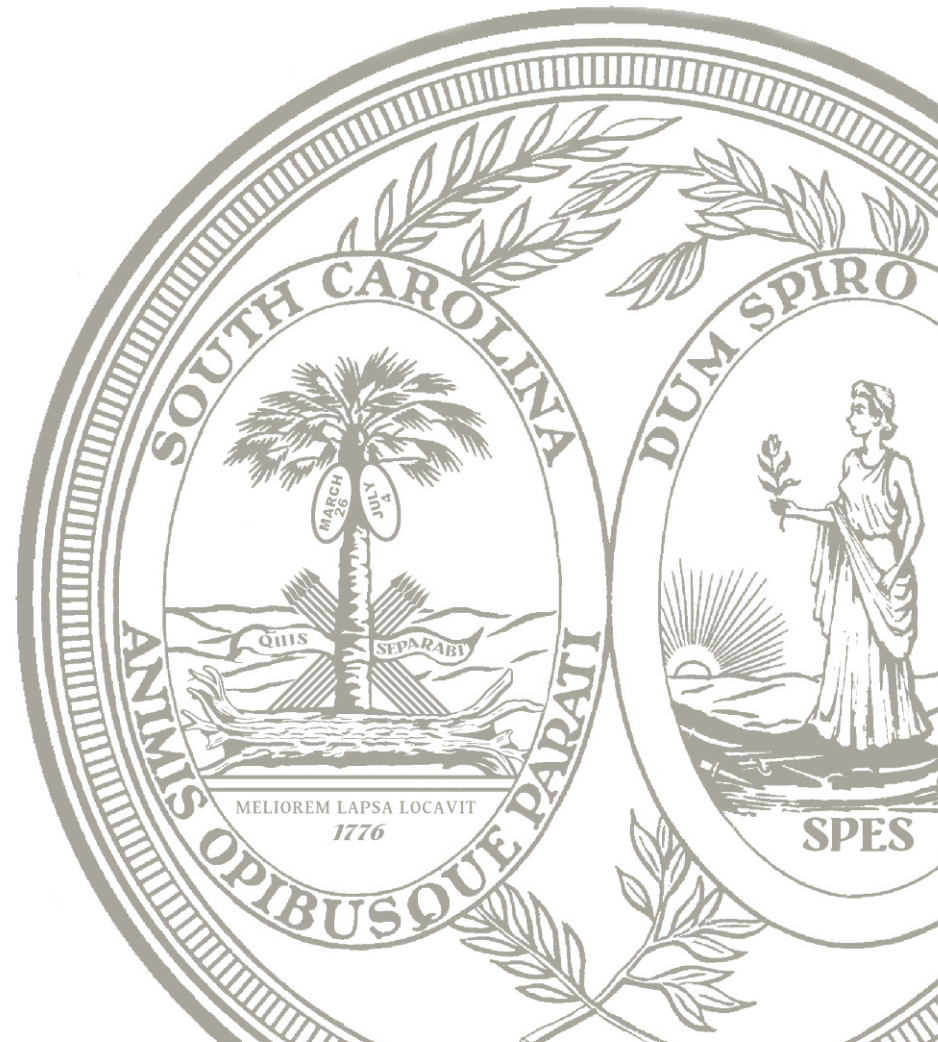


Analyze Data for Game-Changing Results

Part of Data Literacy for
Instructional Leaders Series

**SCDE Office of Educator
Effectiveness and Leadership
Development**



Facilitators



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SC Department of Education



