

Arts Education Collective Impact Initiatives: Meeting the Challenge of Shared Measurement Across Sites

Developing Practical Measures for Equitable Access and Quality

Don Glass, Ph.D.
Charles Beekman, Ph.D.



November 1, 2018
EVAL 2018



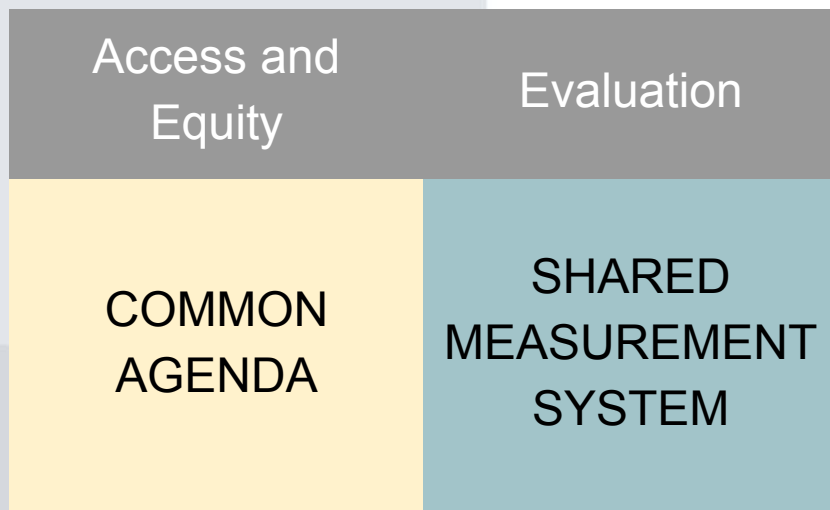
Equitable Access



“In many ways, the city is a banquet, but only some children have a knife and fork.”

