State Charter Schools Commission:

Analyzing data to identify lapses in learning; making plans to address them!

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GCA's team

Main meeting room facilitators

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A bit about you!

Show of hands if you are a…

1) Teacher
2) School leader

Agenda

1. Objectives (7/9)
2. Data analysis: High-level (7/9)
3. A protocol for data analysis (7/9 and 7/14)
4. Apply the protocol to your data (7/9 and 7/14)

Disruption

Per the Oxford English Dictionary:

> "The action of rending or bursting asunder; violent dissolution of continuity; forcible severance."

- What are some specific ways that your life, or the lives of your students, has/have been disrupted over the last few months?

Objectives

We haven't had "school as we've known it" since March.

Have lapses in student understanding of specific content occurred? Will that content be picked up again in fall?

You will get new data when school begins!

For now, (re)analyzing Quarter 3 data from 2019-20 is valuable:

- Last available - how were students doing then?
- Anticipate where lapses are likely to be.

Data analysis: High-level

1. Where are we going? (What are the achievement expectations?)
2. Where are we now? (How close are we to meeting them?)

➢ Today's webinar and 7/14 webinar

3. Where to next, and how do we get there? (What is necessary to address lapses?) Do I need more data to answer these questions?

➢ 7/14 webinar

(Chappuis, 2009; Chappuis, Stiggins, Chappuis, & Arter, 2012)

Where are we going (what are the achievement expectations)?

Think about the assessment data you brought.

1. What is the purpose of the assessment (e.g., to provide information *of* student learning related to specific standards)?

2. What standard(s) is it assessing?

Quarter 3 Benchmark		Standard(s) assessed:			DOK Balance: 0-77-23	
Grade 5 ELA						
Purpose: Assessment of learning of related standards		RI1, 2, 4, 5				
		RL2, 3, 4, 5, 6				
		W3				

Unit	Standard/(Element)	DOK	Item Type	Position		
3	RI1	2	SR	1		
3	RI2	2	SR	2		
3	RI5	2	SR	3		
3	RI4	2	SR	4		
3	RI3	3	SR	5		
3	RL6	2	SR	6		
3	RL2	2	SR	7		
3	RL4	2	SR	8		
3	RL5	2	SR	9		
3	RL5	3	SR	10		
3	RL3	2	CR	11		
3	RL2	2	CR	12		
3	W3	3	ER	13		

Quarter 3 Benchmark		Standard(s) assessed:			DOK Balance: 4-66-30	
Grade 4 Math		OA1b, OA2, OA4				
Purpose: Assessment of learning of related standards		NBT1, 3, 4				
		NF1, 2, 3b, 3d,				
		MD1a, 2, 5, 5a, 6, 7				
		G1, 2				

Benchmark	Standard/(Element)	DOK	Item Type	Position		
Q3	OA1b	2	SR	1		
Q3	OA2	2	SR	2		
Q3	OA4	2	SR	3		
Q3	NBT4	2	SR	4		
Q3	NBT1	3	SR	5		
Q3	NF1	2	SR	6		
Q3	NF1	3	SR	7		
Q3	NF2	2	SR	8		
Q3	NF2	3	SR	9		
Q3	NF3b	2	SR	10		
Q3	NF3d	2	SR	11		
Q3	NF3d	2	SR	12		
Q3	MD1a	2	SR	13		
Q3	MD2	3	SR	14		
Q3	G1	2	SR	15		
Q3	MD6	2	SR	16		
Q3	MD5a	2	SR	17		
Q3	G1	2	SR	18		
Q3	MD3	3	SR	19		
Q3	G3	2	SR	20		
Q3	MD5	3	SR	21		
Q3	G1	2	SR	22		
Q3	MD7	3	SR	23		
Q3	NBT3	1	SR	24		
Q3	OA2	3	SR	25		
Q3	NF1	2	CR	26		
Q3	G1, G2	2	ER	27		

Where are we now (relative to expectations)?