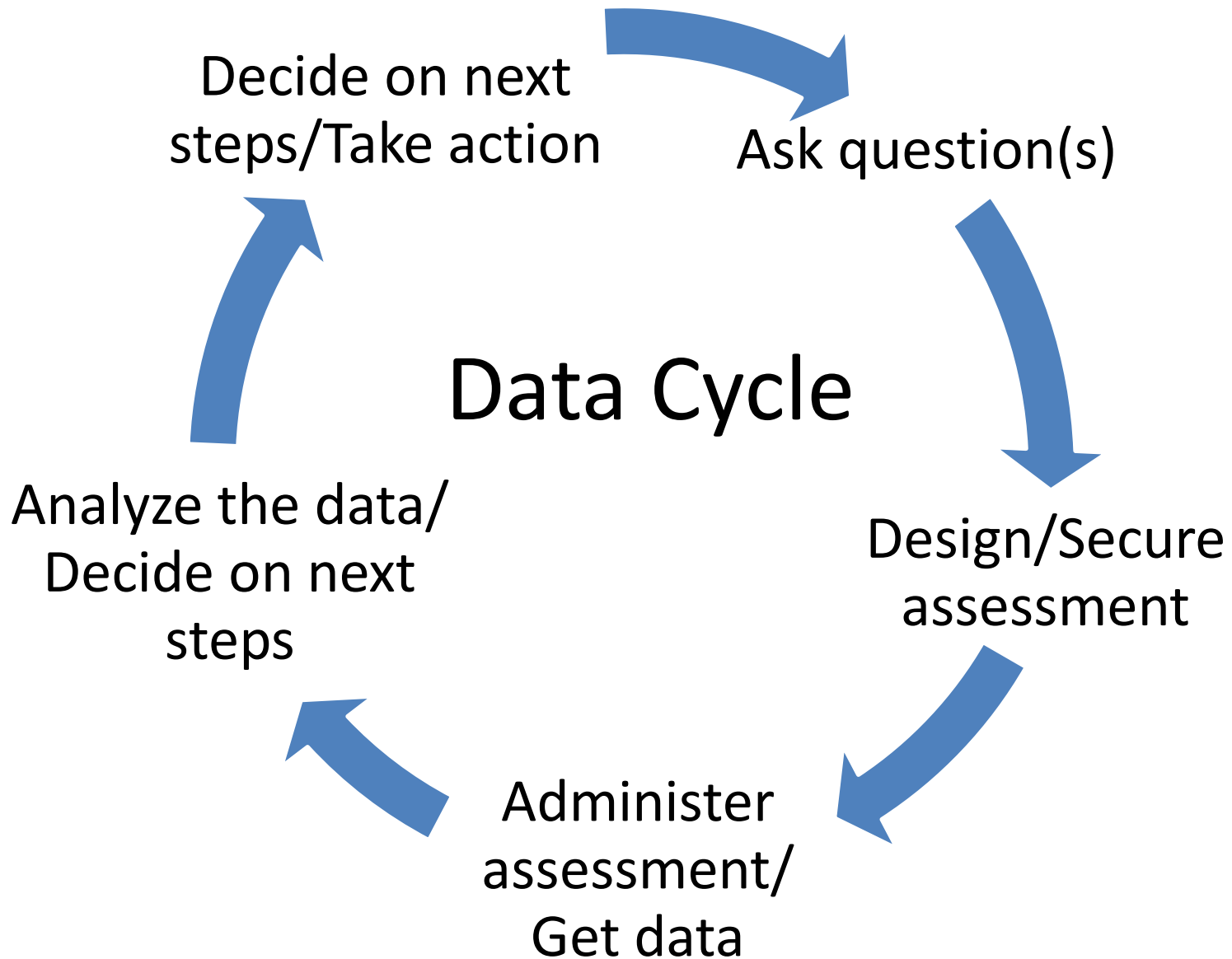
Session Outcomes

- Identify game-changing data for your role versus game-changing data for teachers.
- Identify the most critical thing you need to remember when you analyze data as a principal.
- Identify the most critical thing you need to remember when coaching teachers to analyze data.