-Giselle Antoni, Big Thought, [VUE No.7](#). (2005). p. 21

Shared Measurement for Equitable Access

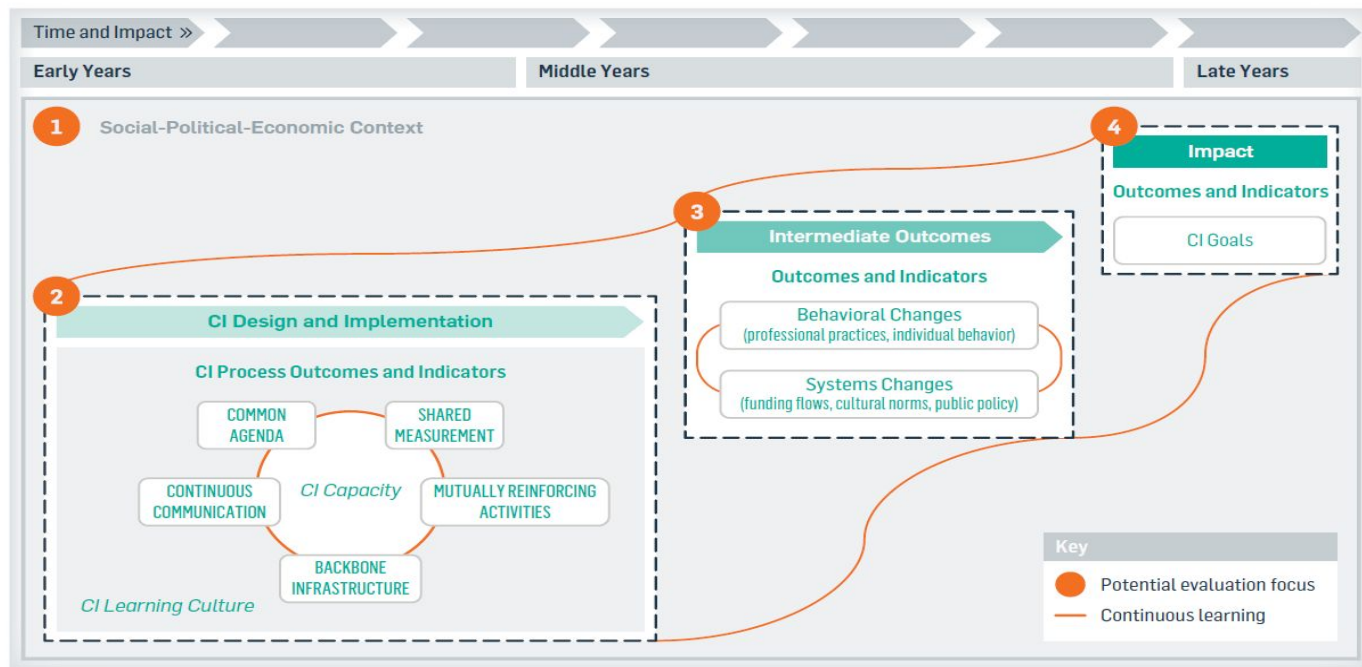




Evaluating Collective Impact

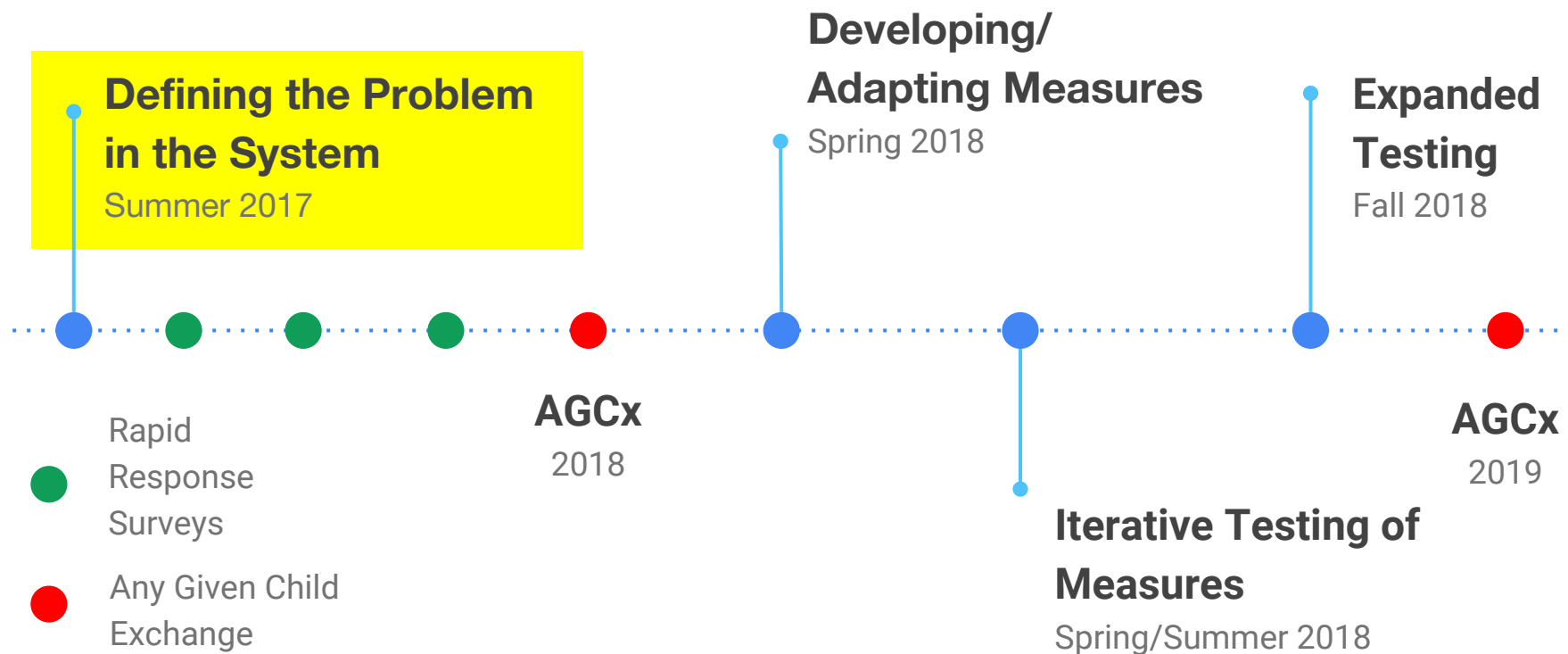
Figure 1:

A Framework for Performance Measurement and Evaluation of Collective Impact Efforts



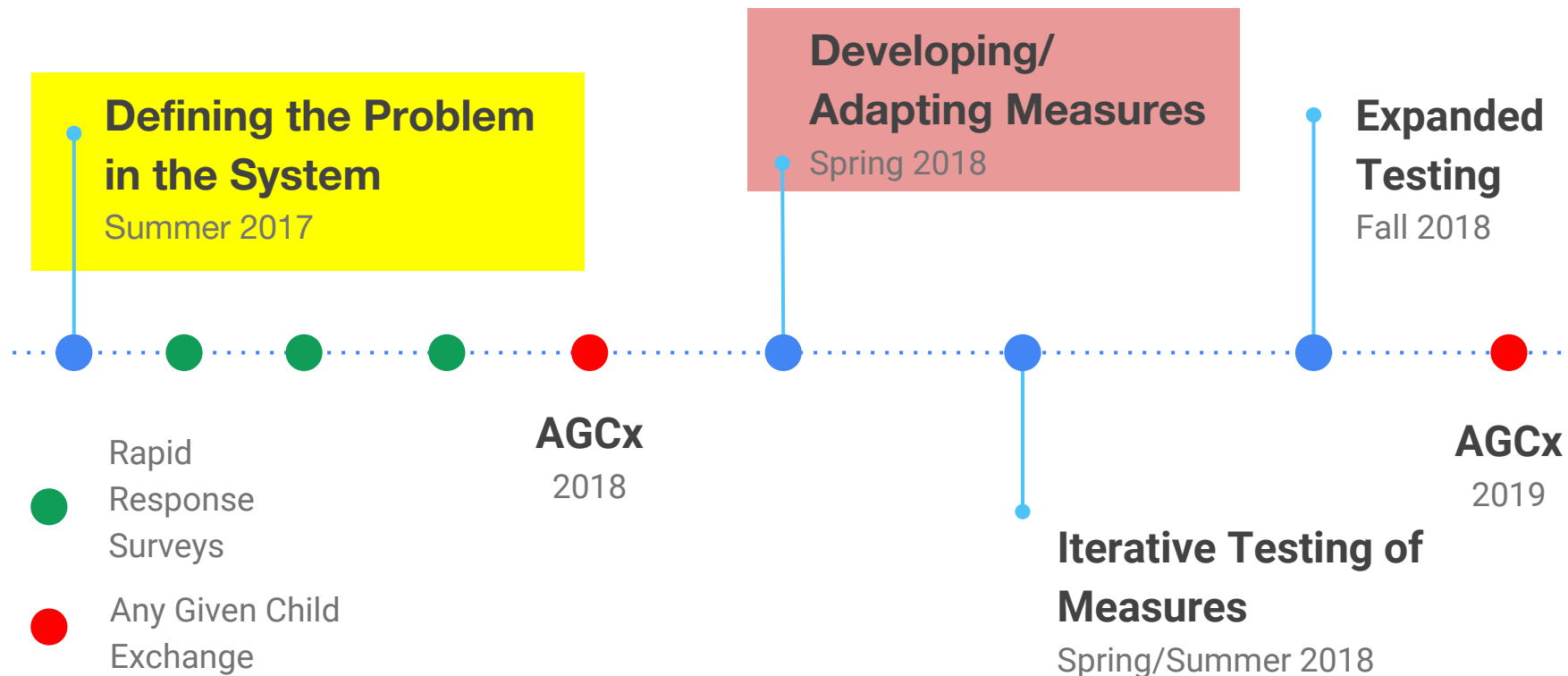


3 AGC COP 1.0: Intermediate Outcomes





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Sizing Up a Context		Participant's Will		
		Resistant	Indifferent	Ready
Extant know-how limited	Limited capacity	Very small scale	Very small scale	Very small scale
	Good capacity	Small-scale test	Small-scale test	Moderate-scale test
Substantial know-how exists	Limited capacity	Small-scale test	Moderate-scale test	Large-scale test
	Good capacity	Moderate-scale test	Large-scale test	System-wide implementation