A protocol for data analysis

General protocol (applies to all assessments)

1) Predict
2) Observe

→ **Where are we now?**

3) Plan

→ **Where to next?**

Predict

Assume you haven't looked at the data yet (or that it has been a while). Before looking at the data, what are your expectations, assumptions, and questions?

- I expect to see…
- I assume that…
- I wonder…

Predict - (examples for ELA)

- I **expect** good scores on the narrative (item 13), given the general progress I saw during instruction.
- I **assume** there will be a strong relationship between overall score (items 1-12, measuring reading comprehension) and the score on the narrative.
- I **wonder** if any students will do much better on the reading comprehension questions than on the narrative (or vice-versa).

Predict - (examples for mathematics)

- I **expect** students to do better on the items in the Geometry domain than the Number and Operations Fractions domain, given evidence of understanding on formative activities.
- I **assume** that teachers covered all the content assessed.
- I **wonder** if reading comprehension on the word problems may influence student performance.

Observe

1. Look at the data - overall, and at the level of standards/domains, if available.

2. At this stage, focus on “just the facts” -- no interpretations, or explanations.

    - What stands out?
    - What patterns or trends do you see?
    - Anything seem surprising or unexpected?

Observe (examples for ELA)

What stands out?

→ The overall average for reading comprehension was 0.66; the average on the narrative was 2.4/4.

What patterns or trends do you see?

→ Overall, students struggled with items about text structure (RI5 / RL5).

Anything seem surprising or unexpected?

→ There was only a moderate relationship between overall score for reading comprehension and the narrative score (r = 0.51).

Observe (examples for mathematics)

What stands out?

→ The overall average was ~45/100. In general students did better in Geometry than in Number and Operations Fractions (as predicted).

What patterns or trends do you see?

→ In particular, students struggled with items in the measurement and data domain. They also struggled on the 2 open-ended items.

Anything seem surprising or unexpected?

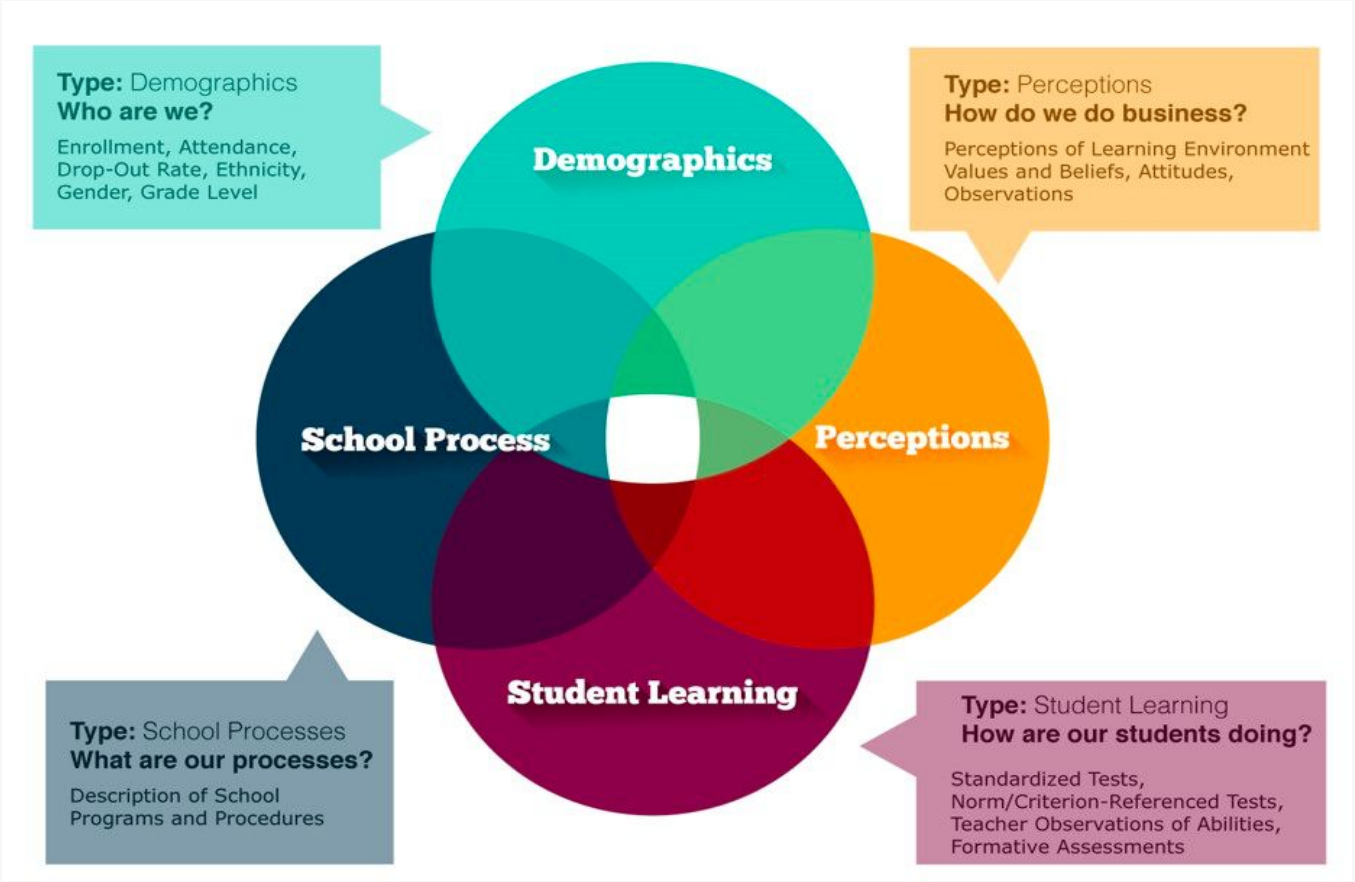
→ Students did better on the more rigorous NF1 item than on the less rigorous NF1 items.

