

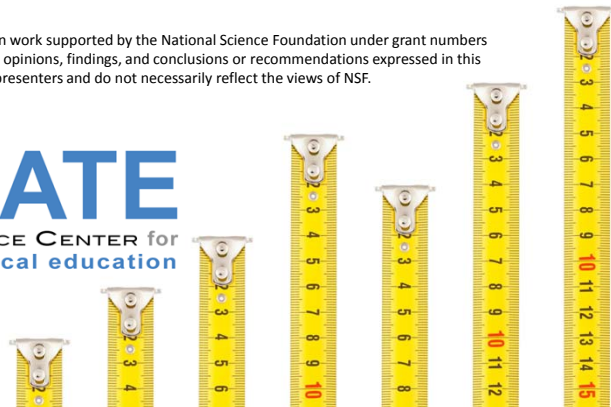
ATE Evaluation: Measuring Reaction, Learning, Behavior, and Results

October 24, 2012









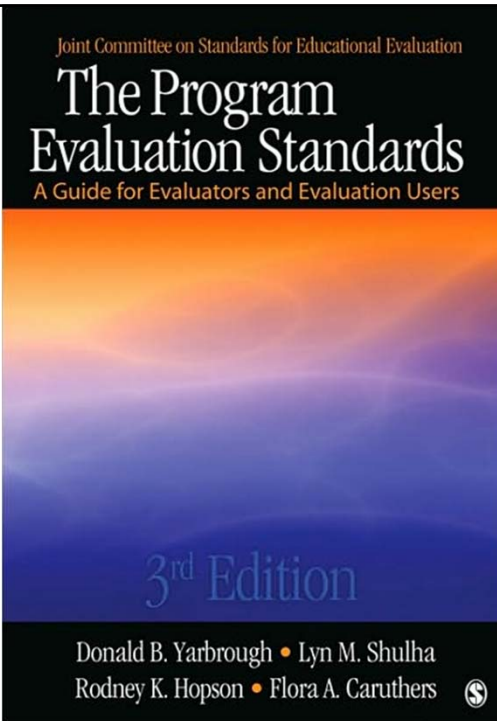
This material is based upon work supported by the National Science Foundation under grant numbers 0802245 and 1204683. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the presenters and do not necessarily reflect the views of NSF.




EvaluATE
EVALUATION RESOURCE CENTER for
advanced technological education

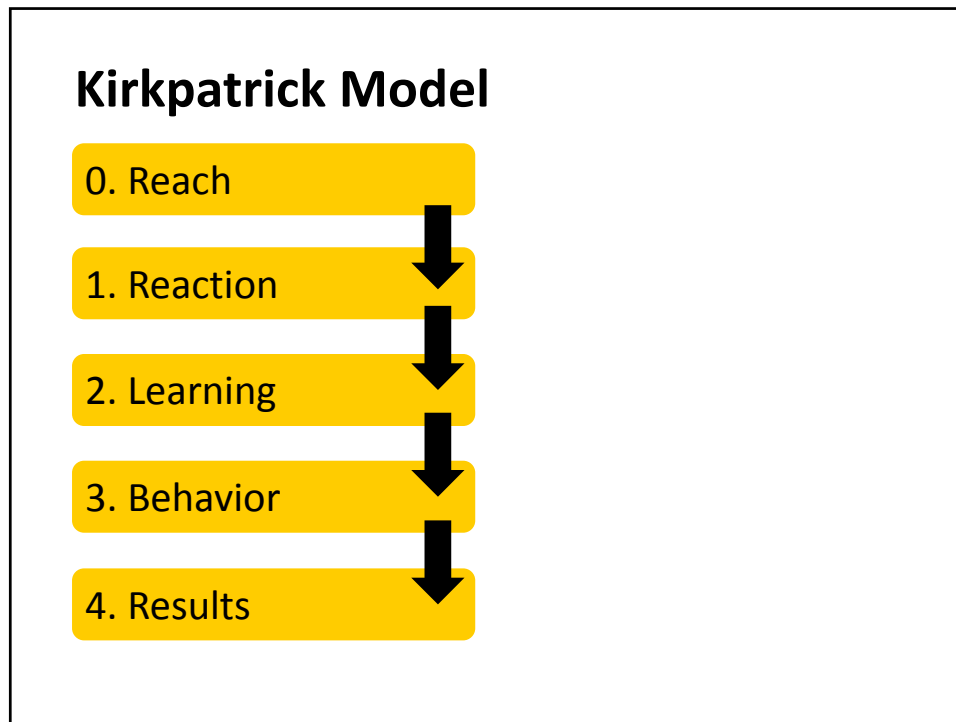


Overview

-  Program Evaluation Standards
-  Kirkpatrick Model for evaluation
-  Data collection
-  Applying Kirkpatrick
-  Data quality
-  Data Interpretation

<p>Evaluation standards</p> <p>Utility Feasibility Propriety Accuracy Accountability</p>	 <p>Joint Committee on Standards for Educational Evaluation The Program Evaluation Standards A Guide for Evaluators and Evaluation Users 3rd Edition Donald B. Yarbrough • Lyn M. Shulha Rodney K. Hopson • Flora A. Caruthers</p>
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<p>Kirkpatrick </p> <p>Model for </p> <p>evaluation </p>



Level 0: Reach

The extent to which the intended audience was reached and involved

A large group of diverse business professionals, including men and women of various ethnicities, standing together in a group photo. They are dressed in professional attire, such as suits, blouses, and dresses. The group is arranged in several rows, with some individuals in the front row and others in the back. The background is plain white.

Level 0: Reach

“How well does the proposed activity broaden the participation of underrepresented groups (e.g., gender, ethnicity, disability, geographic, etc.)?”

NSF's
**BROADER
IMPACTS**
review
criterion



Level 1: Reaction

The extent to which participants react favorably to activities and products



Level 1: Reaction

Satisfaction

Engagement


Relevance



Level 2: Learning


The extent to which participants acquire the intended knowledge, skills, attitudes





Level 2: Learning

The extent to which participants acquire the intended knowledge, skills, attitudes, confidence, or commitment




Level 2: Learning

Knowledge


“I know it.”




Level 2: Learning
Skill
“I can do it now.”



Level 2: Learning
Attitude
“I believe this is worthwhile.”



Level 2: Learning
Confidence
“I think I
can do it.”



Level 2: Learning
Commitment
“I intend
to do it.”

