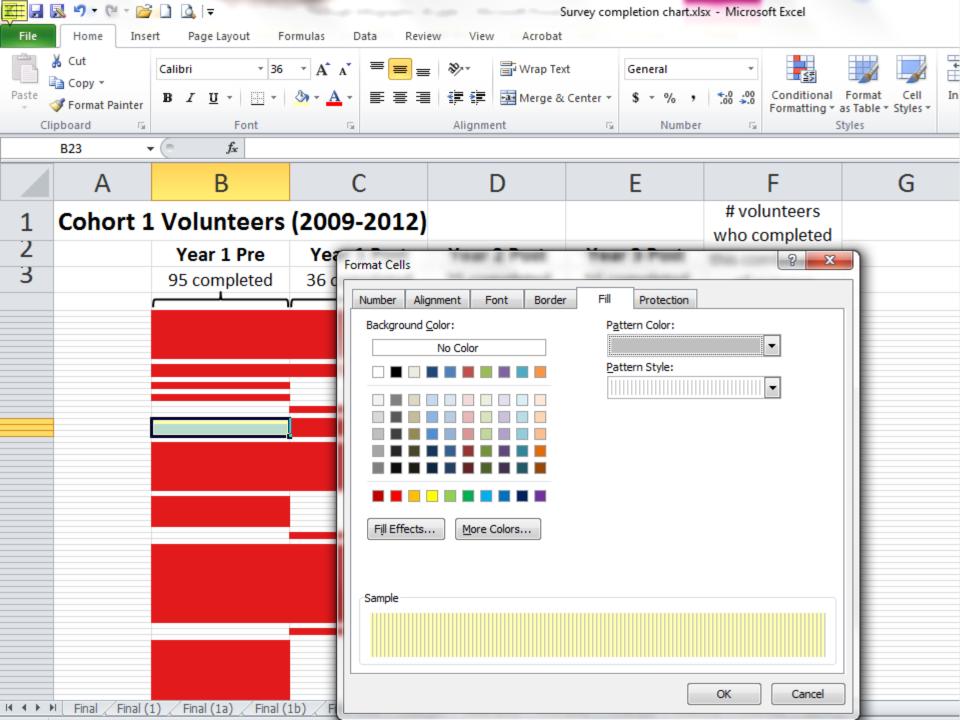


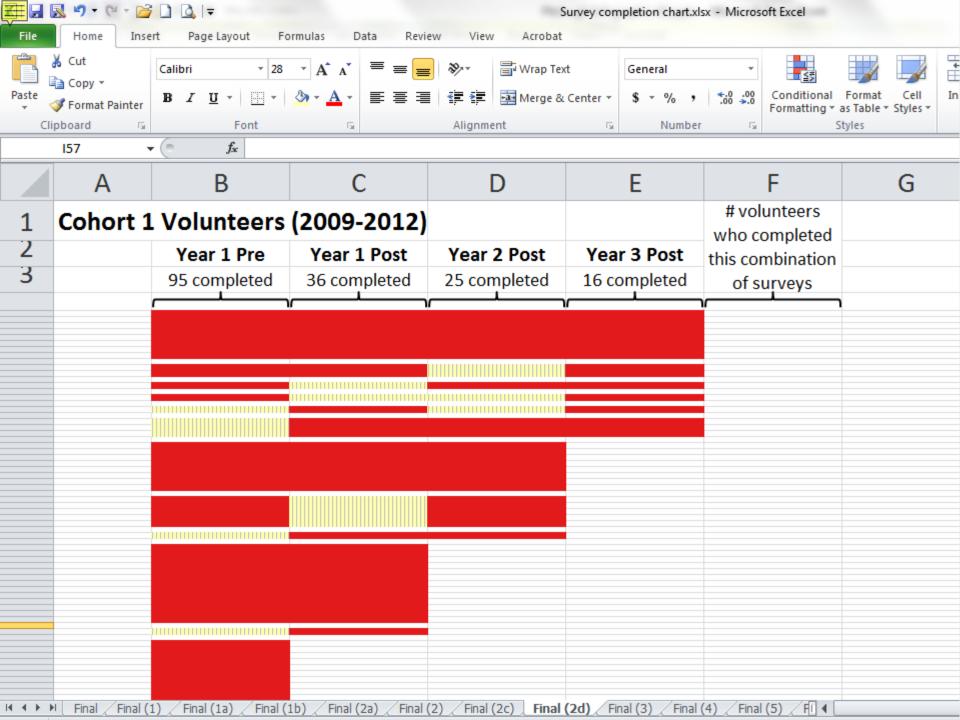


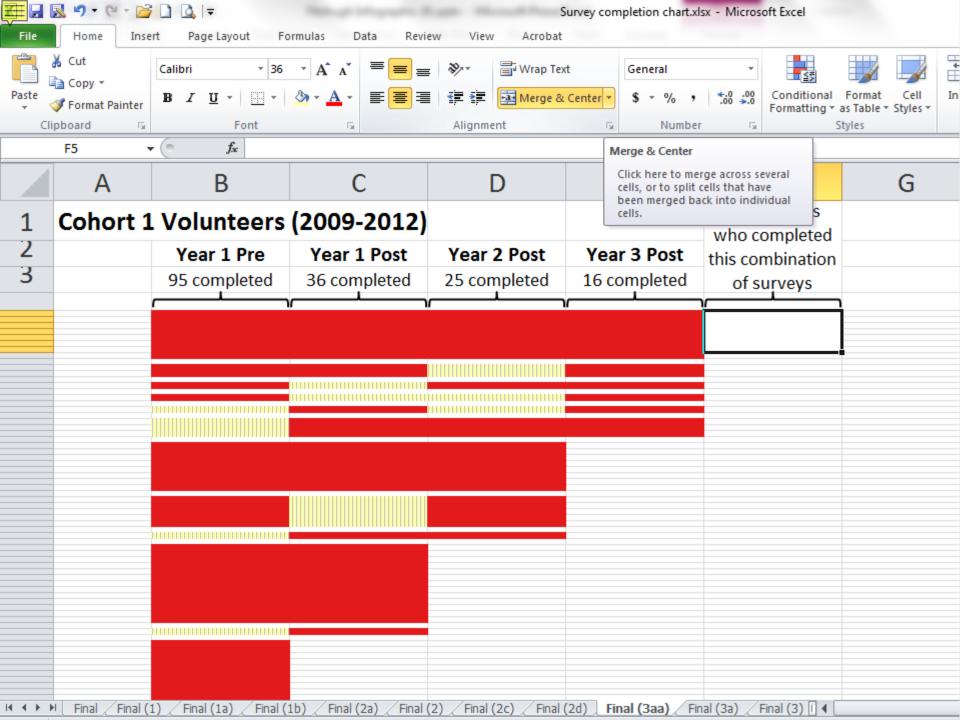