Apply

Use the provided table to make predictions and observations about your data.

Note: do this is smaller meeting rooms from 2:25 - 2:55.

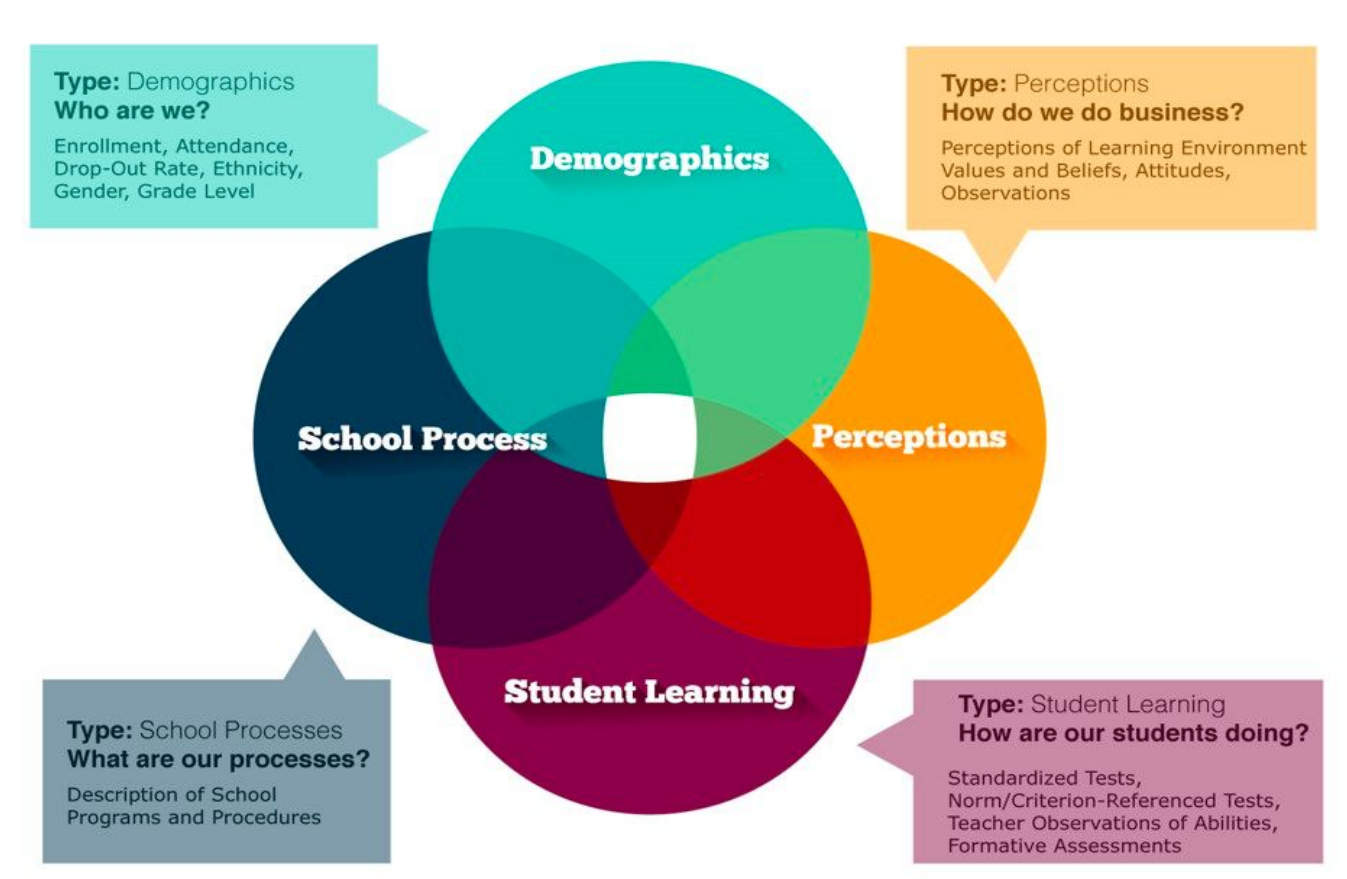
Bernhardt (1998) - "Multiple Measures"



