Using Audience Response Systems to Capture Data with Low-Literacy Communities

Venessa Rivera Colon, M.Ed, C.C.H.W
Manager, M-POWER
Moffitt Program for Outreach Wellness
Education & Resources
What is data?

Facts or information used usually to calculate, analyze, or plan something
(Merriam-Webster)
Why is it important to collect data?

• Develop goals
• Help you improve your work
• Show credible evidence of your work
• Determine knowledge gained
• Determine intent of changing behaviors
• Learn more about the population that you are serving
• Funding

(Community Toolbox, 2015)
How do we collect data?

- Pre/post test
- Evaluations/Surveys
- Interviews
- Focus Groups
- Observations
- Review of documents
Pre/Post Tests

Advantages:
• Provides objective information on what the test taker knows and can do
• Can be scored in straightforward manner
• Accepted by public as a credible indicator of learning

Disadvantages
• May be oversimplified and superficial
• May be very time consuming
• May be subject to corruption via coaching or cheating
• May be biased against some groups of test takers

(National Science Foundation, 2002)
Surveys

You didn't fill out the survey?

I don't know who you are.... But I will find you....
Surveys (Evaluations)

Advantages:
• Good for gathering descriptive data
• Can cover a wide range of topics
• Are relatively inexpensive to use
• Can be analyzed using a variety of existing software

Disadvantages
• Self report may lead to biased reporting
• Data may provide a general picture but lack depth
• May not provide adequate information on context

(National Science Foundation, 2002)
Methods of administering pre/post and surveys

• Pen and pencil
• Electronic- Survey monkey
• Audience Response system
Challenges posed with using traditional methods

- Time constraints
- Literacy level
- Embarrassment
- Lack of confidentiality
- Accuracy
- Lack of completion
- Lost in translation...Likert scale is a foreign concept for some immigrant populations
- THEY LOVED ME BUT ABSOLUTELY SCORED ME POORLY!
What is an Audience Response System?

“Most audience response systems use a combination of software and hardware to present questions, record responses, and provide feedback. The hardware consists of two components: the receiver and the audience’s clickers. Questions may be created either using PowerPoint or ARS software. Question types may include multiple choice, true/false, numeric, ordering, and short answer. Questions are displayed onscreen and the audience responds by entering their answers using the clicker.” (University of Illinois Springfield, Information Technology Services)
Benefits of Using ARS to gather data

- Interactive
- Less time consuming
- Confidential
- Easier to identify number/letters as responses
- Can use images or words- Likert scale
Limitations with using ARS

- Need electric source
- Cannot ask open-ended questions
- Technical difficulties
- Need someone who knows how to analyze the data
Suggestions when using ARS with Low-Literacy Populations

• One-key response questions answered with little difficulty
• Questions requiring pressing multiple clicker keys more difficult
• Error may increase as question becomes more complicated
• Use clickers that have fewer, bigger, and more widely separated buttons, and less printing

(Keifer, Reyes, Liebman, & Juarez-Carillo, 2014)
Using ARS for demographics

- Gender
- Race
- Ethnicity
- Language
- Age range
- Income range
- Education status
- Employment status
Using ARS for Pre/Post test and surveys

As you design your pre and post test and surveys...REMEMBER

• Are items and questions written in a simple, yet precise manner?
• Do any of the questions reflect any bias, such that the respondent is encouraged to answer in a particular way?
• Are any of the questions or items unnecessarily personal?
• Are there any ambiguous words or colloquialisms in the question? Items should be worded in a way that will mean the same thing to all respondents.
• Are the response categories too vague? Are the response categories mutually exclusive? Terms like “occasionally” can have a wide range of meanings.

(Earthman, Richmond, Peterson, Marczak, & Betts, 1999)
ARS Systems

- imlaunderceresponse.com
- meridiaars.com
- replysystems.com
- turningtechnologies.com
- polleverywhere.com
- qwizdom.com
- einstruction.com
- iclicker.com
- h-itt.com
- optiontechnologies.com

https://www.polleverywhere.com/ars-comparison
MOCK ARS

Let’s practice!
References