Level 3: Behavior

The extent to which participants apply what they learned



Level 3: Behavior

The extent to which participants *adopt intended behaviors*



Level 3: Behavior

Critical behaviors

key behaviors that need to be performed to bring about desired outcomes



Level 4: Results

The extent to which intended outcomes occur





Level 4: Results

Targeted outcomes

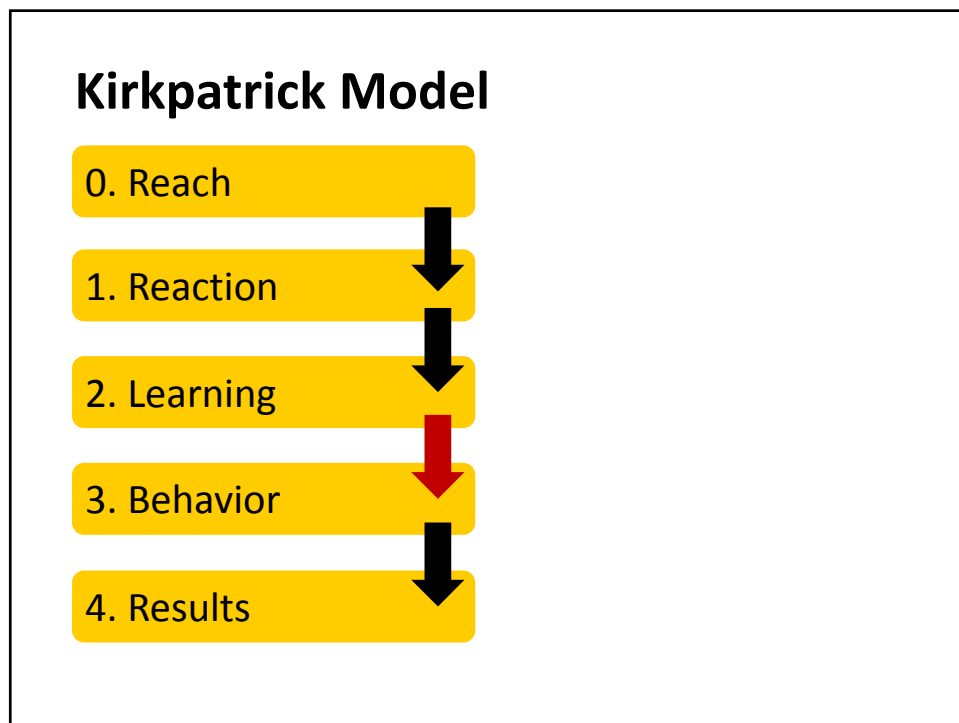
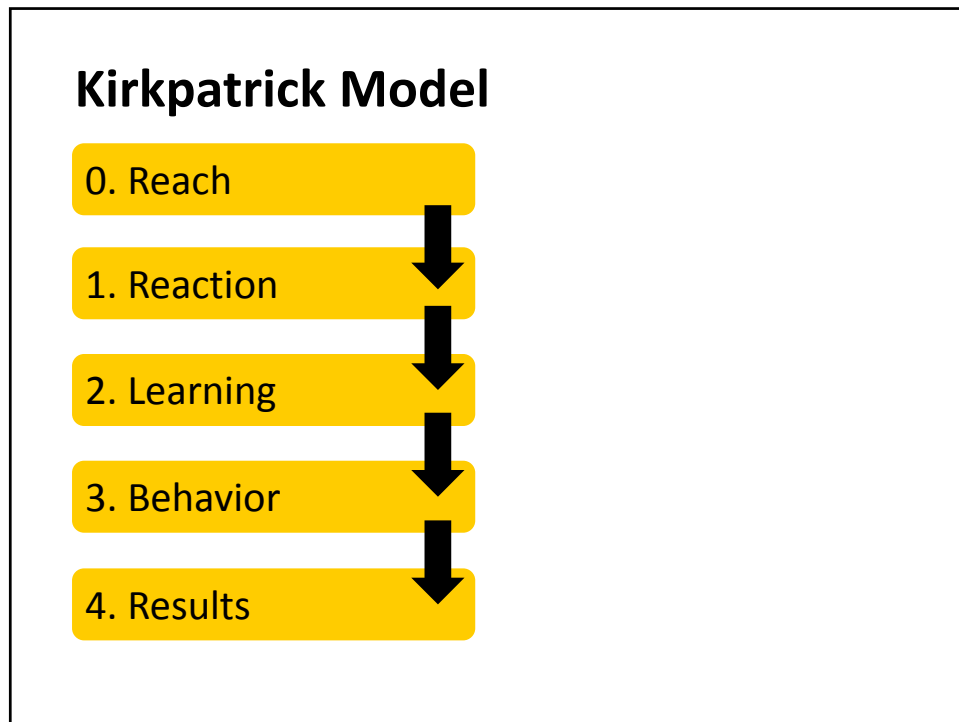
related to high-level
goals/project purpose

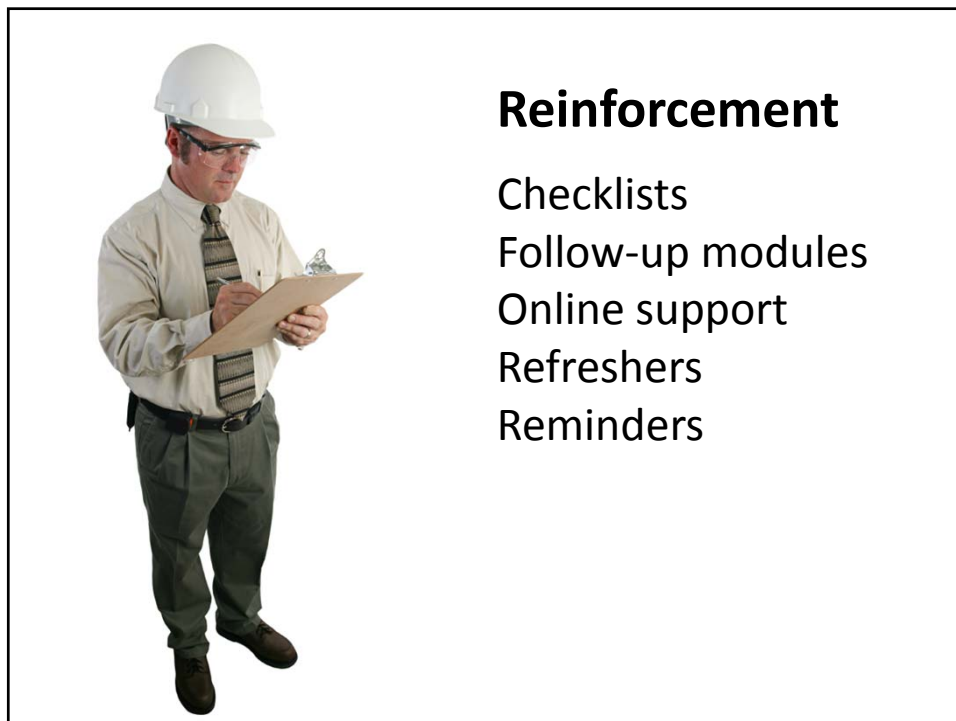
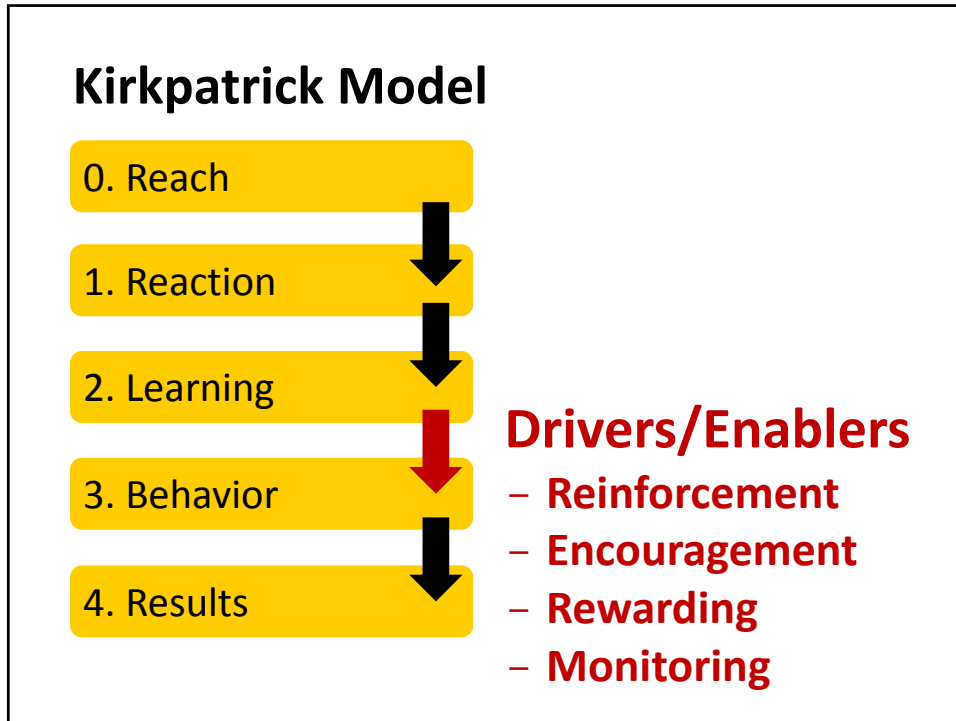


