Digging into Data Protocol

Purpose

To engage in productive dialogue about data and to build collective capacity to make sense of data relevant to teaching and learning.

Roles

- *Facilitator* who guides the group through the process and ensures that the protocol and norms are upheld.
- *Notetaker* who captures notes from the discussion and is prepared to share out for the group.

Norms

- Share the air: step up, step back, and invite others in.
- Hard on the content, soft on the people.
- Focus on learning, not judging.
- Stick to the protocol.

Phase 1: Getting Oriented (5 minutes)

- Participants take 2-3 minutes to individually review the data.
- The facilitator then leads a quick check-in: Does everyone understand what is being presented?

Phase 2: Discussion

Each person shares an observation, question, and hypothesis

Observation

- Each person shares one thing they noticed that they want to celebrate and/or call attention to. During this portion, it is important to just describe what you see as objectively as possible. Resist the urge to interpret or pose questions.
- Helpful sentence frame: **I notice….**

Question

- Each person shares a question that emerges for them from the data.
- Helpful sentence frame: **I wonder...**

Hypothesis

- Participants share possible hypotheses or explanations for what they see, trying to identify multiple alternative explanations.
- Helpful sentence frames: **This could be because... Or it could be because...**

Phase 3: Next Steps
- Participants share what they might do next given their understanding of the data.
- Helpful sentence frames: **One thing we could do next is...**

Phase 4: Share Out

The notetaker from each group has **1 minute** to share highlights from their group's discussion of the data. We recommend sharing the following:
- One celebration/noticing
- One question that emerged
- One possible hypothesis
- One next step

Phase 4: Debrief

The facilitator leads the group in reflecting on this process.

Helpful Guiding Questions
- What was this process like for you?
- What adjustments would you make?
- How did looking at data influence your understanding of the issue?
- What are we learning about how to package data so that we can engage in productive conversations?
- How might you use this protocol in your work, with your team?
- What data are we craving?

This protocol has been adapted from the High Tech High GSE Center for Research on Equity and Innovation designed from a similar protocol designed by the Carnegie Foundation for the Advancement of Teaching and Learning.

Fishbone Generation Protocol

The purpose of this protocol is to arrive at a deeper understanding of the literacy achievement problem before jumping to solutions.

Norms

- **Avoid solutionitis**…the goal is to understand the issue, not solve it (yet).
- **"Yes and"**…the goal is to generate lots of ideas, and not fixate on one.
- **Embrace "definitely incomplete; possibly incorrect."**
- **Share the air.**

Our Problem: Too few students of color, low-income students, and English learners are achieving the literacy proficiency they need to be college and career ready.

Step 1: Initial Brainstorm of Causes (5 minutes)

Individually brainstorm as many causes as you can that might contribute to the problem/issue. Write each cause on a different sticky note. *For meaty "big" topics, it can help to ask a chain of "why?"*

Step 2: Share and Categorize (15 minutes)

- *Share around:* Each person shares one cause contributing to the problem. If others have a similar cause, you can start to group those sticky notes together on your poster.
- *Continue to share* your initial brainstorm, building on each other's ideas and adding new causes that may contribute to the problem.
- **Cluster on your poster:** Group related causes together, and give each category a title.

Step 3: Post and Reflect (5 minutes)

Post your poster to the wall. Does your diagram capture the root causes you think are important? Anything missing?

Improvement Tool: Interrelationship Digraph

A convergent tool for dialogue that helps us determine which root causes are most important to address.

Our Problem: Too few students of color, low-income students, and English learners are achieving the literacy proficiency they need to be college and career ready.

Step 1: Place the labels you created for each grouping of causes—the major cause categories—in a circle on a new piece of chart paper.

Step 2: Each person makes a prediction (2 minutes). Which of the major category causes do you think is most important? Ask people to write their prediction on a sticky note and share them later.

Step 3: Construct the Digraph (15 minutes)

Starting with one cause, for each pair of causes ask yourself the following:
- Is there a relationship between these two?
- If yes, which causes the other *the most*? Draw an arrow from one to the other to show directionality.
    - For example, the facilitator may ask the group, "Do instructional practices cause a lack of motivation or vice versa?" If the group thinks instructional practices cause lack of motivation (more than lack of motivation influences instructional practices), draw the arrow going toward motivation (*from cause to effect*).
- You can decide there is not a causal relationship, but you <u>must</u> pick a direction if you do see a relationship. No lines with arrows at both ends!