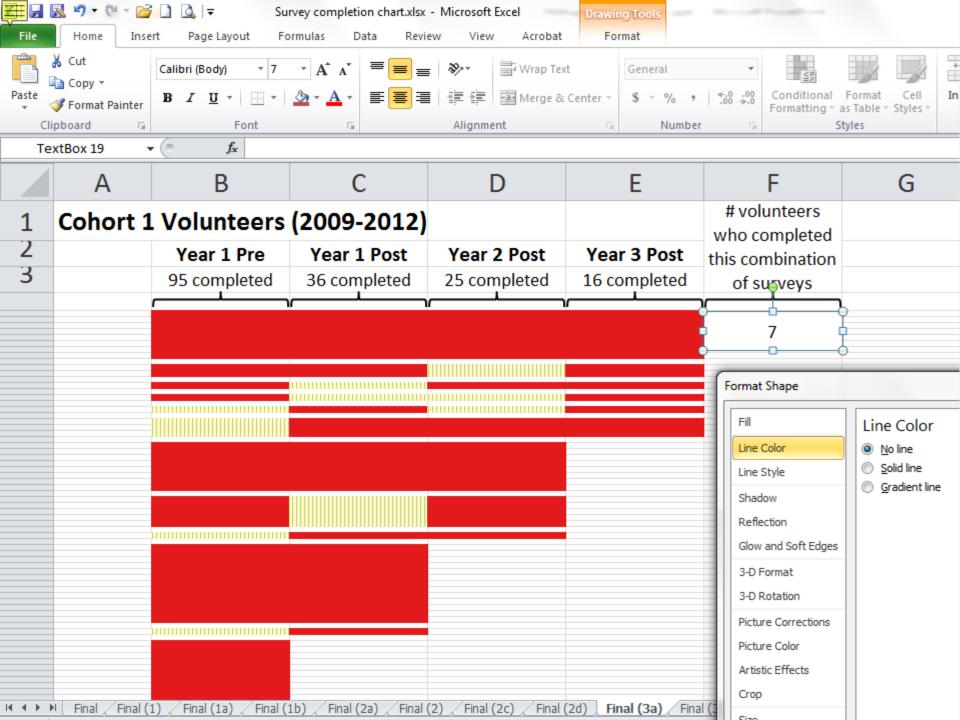


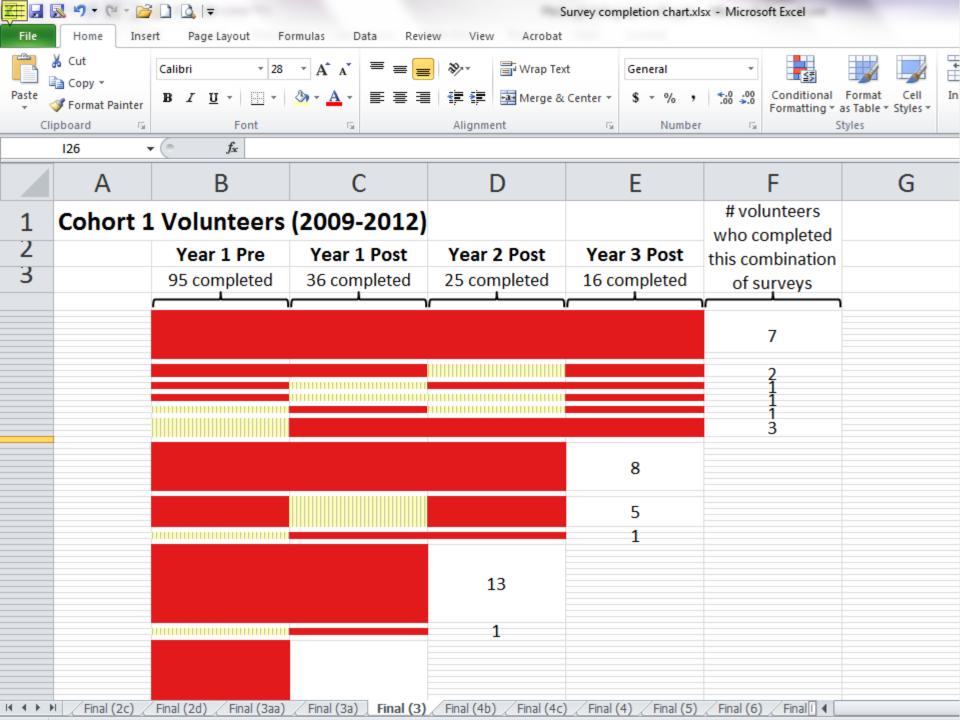


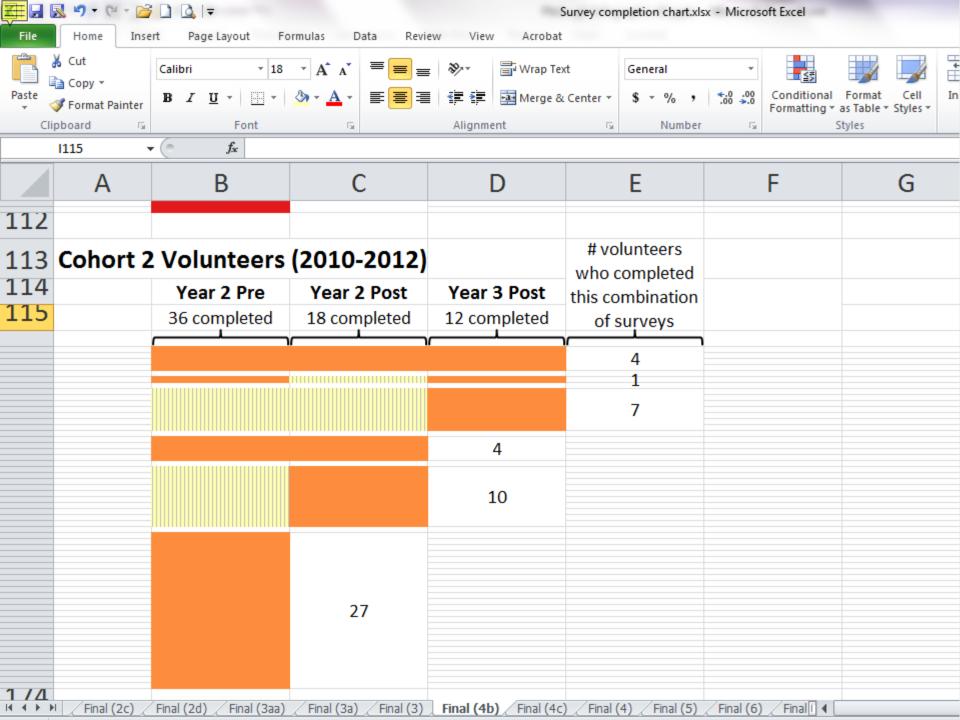