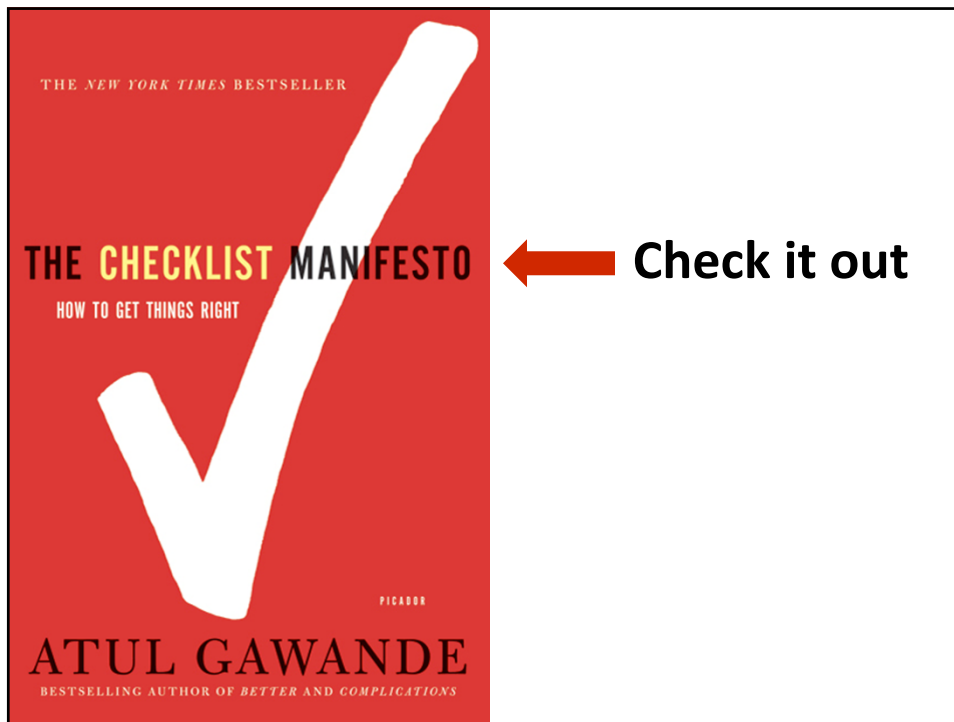
Level 4: Results

Targeted outcomes

What is going to be
different in advanced
technological education—
or the workforce—
because of your grant?








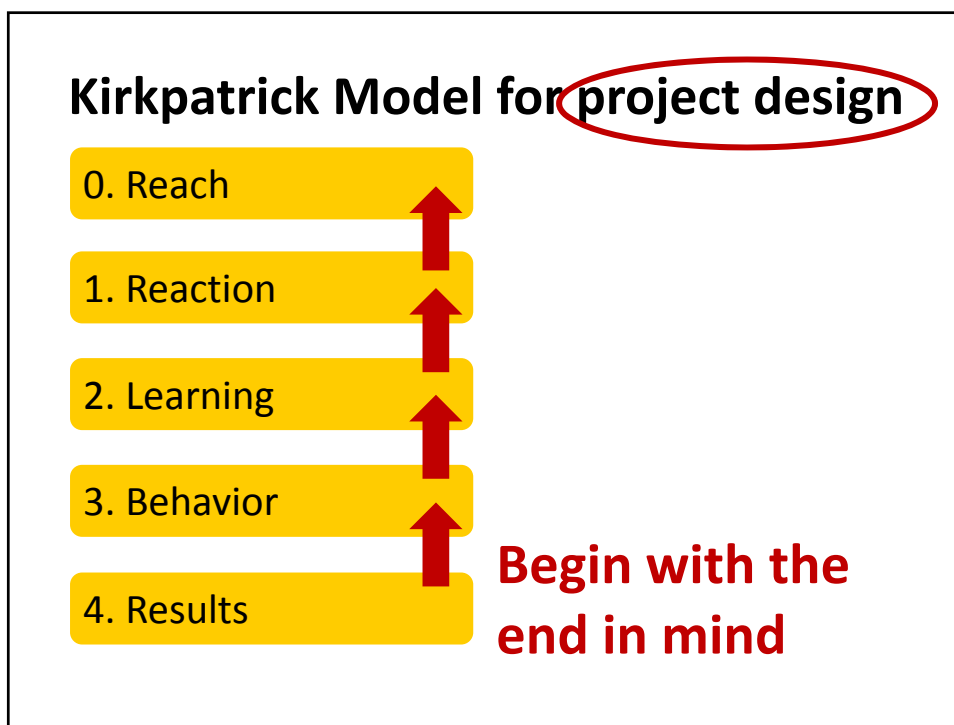
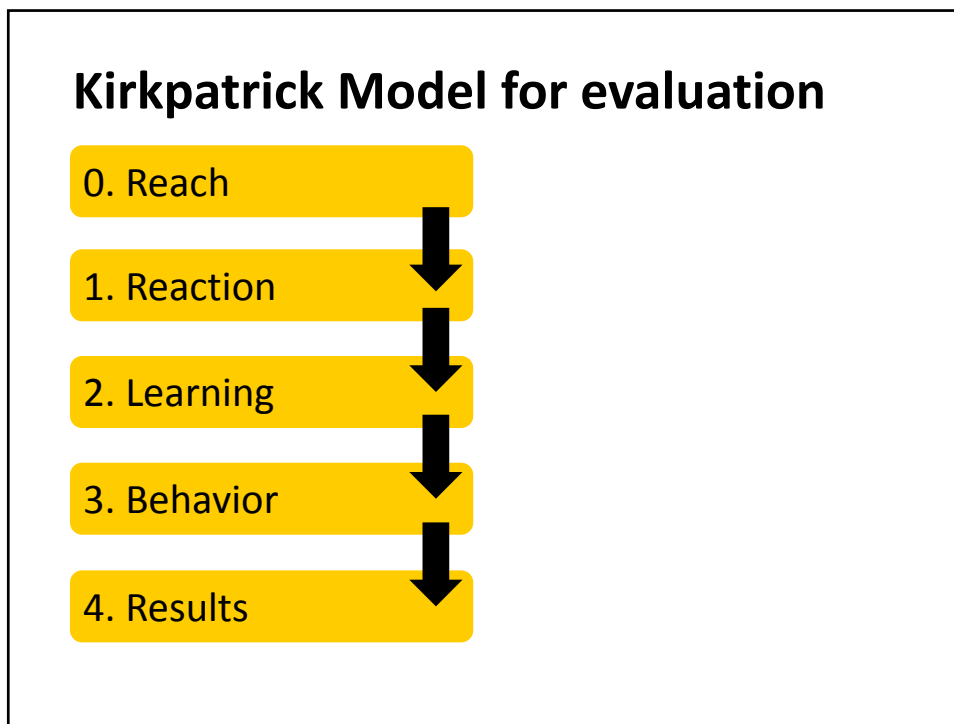
Rewards