Develop and Use New Data Tools to Inform Improvement

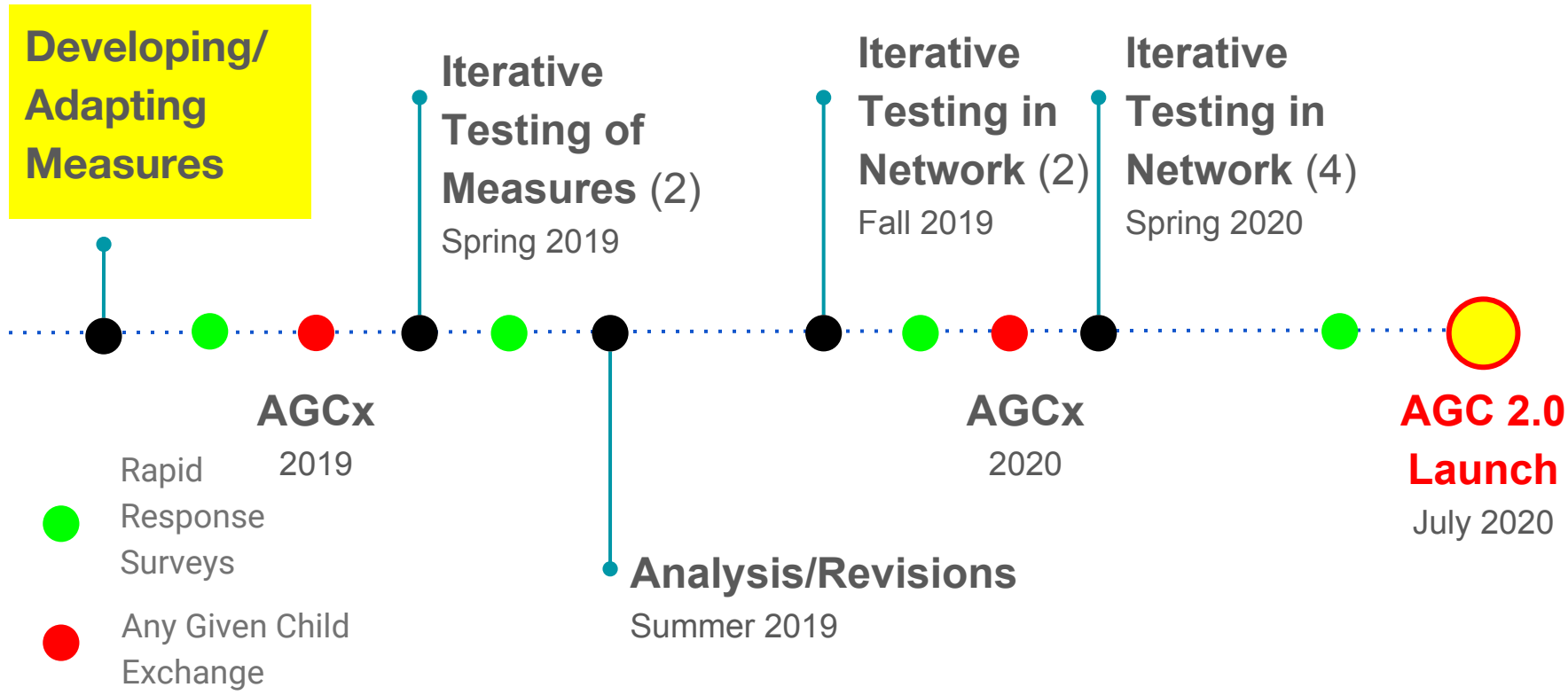
- Develop simple, clear, and efficient tools for tracking:
 - changes in **provision**
 - growth of **networks** supporting the initiative
 - **quality** of arts learning
- Share **meaningful feedback** to help sites gauge progress, report to their communities, and set new goals.