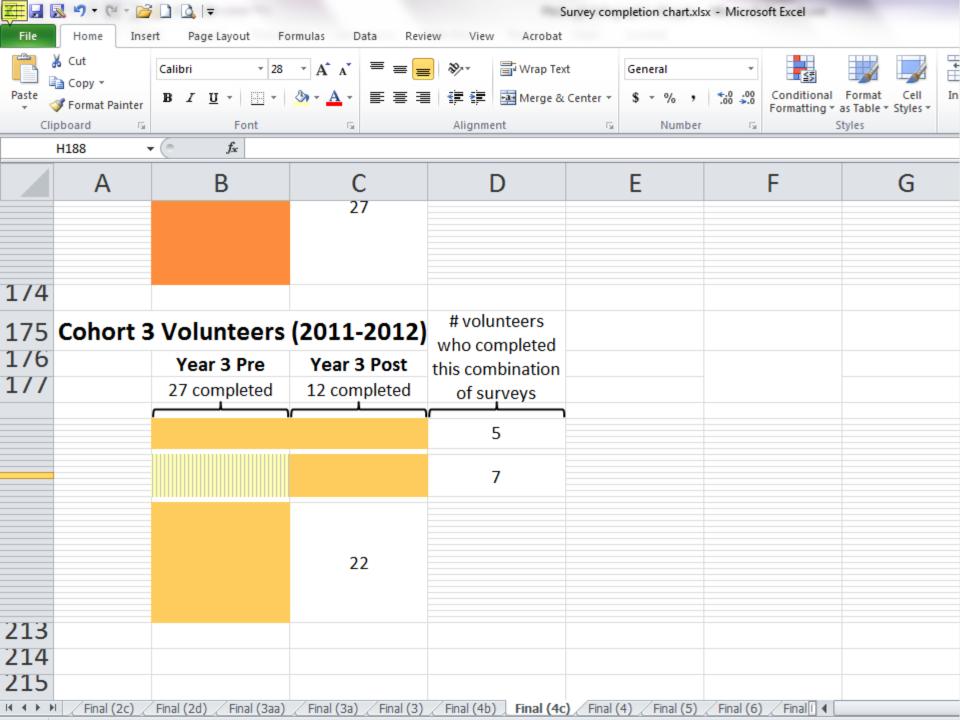


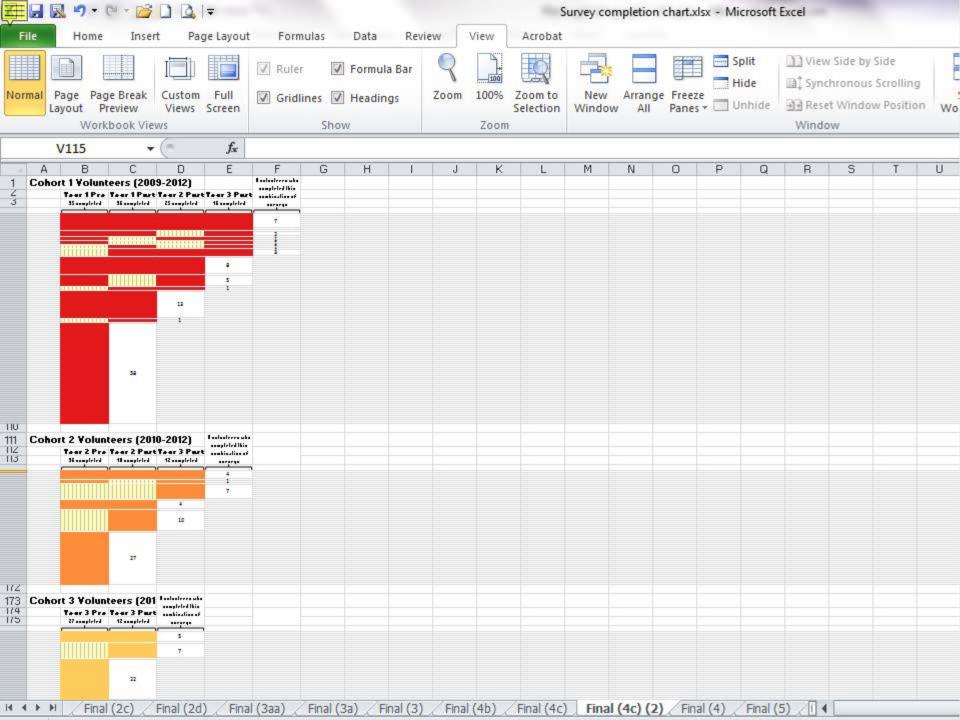


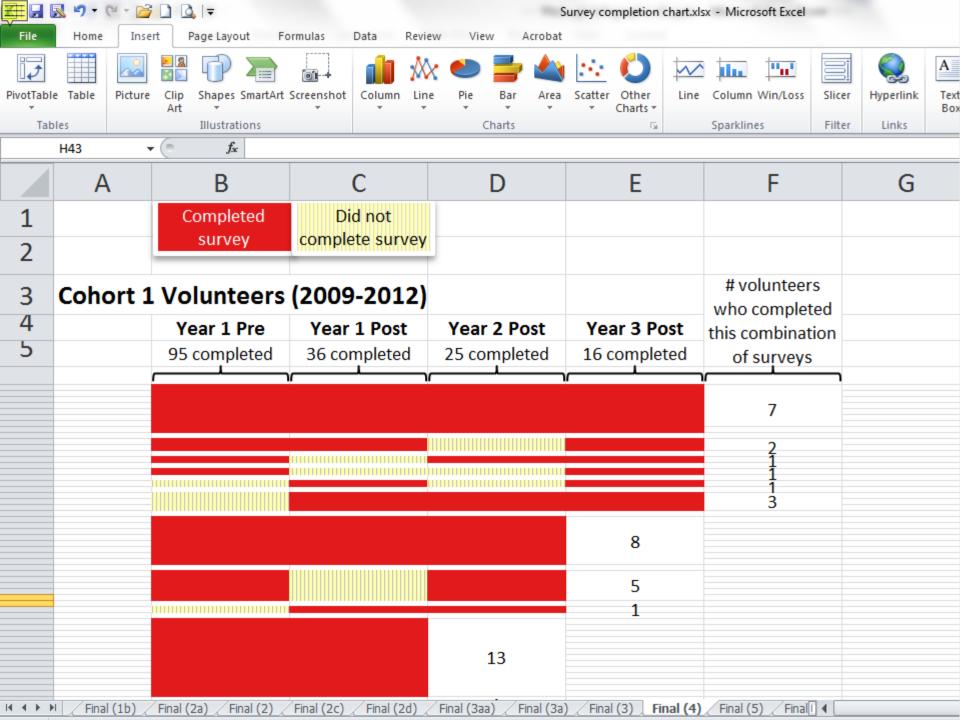


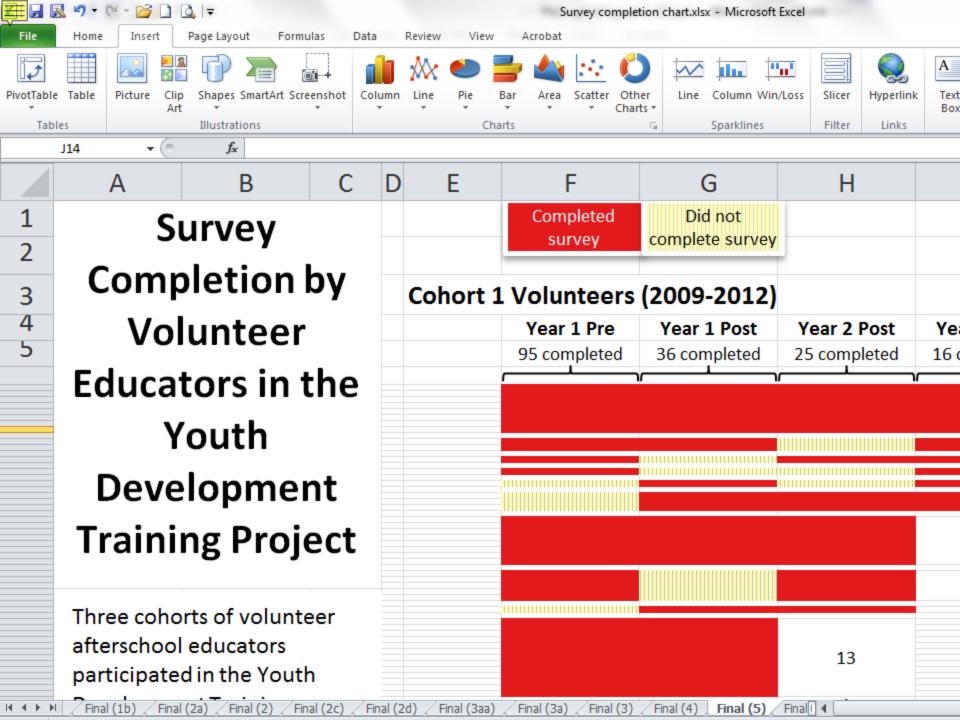