Digging a little deeper:

Differences in achievement (i.e., student learning) may be explained by these other measures.

Bernhardt (1998) - "Multiple Measures"



What are examples of demographic, process, or perceptions measures that you feel have a strong impact on student learning/achievement?

Any that you haven't collected data on before the pandemic that are important to collect now?

Asking more detailed questions about the data

- Does achievement (overall or in specific domains) vary by FRL? (achievement x demographic)?
- Is achievement on specific standards similar for students who did and did not receive an instructional intervention (achievement x process)?
- Does overall achievement different vary by FRL, and, if so, are the differences consistent for females and males? (achievement x demographic x demographic)?

Apply

Using demographic, process, and/or perceptions data that you have, phrase 2-3 more detailed questions:

- 1-2 involving 2 measures
- If possible, 1-2 involving more than 2 measures.

Note: do this is smaller meeting rooms from 3:25 - 3:55.

Final thoughts - webinar 1

What is gained by addressing these more detailed observation questions?

What are some measures that are important to collect data on this fall (which would likely impact achievement) that you don't currently have?

See you on July 14 at 2:00 p.m.!

Model (2:00 - 3:00)

- GCA will model using the data to answer the more detailed questions.
- GCA will model using these answers to inform plans: where to next?

Application (3:00 - 3:50)

- Option 1 (for those with data): do likewise in small meeting rooms.
- Option 2 (for those without data): stay in main meeting room; phrase questions you'd like to answer in fall; discuss how to collect data to answer them.

Final Remarks (3:50 - 4:00)

Thank you for your time and participation!

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References

Bernhardt, V. L. (1998). *Multiple measures*. California Association for Supervision and Curriculum Development.

Chappuis, J. (2009). *Seven strategies of assessment* for *learning*. Upper Saddle River, NJ: Pearson Education.

Chappuis, J., Stiggins, R. J., Chappuis, S., & Arter, J. A. (2012). *Classroom assessment for student learning: Doing it right – Using it well.* Boston, MA: Pearson.