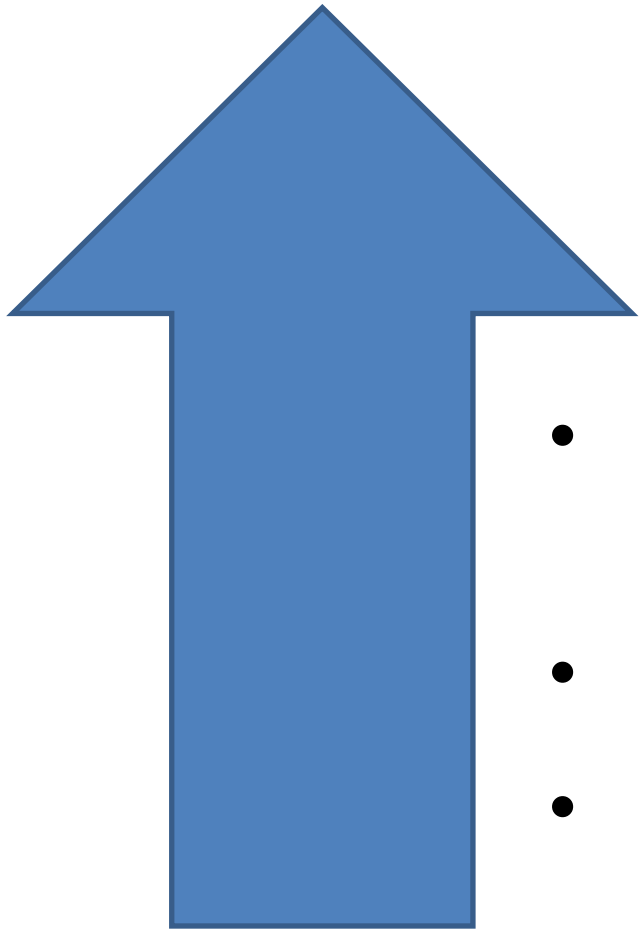
PADEPP Standards

Standard 2: Instructional Leadership

- Demonstrates proficiency in analyzing research and assessment data.
- Ensures the use of data from appropriate assessments and educational research to continuously monitor progress and strategically improve instruction in response to ongoing progress monitoring.



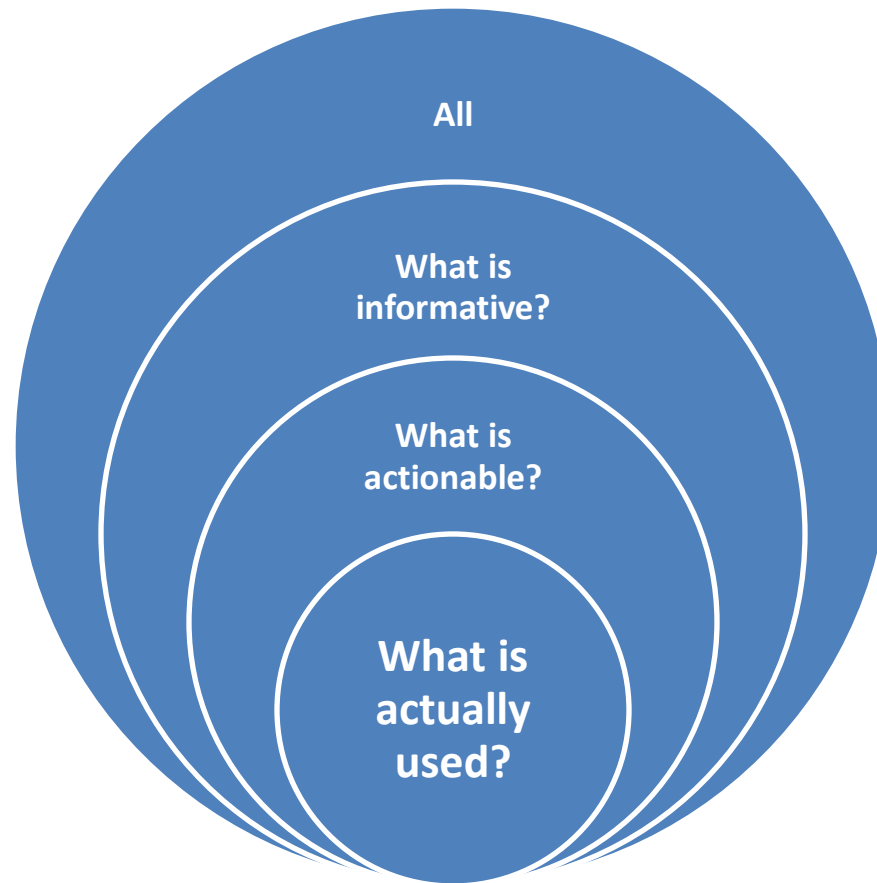
Information



Data

- Look for connections
- Structure
- Consider context

Data versus information?



