Actionable Analysis: Using Multiple Data Sources to Identify the "Sweet Spot"

Bakersfield College Data Summit 2
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Scorecard | Prepared rate | Staffing reports | FTES Budget | Contact hours | Survey results | Program Outcomes | Success rate | GPA | Employment rate | Attempts | Basic Skill rate | Retention rate | CCSSE | Persistence rate | SLO | Progress rates | Withdraw rate | Enrollment Count | Major Count

Drowning in DATA!!!!
So many things we need to analyze... It can get overwhelming very quickly.

We have questions about:

- Processes,
- course success rates,
- areas for improvement,
- intervention effectiveness,
- efficiency of everything,
- make decisions

- learning outcomes,
- program outcomes,
- achievement outcomes,
- intervention points,
- discover what is!

So many things we need to analyze...

It can get overwhelming very quickly.
Process for Looking Across Data Effectively

The hard part first:

1. Identify Purpose
2. Identify Unit level
3. Identify Question
Identify Purpose

Purposes

- Examine processes
- Find areas for improvement
- Program review
- To see if an intervention worked
- To increase efficiency
- To make decisions

- Accreditation reports
- State reports
- Program improvement
- Look for intervention points
- Someone said I should
- To discover what is!
TASK: Identify your primary purpose for looking at data.

Write down what you will do with the results of your data analysis.

*Example*: I have to write a report for the President.
   I will tell others in my area about what I find.
   I will use it to make changes in my program or class.

Compare your answer with the list of purposes. Add to the purpose list if your purpose isn’t on the list.

JUST...

Identify the MOST IMPORTANT PURPOSE for your analysis and ignore all other purposes.

You can address the other purposes at another time.
Identify Purpose

Identify Unit level

Identify Question
Identify Unit level

Unit and research groups are suggested by your research purpose.

**TASK:** Select Unit level and Research group *(write them down!)*
Identify Purpose
Identify Unit level
Identify Question
There are **only 2** research questions when looking at data.

**Describe**

What is...?

*Example:* How do our success rates look?

**Make an Inference**

What happens when/if...?

*Example:* What happens to success rates when there is an intervention?
TASK: Write down your question. Cross out unimportant words.

Example: How well is the program working?
How well is the **program working**?

What does the program look like in terms of data?
What does the **program look like** in terms of data?

What does the data show/say about the program?
What does the **data show/say** about the **program**?

Question: **DESCRIBE**

Example: Would we see higher persistence if we required more contact hours with counselors or advisors?

Would we see **higher persistence if we required more contact hours with counselors or advisors**?

Question: **INFERENC**E
Next step: DATA SELECTION and ANALYSIS
DATA SELECTION and ANALYSIS

Data

• List all data sources you want to use. Include QUALITATIVE data like interviews and focus groups if relevant to your purpose.

1st Analysis

• Look at each type of data separately. ASK: How does this DESCRIBE the UNIT? ASK: How does this data apply my QUESTION?
• Record your impressions of what the data suggest to you about your research question. KEEP IT SHORT! 10 sentences maximum.
• Write down questions that come to you while you are working. Example: Does this data connect to what I saw in (an earlier piece of data)?

2nd Analysis

• Put your notes from each data set together either in a single document or side by side where you can move them around.
• WRITE down your impression of connections or conflicts across the data descriptions.
• Look for answers to the questions you wrote down in the 1st analysis.

Report Out

• Combine your descriptions, notes and questions into a single document. This is your draft report of findings.
• Take the draft you have created and talk about it or write it using your purpose, unit level, and question for the context.
• Use the information as documentation of what it, to suggest changes, or to inform others.
For Best Results:

This type of analysis usually takes place over several time periods. Avoid more than a couple of days break during the 1st analysis phase. You will lose track of subtle patterns if you take a long break between data types.

Reference your data sources when you report what you found.

Finally, practice makes perfect.