Increase Diversity, Equity, and Inclusion

- Ensure that sites' data can address questions of **equity** in arts learning.
- Re-think the core structures of the initiative to ensure they **reflect** the **demographic and cultural diversity** of their communities and the many roles people can play.

3 AGC 2.0: Intermediate Outcomes



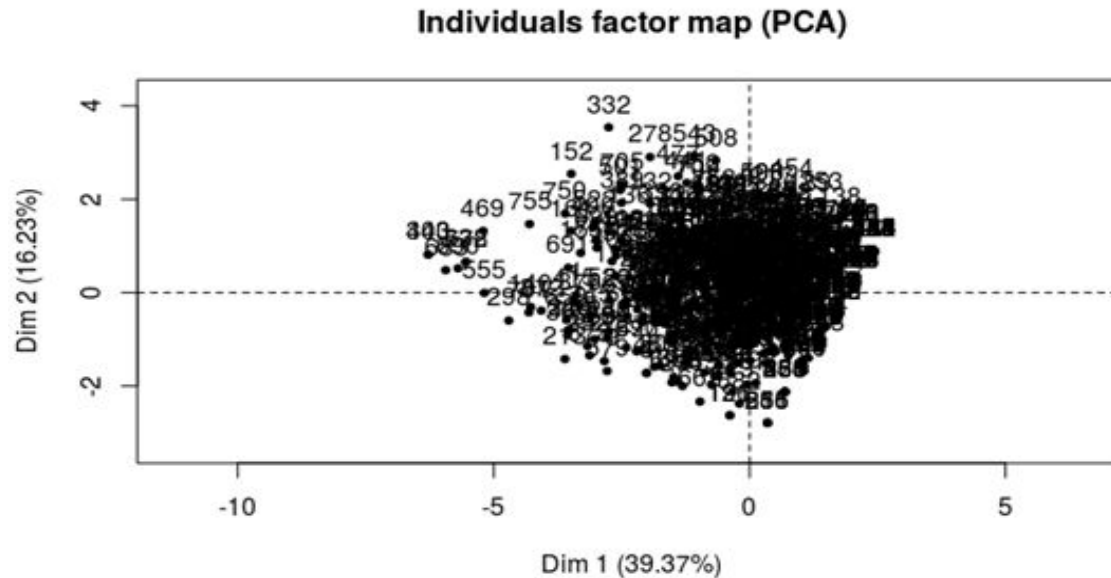
Factor Analysis

Useful to investigate **communalities** across items. “How do these items hang together”

- Data reduction strategy
 - Reduce observations across a number of items to a few latent factors
- Exploratory - no theory specified *a priori*
 - “let’s see how things shake out”
- Confirmatory - testing the fit of a model
 - “Does this model fit the data well”