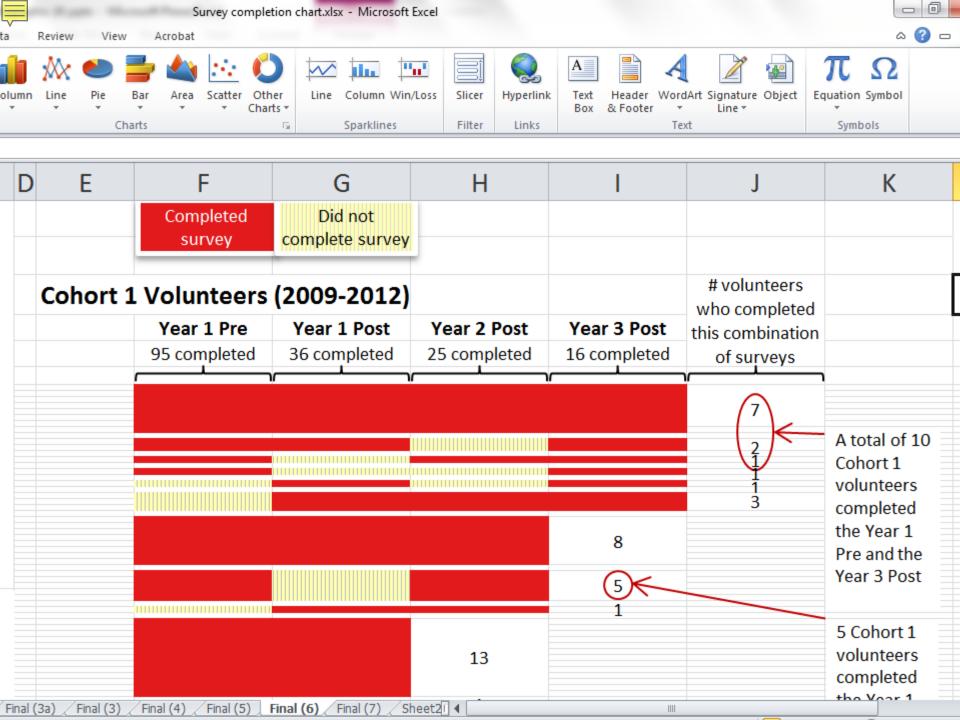


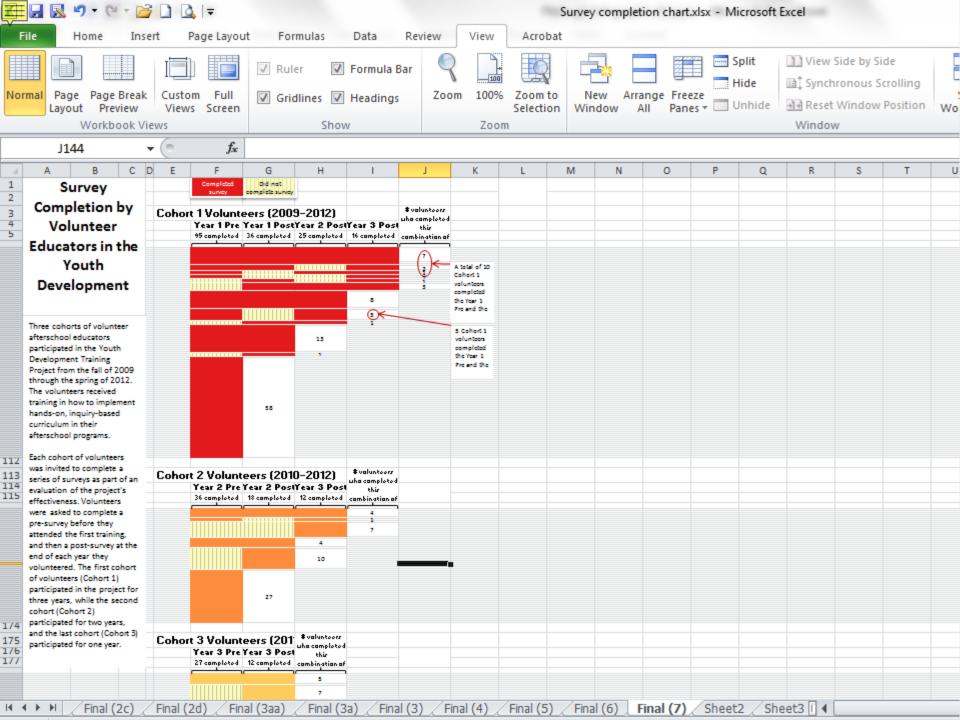










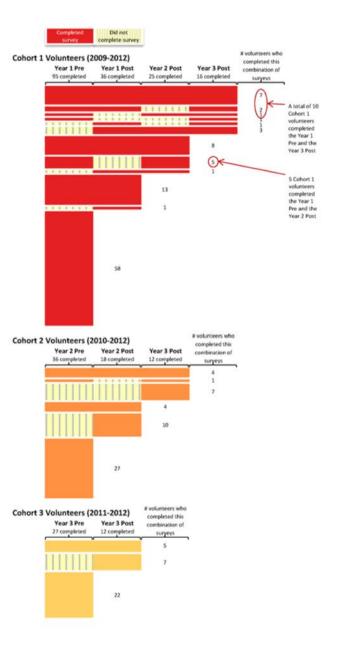




### Survey Completion by Volunteer Educators in the Youth Development Training Project

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### How to create an infographic\*

- 1. Learn about topic
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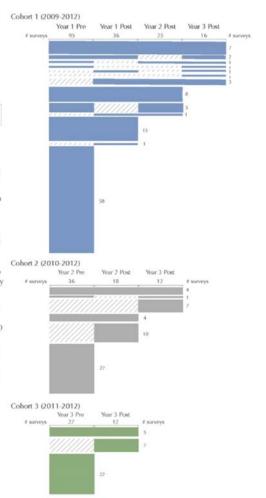
\*Alberto Cairo



Survey Completion by Volunteer Educators in the Youth Development Training Project