Repeat until you have established a relationship (or not) between all the topics.

Tally outgoing arrows and incoming arrows for each cause. (5 minutes)
- *The root causes with the most <u>outgoing lines</u> most impact the issue/problem. Star the top 1-2 root causes!* The root causes with the most ingoing lines tend to be the effects/symptoms of the causes.

Step 4: Discuss Predictions and Implications (5 minutes)
- Were our predictions correct? What root cause(s) have we learned are at the heart of the problem?
- What other data would you like to collect and analyze to further understand the literacy achievement problem at your school?

This protocol has been created by the High Tech High GSE Center for Research on Equity and Innovation.

Generating Change Ideas Protocol

Protocol

1) Individual Brainstorm (5 min): What could we try that would impact our most important root causes? One idea per post-it.

2) Chart the Change Ideas (15 min.): Where does each idea fit on the effort vs. impact matrix? *Start with each person sharing their favorite idea.* Cluster similar ideas as you go.

3) Select High-Leverage Change Ideas to Move on (5 min.): Which ideas in the *"high impact, low effort"* quadrant can we get moving on now? (Star these!) Which ideas on the "high impact, high effort" do want to work toward?
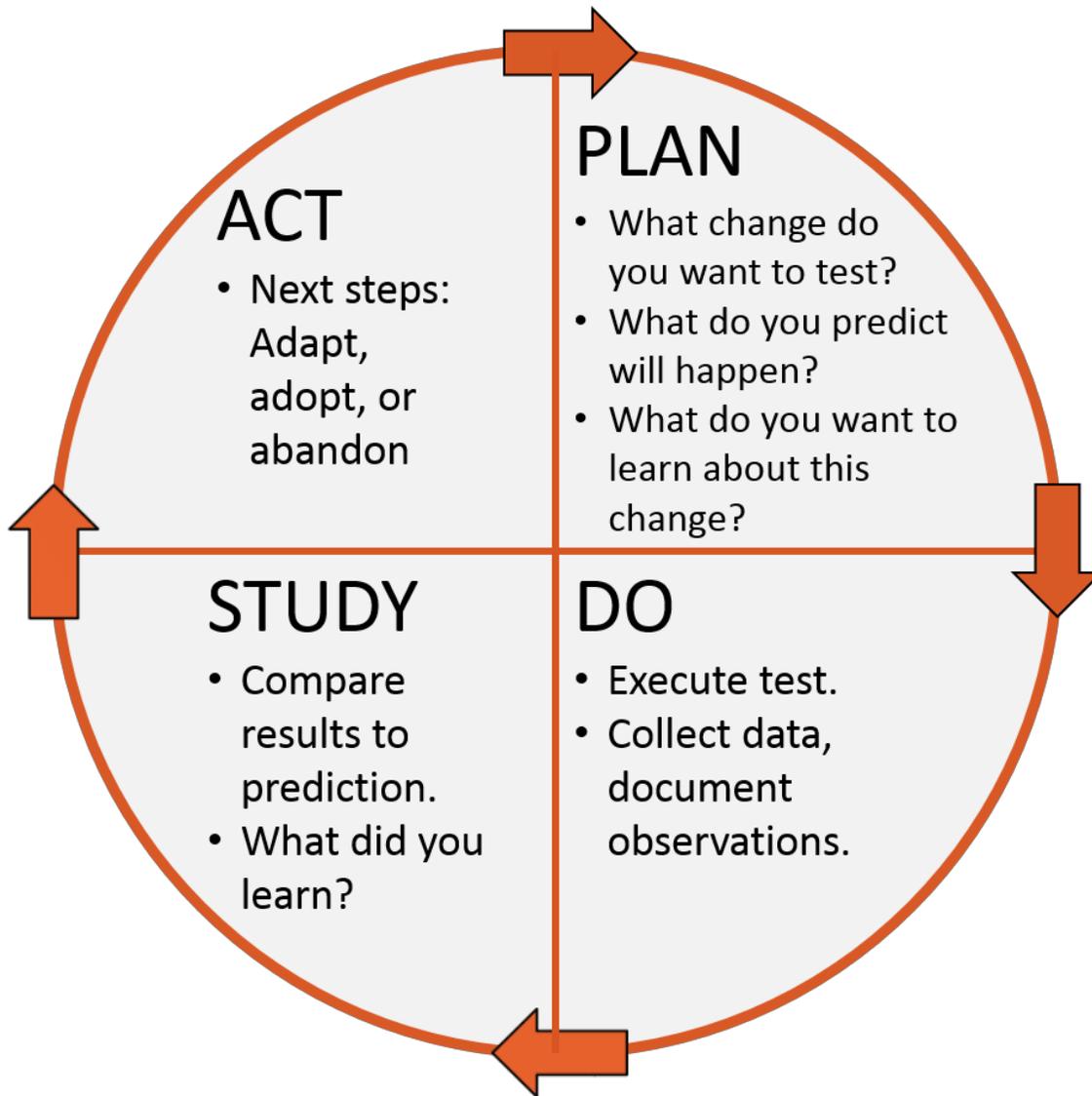
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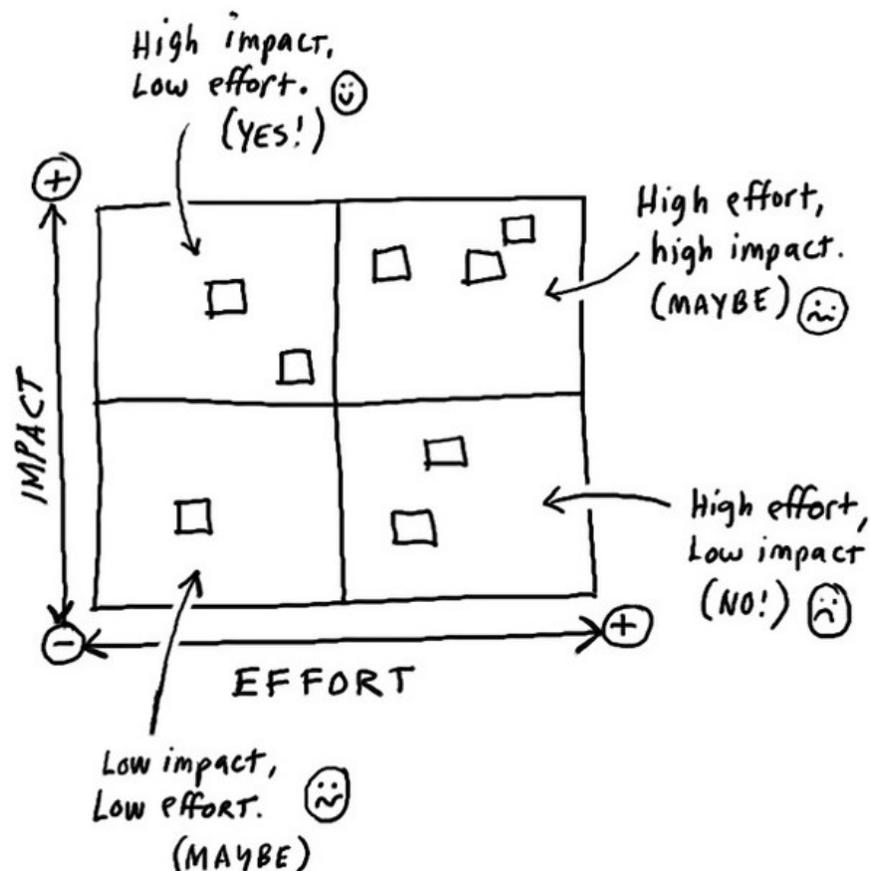
Plan, Do, Study, Act (PDSA)

Date:	
Change Idea:	
Plan Details ***What*** do you need to do to get ready? ***When*** will you test the idea?	

Questions: What do we want to learn from this cycle?	**Data:** What data will we collect to answer our questions?	**Predictions:** What do we think will happen?	**Results:** What were the results? What did we learn? *(completed after implementation)*

Plan-Do-Study-Act (PDSA) Learning Cycle

ACT
- Next steps: Adapt, adopt, or abandon

PLAN
- What change do you want to test?
- What do you predict will happen?
- What do you want to learn about this change?

STUDY
- Compare results to prediction.
- What did you learn?

DO
- Execute test.
- Collect data, document observations.