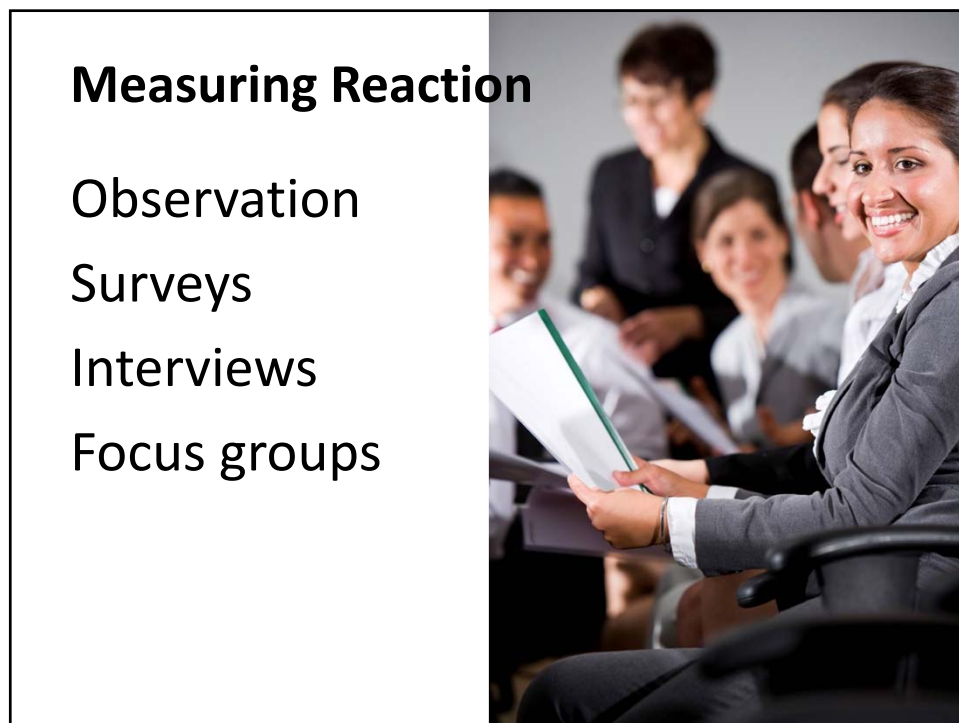
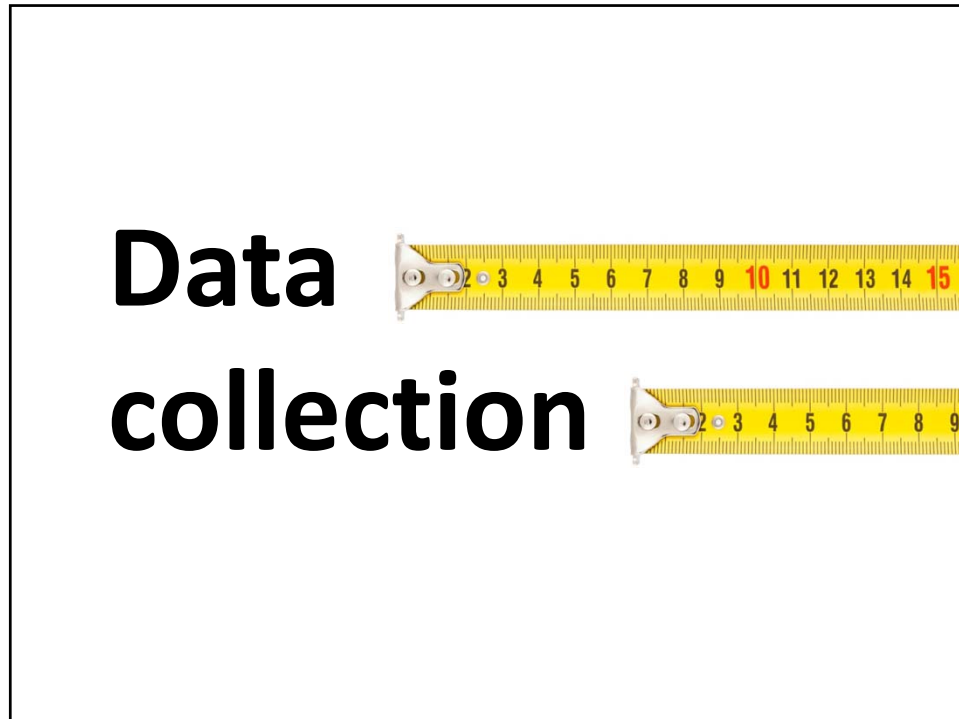
Recognition
Awards


A photograph showing a pair of hands holding a transparent, rectangular award trophy with a green base. The trophy is held up against a bright blue sky with scattered white clouds. The hands are positioned on either side of the trophy, with fingers slightly curled as if presenting it.A photograph of three business professionals in an office setting. They are gathered around a white table, looking at documents and a laptop. One woman is pointing at a document, another is looking at a laptop, and a third is looking at a document. There are coffee mugs on the table. The scene is brightly lit, suggesting an indoor office environment.

Monitoring

Logs
Surveys
Periodic check-ins







Measuring Learning

- Survey
- Knowledge test
- Demonstration
- Simulation
- Role play

Measuring Behavior

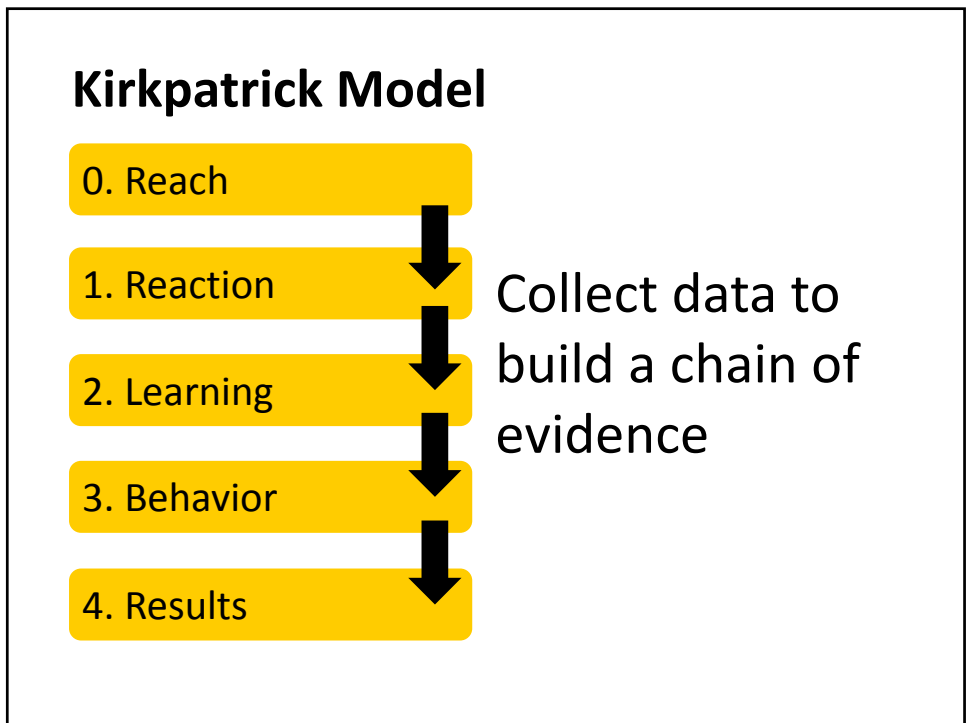
- Interviews
- Observation
- Surveys
- Third-party feedback





Measuring Results

- Institutional data
- Employment data
- Employer feedback



Applying

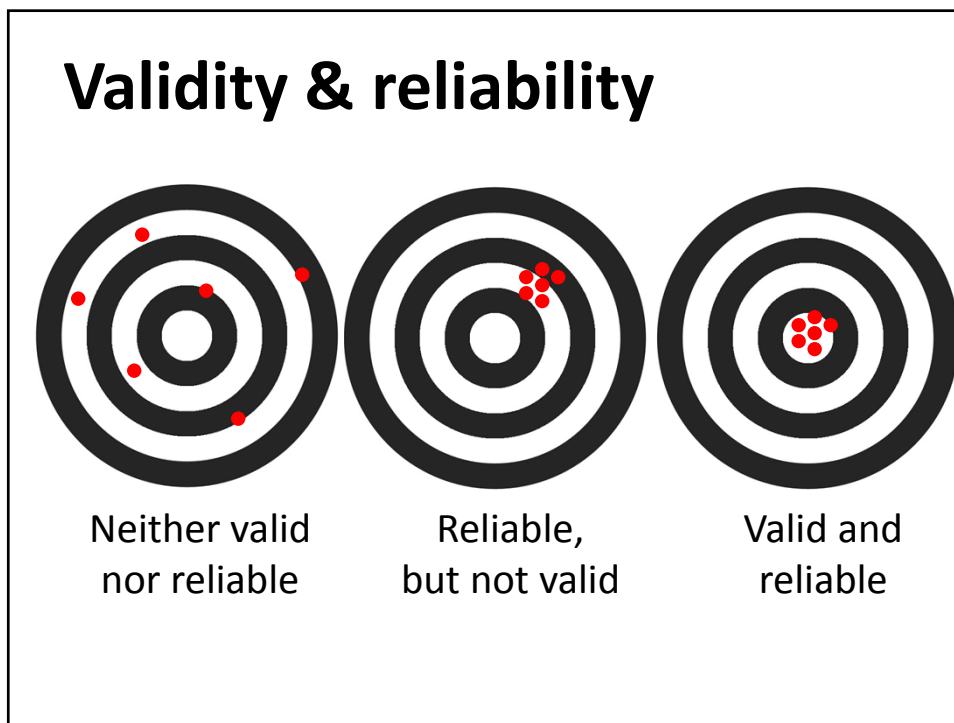
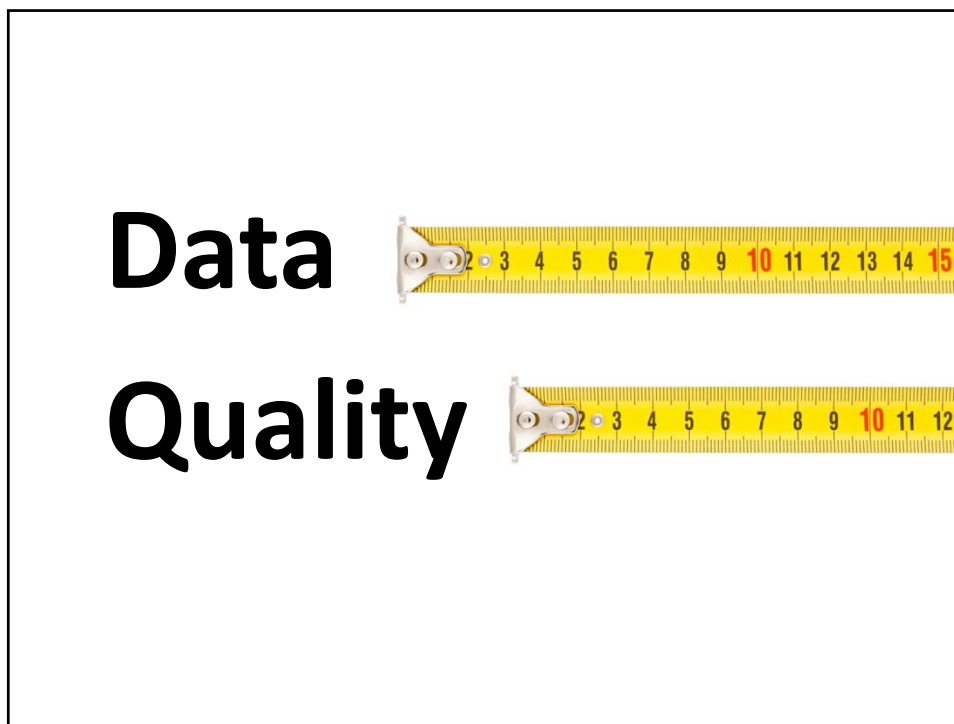


