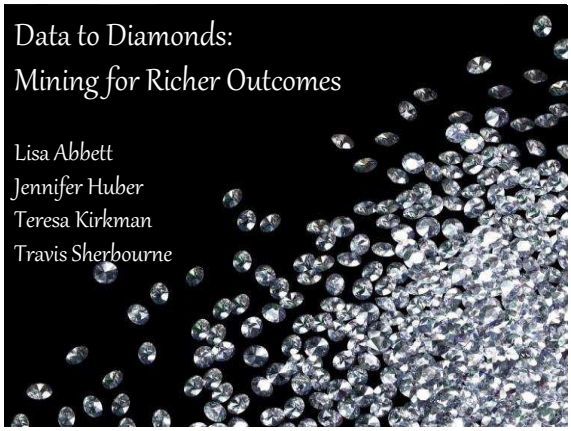


Gems of Knowledge

- Participants will explore data sources
- Participants will appraise the quality of the data
- Participants will consider ways to use data to affect student outcomes
- Participants will practice using a data framework

Locating Our Diamond Mines: Preparing

- Goal: use state and local data to improve results
  - OSEP adding results in State Determinations
  - OSEP adding results around reading
  - focus on outcomes, not activities
- Gap between the performance of students with disabilities on statewide reading assessments and their typically developing peers

Excavation

Data Use Process

- A framework
- Four phases with 8 steps . . .

Mining the Data: Considering Data Sources

Mining in AZ Dash – listed on home page and also known as Arizona Report Cards!

First Tab–"OVERVIEW" features:

- New State school report card
- User friendly with weekly online trainings
- Lists scores on state assessment
- Search by school, district, or charter holder
- Designed by Arizona educators
- COMING SOON!–postsecondary report cards

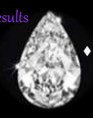
Second Tab—"Assessments"

Currently included

- AIMS for grades 3–8 & 10
- AIMS A – all grades 2011–2013
- COMING SOON – Stanford 10 scores
- COMING SOON – AZELLA results

Partially installed

- National Assessment of Educational Progress (NAEP)
  - Contains nationally comparable achievement
  - Reports state-level data for assessments in multiple subject areas such as math, reading, writing, and science
  - Focuses on grades 4 and 8



Activity

- What data sources are you using to drive your decision making?
- What data sources are available to your LEA?

Local Data Examples:

DIBELS
Galileo
aimsweb
STAR Reading
Attendance data
Discipline data
Graduation/dropout rate
Grades/progress reports
Intuitive data

Appraising the Data: Preparing

Appraising the Data

- Does the data give you the information you need?
- Is the data valid?
- Is the data reliable?

Inquire

- What is your question?
- Analyze data to define a problem statement
- Determine actionable causes

Inquire: Questions for Any Data Set

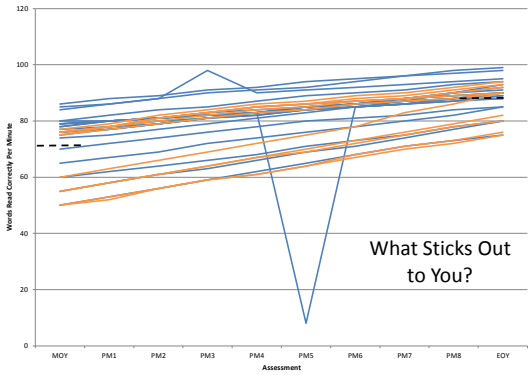
- Are the results expected?
- What results are unexpected?
- What anomalies/outliers exist?
- What weaknesses are evident?
- What are some of the patterns?

Inquire

- Be Honest when looking at the data.
- Detach emotionally from it.
- It is okay to be vulnerable.
- Data is what sets the stage for what needs to be improved upon.
- Data should be a reality check.

Activity

Using the data framework for data analysis



Inquire: Check Yourself

- Were you Honest when looking at the data?
- Did you detach emotionally from it?
- Were you vulnerable?

Inquire: Questions for Educational Data Sets

- What learning strengths and weaknesses are evident?
- Which groups or subgroups of students are having difficulty learning?
- What instructional changes might improve student learning?
- What professional development is needed to improve student learning?
- What materials and equipment are needed to support changes in instruction?

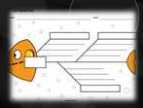
Determine Actionable Causes

- Would the problem have occurred if the cause had not been present?
- Will the problem reoccur if the cause is corrected?
- Will correction of the cause lead to similar events?

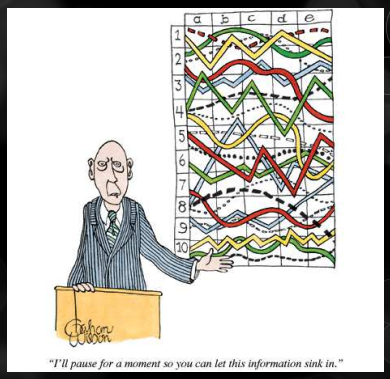
The answer to all of these questions should be no.

If yes is answered for any one question, then that question is a contributing cause but not a root cause.

"5 Whys" Technique of Cause: Effect Analysis



- Begin with your problem statement; ask why the problem happens.
- If root cause is not found, ask why again.
- Continue asking why until the team agrees that the root problem has been identified.



"I'll pause for a moment so you can let this information sink in."

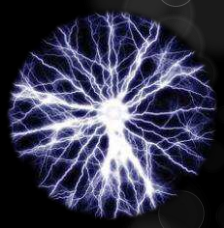
Plan: Setting the Diamonds

- Create SMART goals
- Address actionable cause(s)
- Set short-term, medium-term, and long-term objectives
- Identify Strategic Activities

Act: Creating the Piece

- Implement activities with integrity
- Continuous evaluation

Act: When we use data to act, there is power in that data.



MINING FOR DEEPER INSIGHTS
I THINK WE BROUGHT THE WRONG TOOLS.
INSIGHT TEAM
SO WHAT?
BEEN THERE... SEEN THAT.
LIES... ALL LIES!
GOLD!
KenMillerGroup
insight for innovation