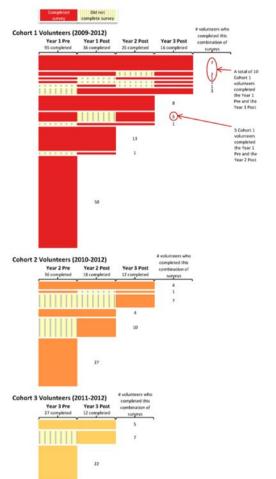
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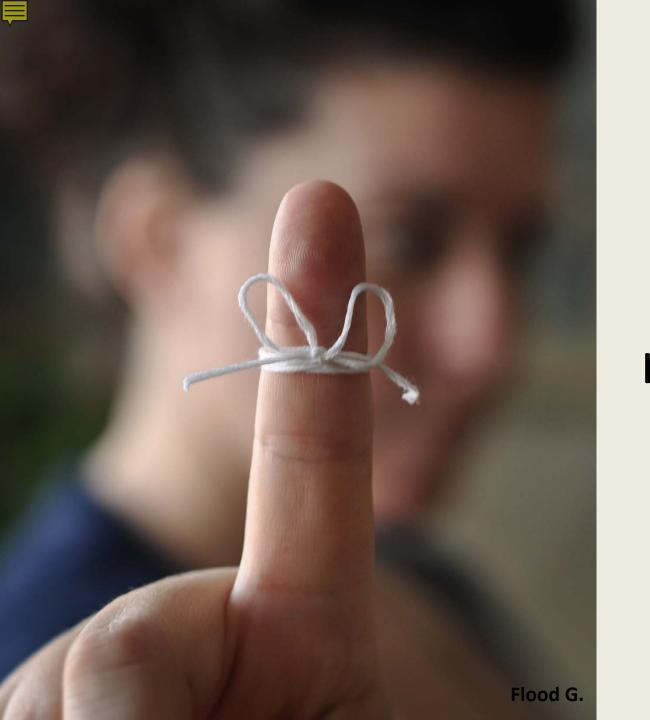




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**tips** to remember



#### 1

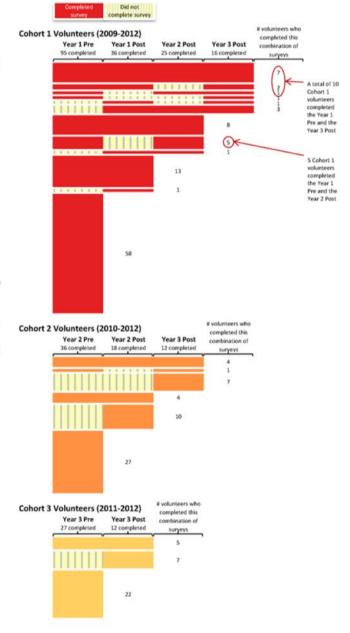
## Consider perception research

Cleveland, W.S. & McGill, R. (1984). Graphical Perception. Journal of the American Statistical Association.

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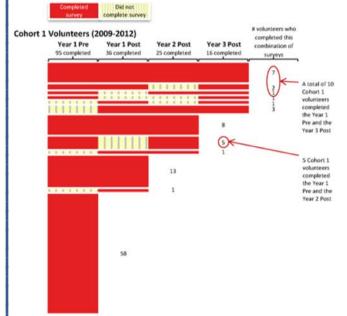


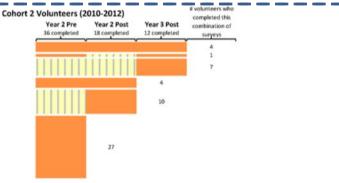
## Use grids to compose your design

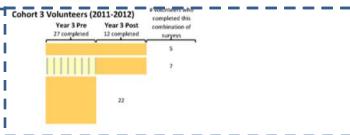
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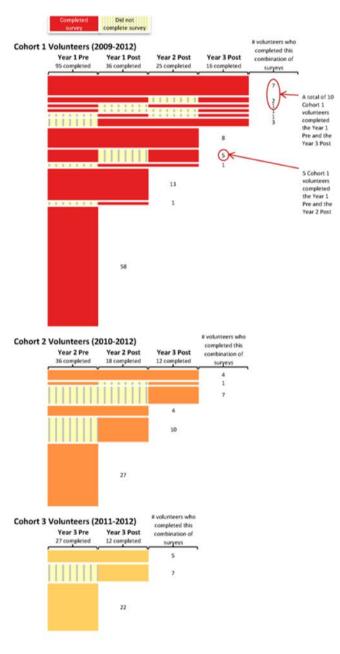
# Use a limited color palette and fonts



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"Any good infographic is functional as a hammer, multilayered as an onion, and beautiful and true as a mathematical equation."

~Alberto Cairo





Introduction to Infographics and Data Visualization

Alberto Cairo

http://open.journalismcourses.org



#### Check out these data viz blogs:

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http://flowingdata.com/
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http://stephanieevergreen.com/blog/

http://emeryevaluation.com/

http://www.excelcharts.com/blog/

http://eagereyes.org

http://www.perceptualedge.com/blog/

http://www.storytellingwithdata.com/