Kirkpatrick



Landspeeder Technology Institute





Ask good questions

To what extent do you follow the MyPyramid Guidelines when making nutritional decisions for your family?

I buy healthy food for my children.

- Always
- Usually
- Sometimes
- Never

In a typical 7-day week, how many days do your children consume the following types of foods?

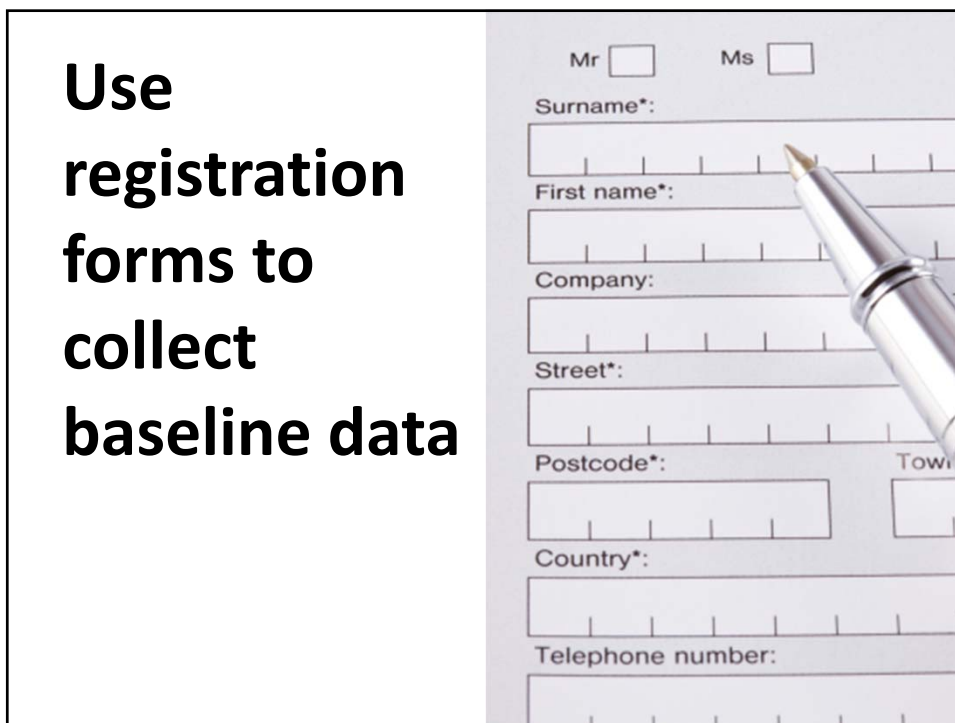
- ___ fresh fruit
- ___ fresh vegetables
- ___ whole grain breads or cereals
- ___ milk, yogurt, or cheese
- ___ fish
- ___ sugar-sweetened beverages