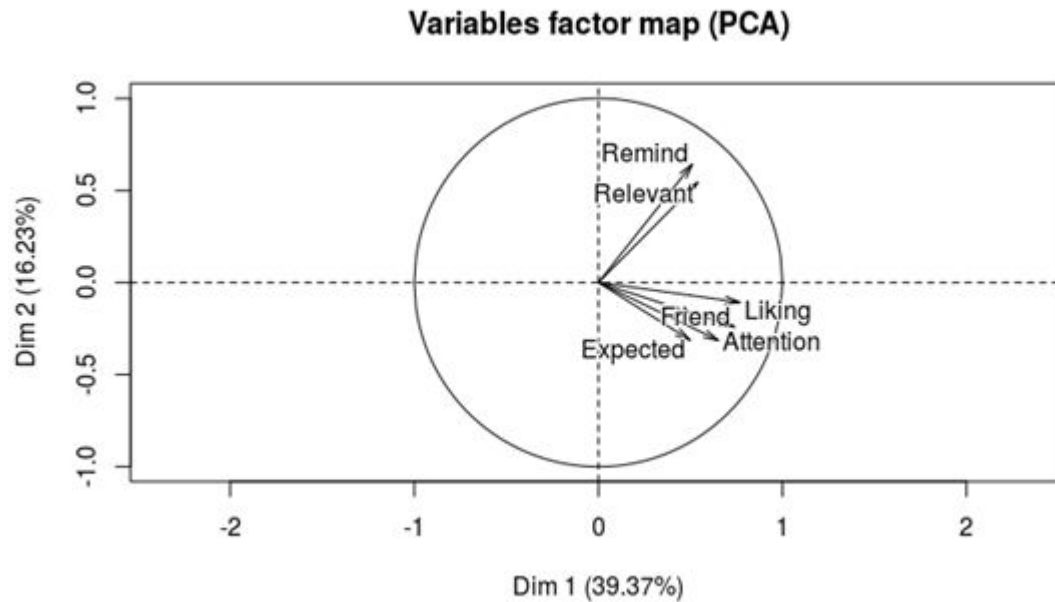


Factor Analysis





Factor Analysis

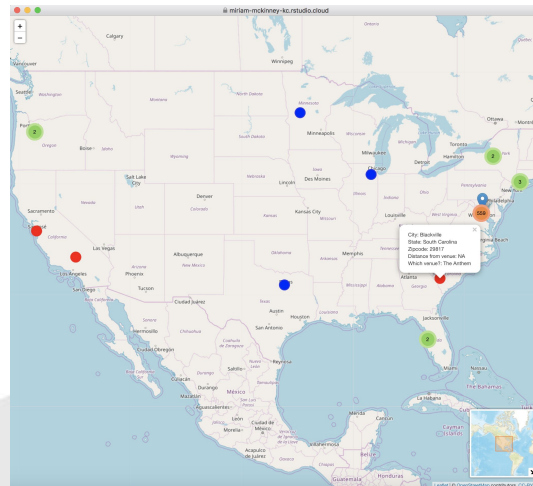


Rasch Analysis

- Special case from item response theory (IRT)
- Basically, “How can we get the most information with the fewest items?”
- Luckily parsimony and burden align

R | KnitR | Shiny

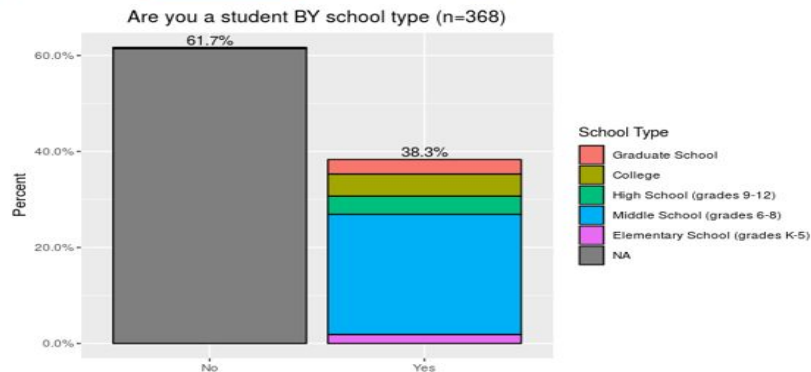
- **R**
 - Free software for data science
 - Open-source, collection of ‘packages’
 - Very versatile
- **knitR**
 - Package in R
 - Used to create dynamic documents
- **Shiny**
 - Think ‘apps for R’





“Real Life” Dynamic Document Example

```
mstage %>%  
  drop_na(q1a) %>%  
  ggplot(aes(x=q1a))+  
  geom_bar(colour="black",aes(y=(..count../sum(..count..)),fill=fct_rev(q1b)))+  
  geom_text(aes(y = ((..count../sum(..count..)), label = scales::percent(..count../sum(..count..))), stat = "count", vjust = -0.25)+  
  scale_y_continuous(labels=scales::percent)+  
  ylab("Percent")+  
  ggtitle("Are you a student BY school type (n=368)")+  
  theme(plot.title=element_text(hjust=0.5))+  
  theme(axis.title.x=element_blank()+  
  expand_limits()+  
  guides(fill=guide_legend(title="School Type"))
```





Contact Us

Education Division | Research and Evaluation

Don Glass dglass@kennedy-center.org

Charles Beekman crbeekman@kennedy-center.org