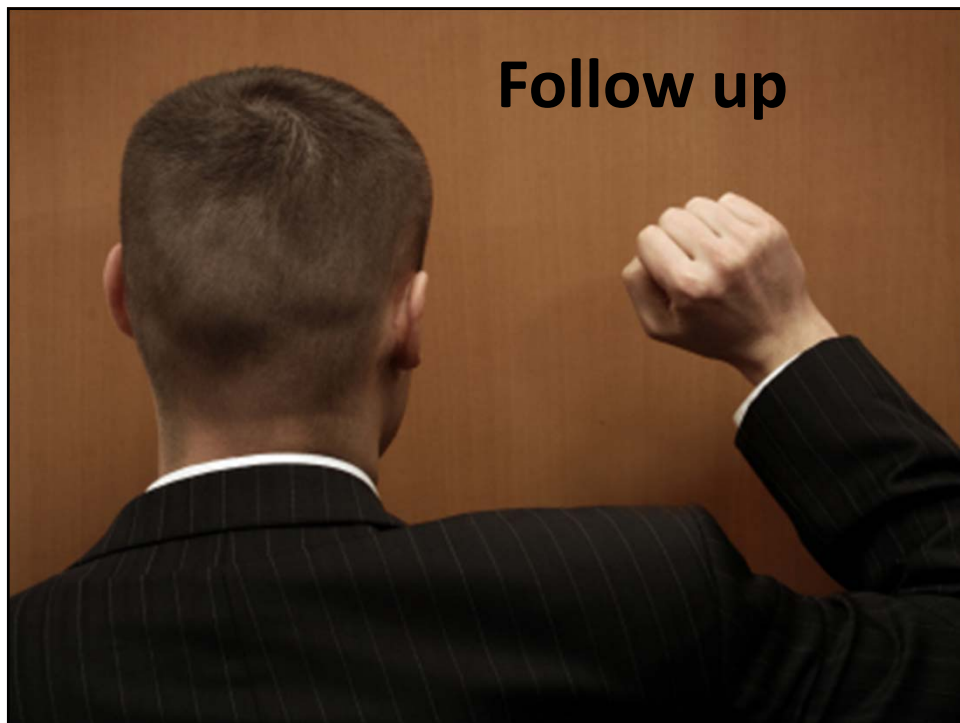


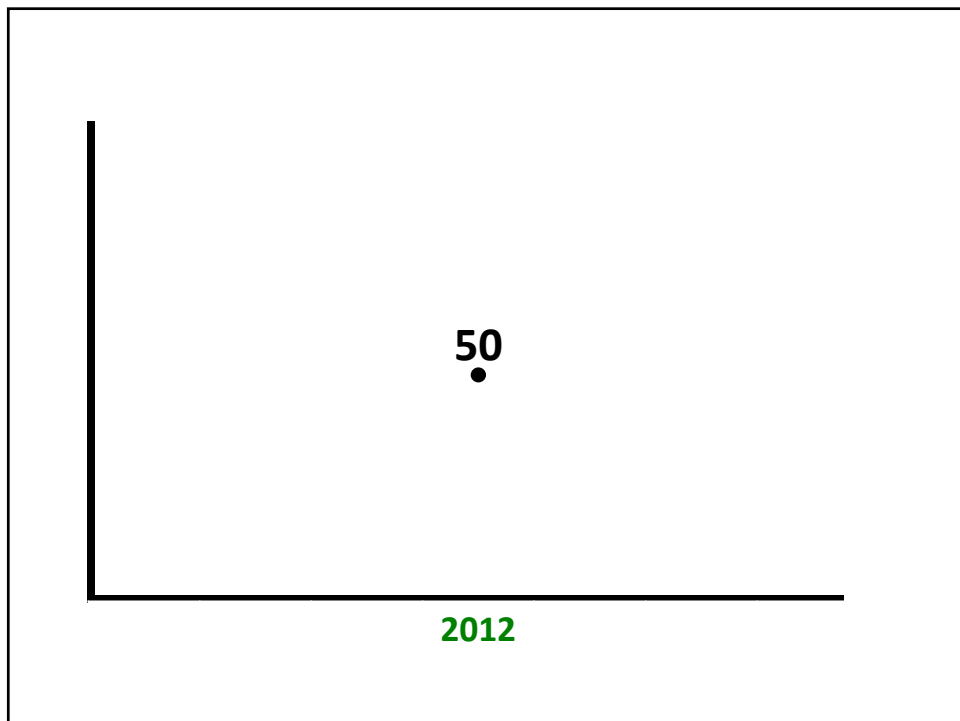
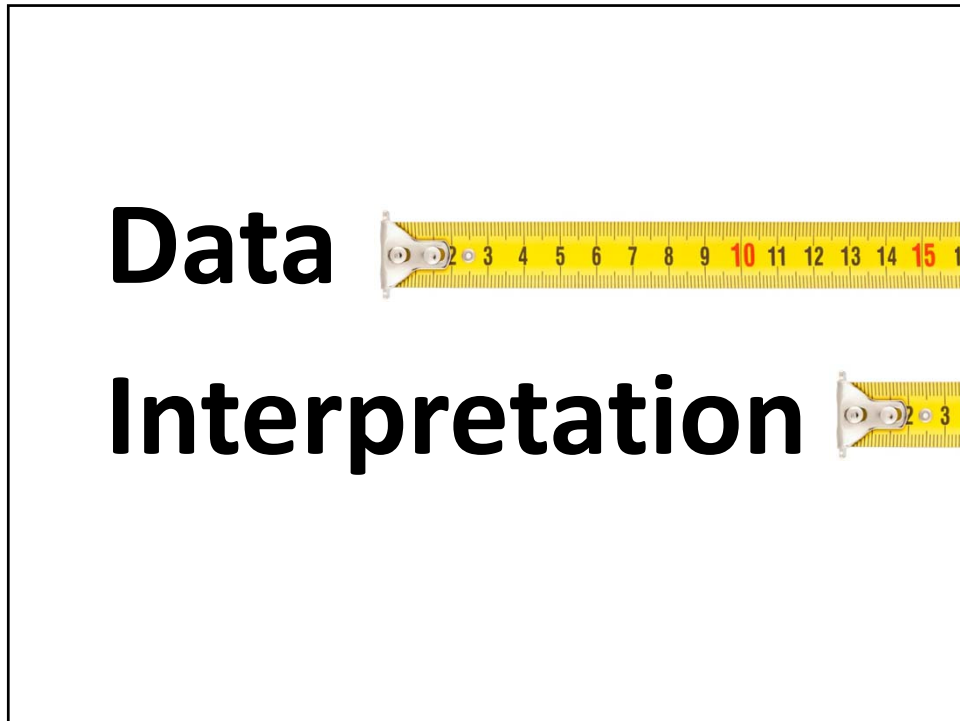
Use existing data

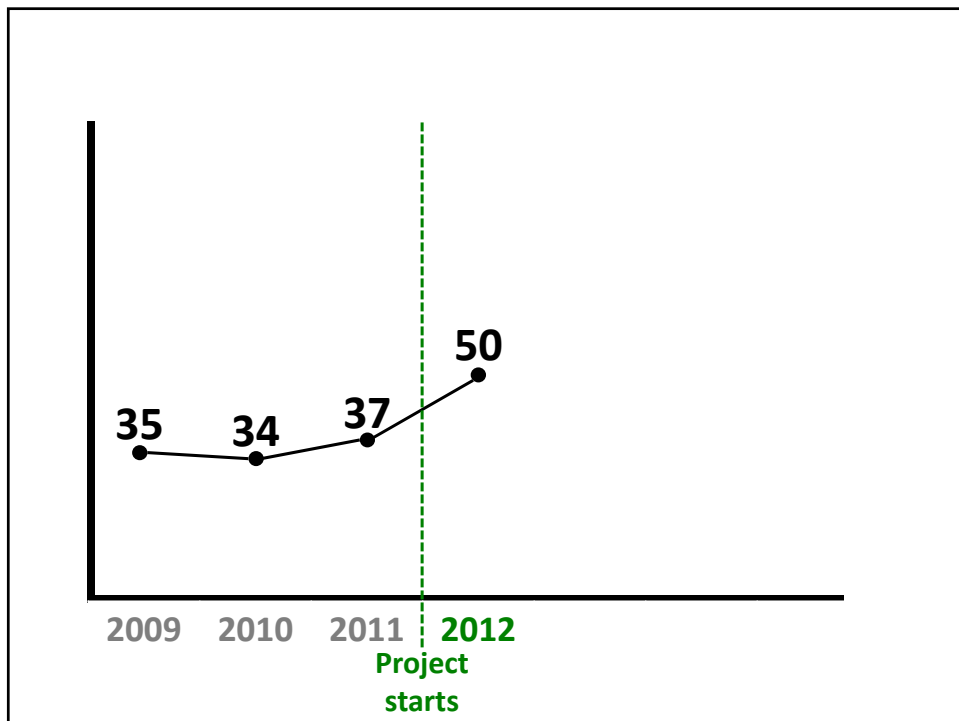
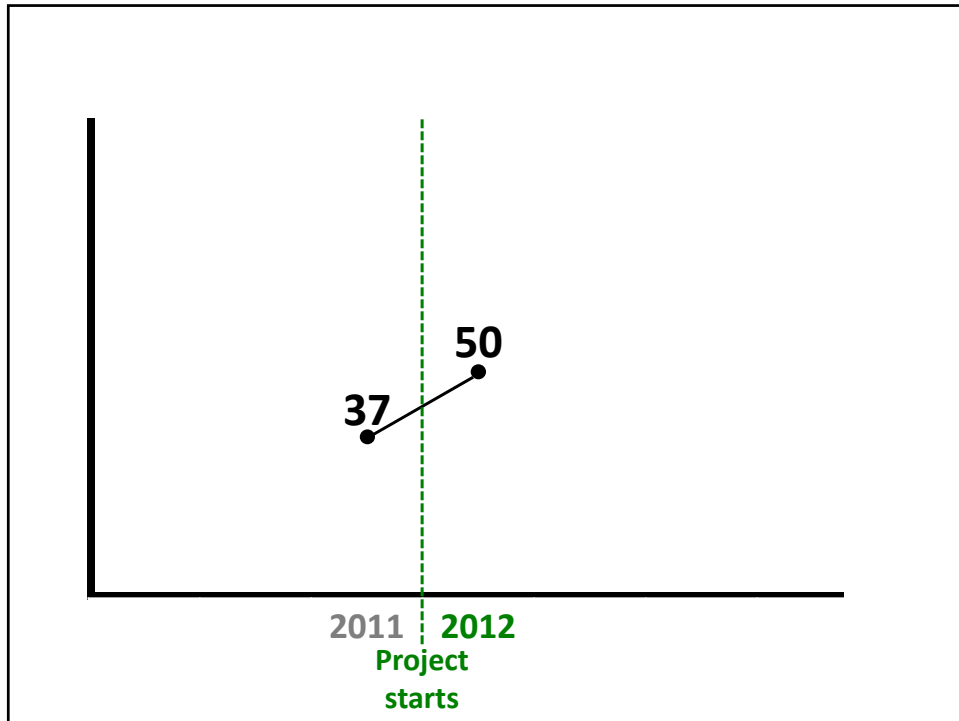


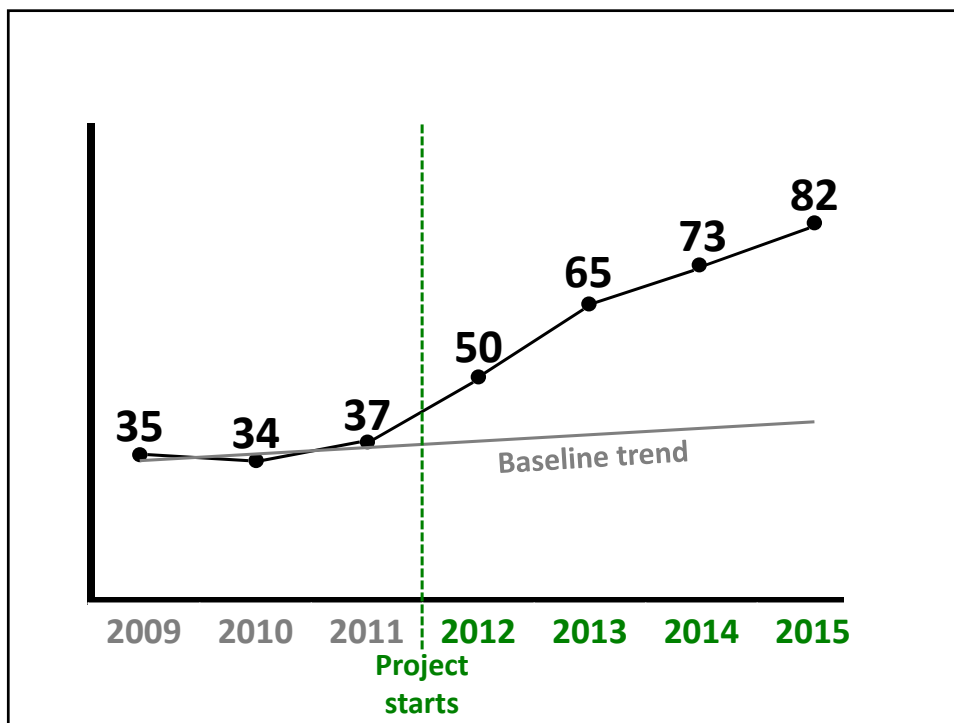
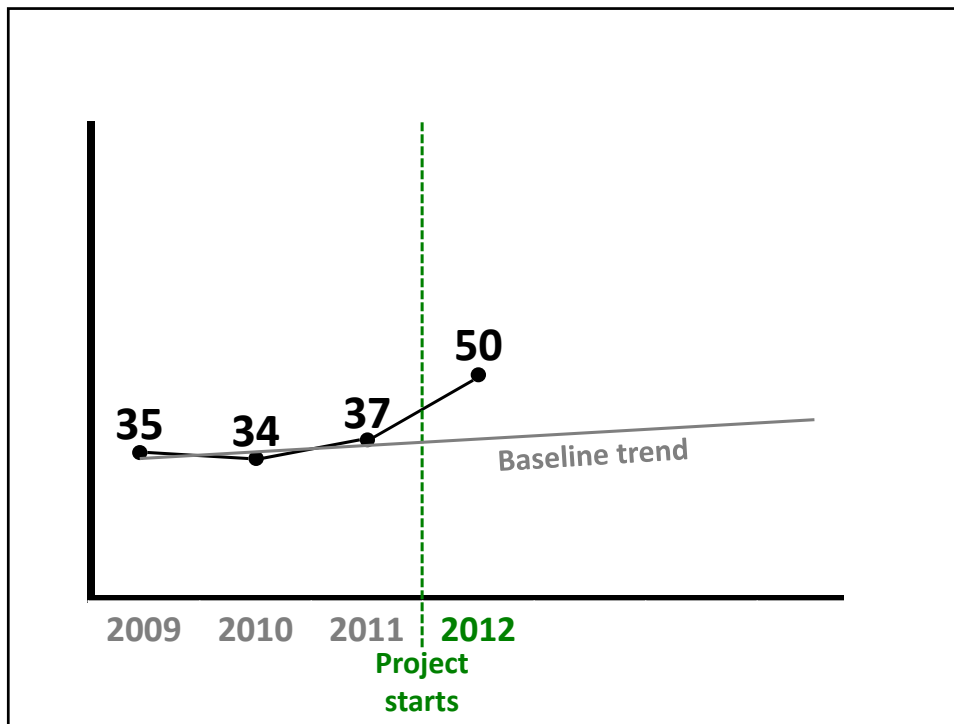
Use registration forms to collect baseline data

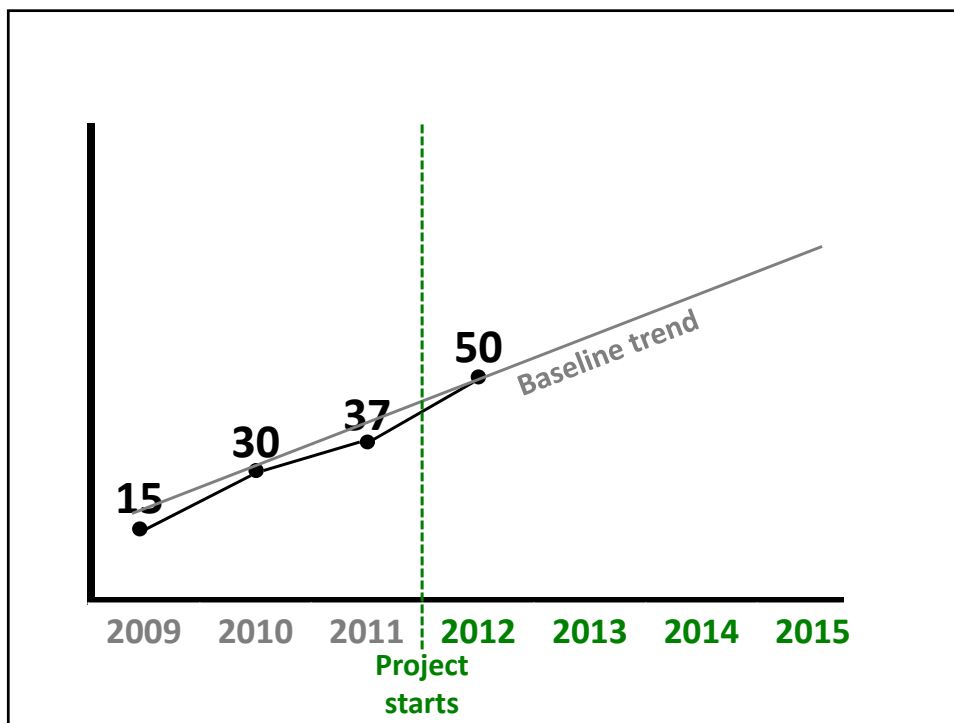
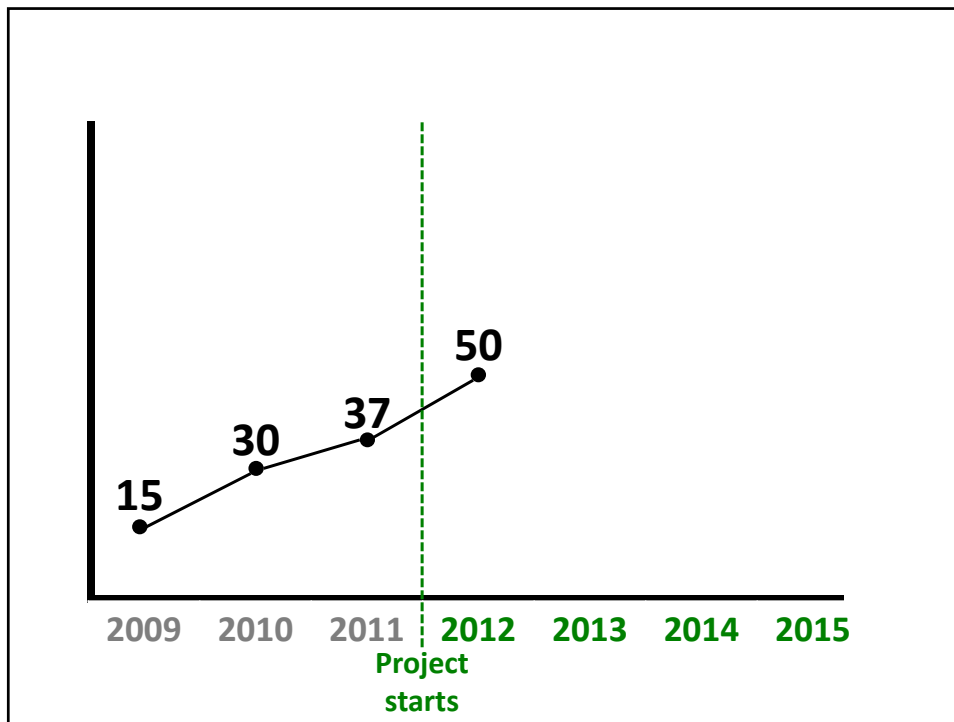


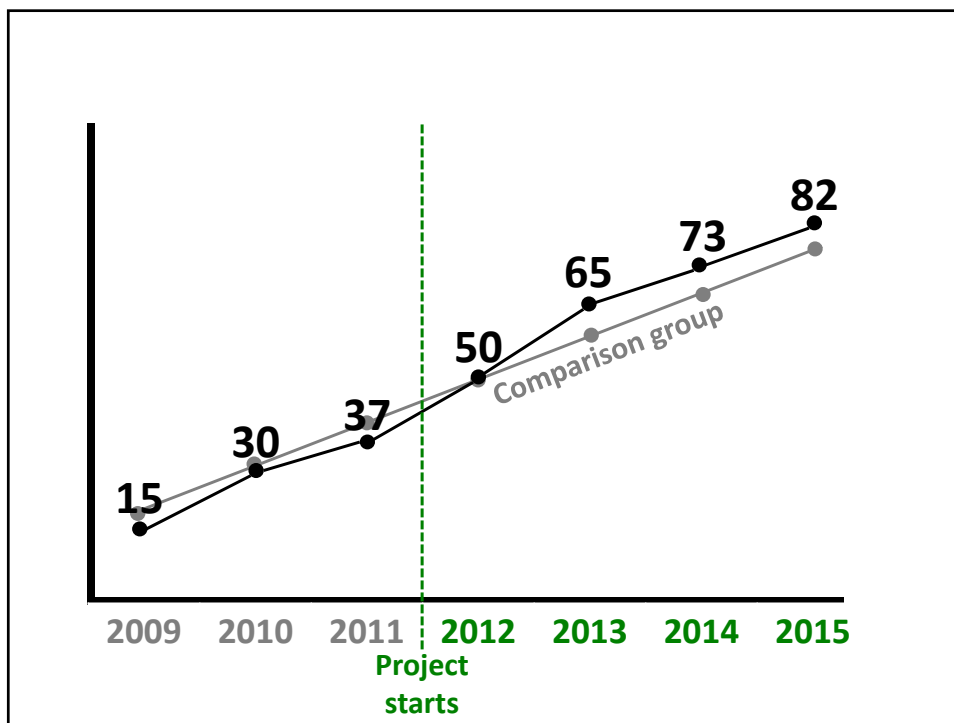
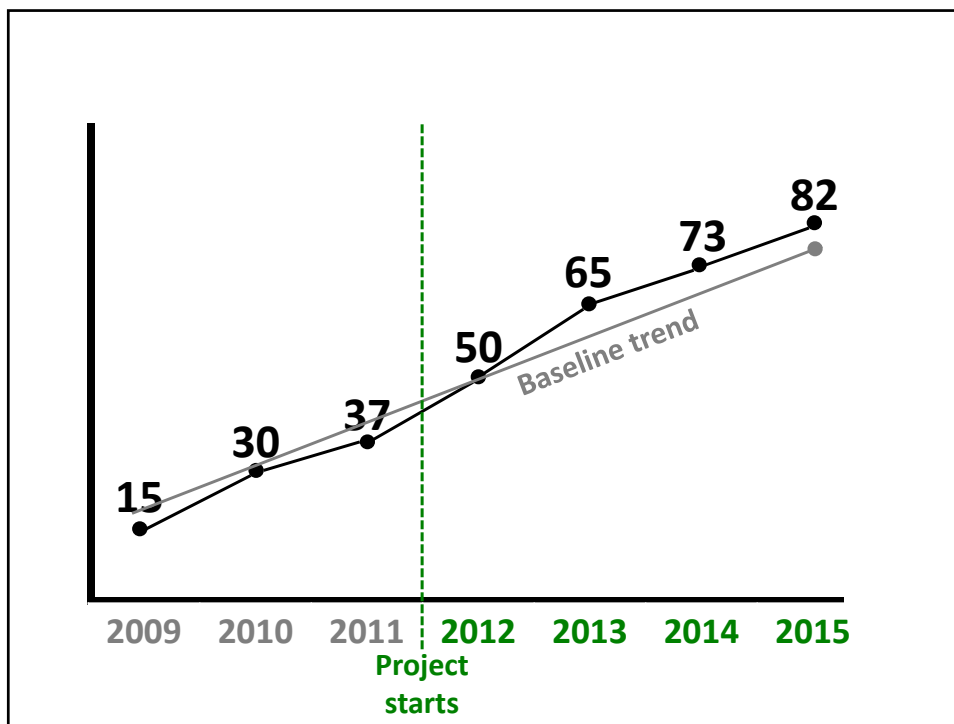


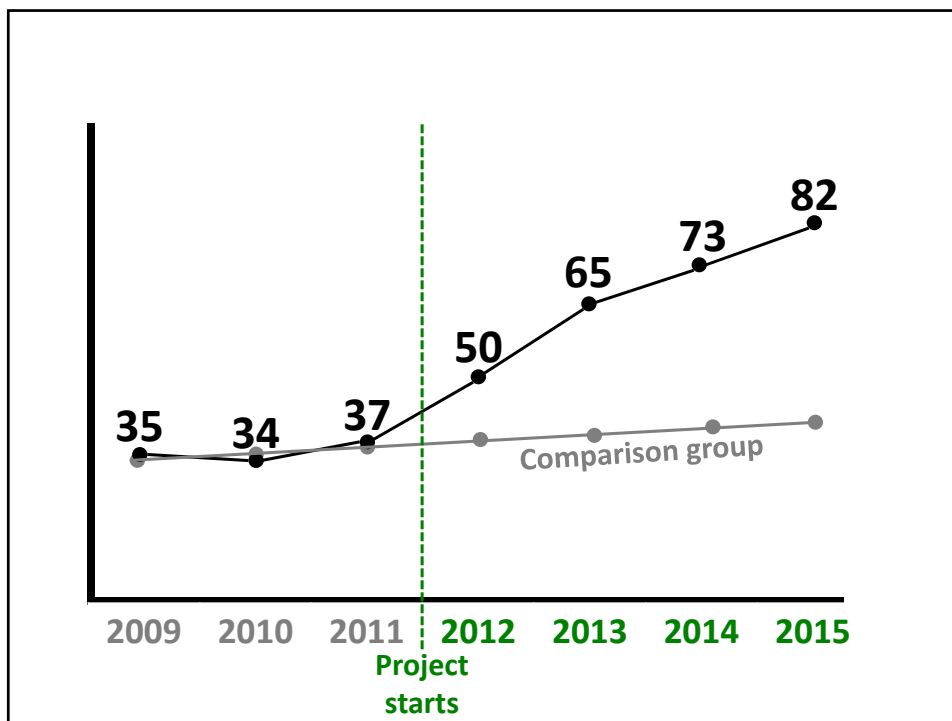












Comparisons are critical!

- over time
- with another group
- with what would have happened in the absence of the intervention
- with expectations/targets



Discussion



You're invited!

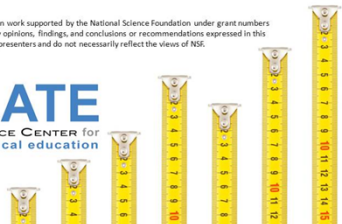
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**EvaluATE
webinar on
November 28**

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