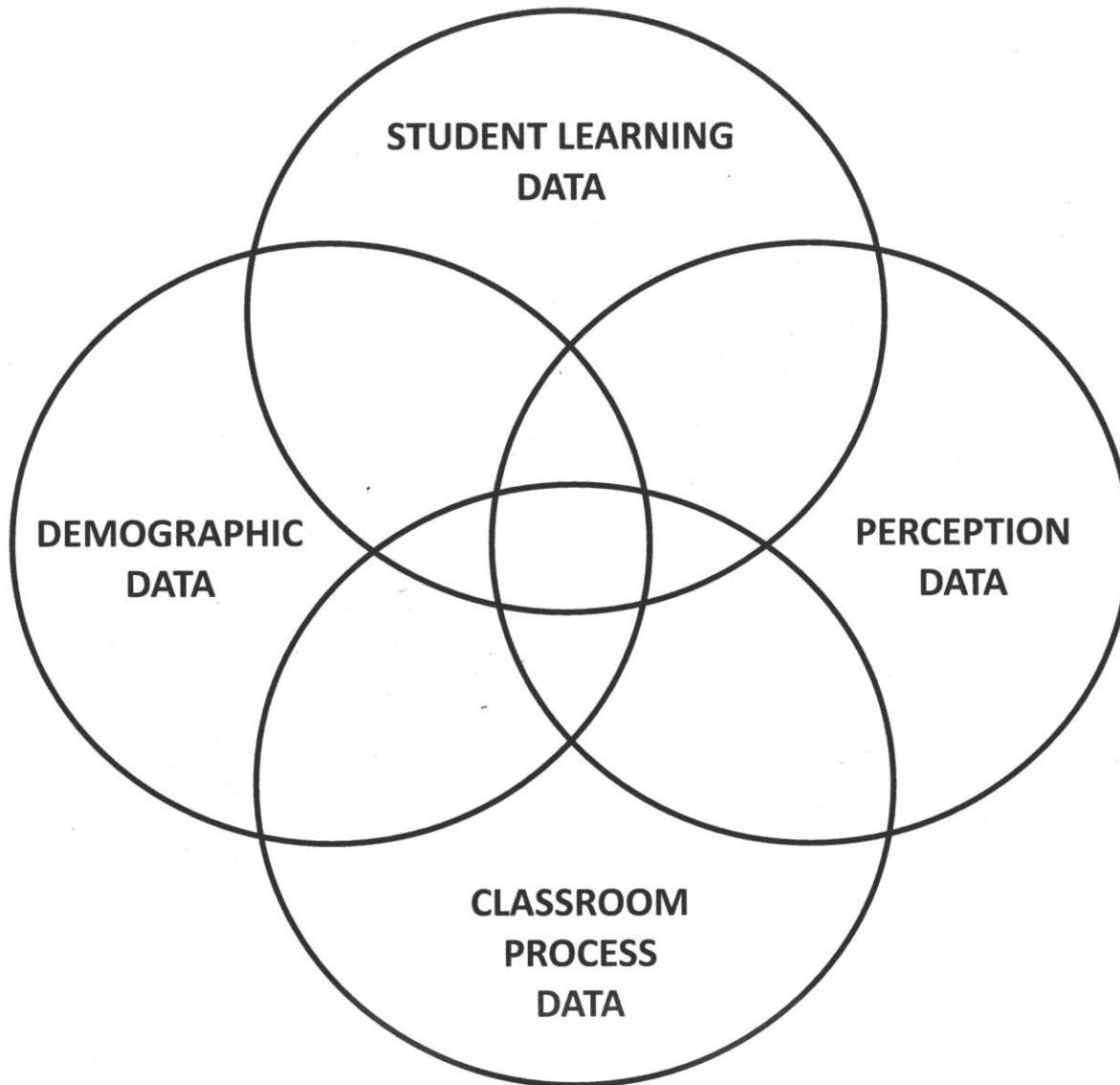
Levels of Data

Level of Data	Student Learning Example	For what role is this level of data most actionable?
International (across countries)	TIMSS or PISA results	National leadership
National (across states)	NEAP results	National leadership; State leadership
State (across districts)	SCReady results	State leadership; District leadership
District (across schools)	SCReady results	District leadership
School (across teachers, subjects, or teams)	SCReady or MAP results	School leadership
Classroom (across classes, students, or groups)	Classroom assignment or assessment results; MAP results	Teacher
Student (across assignments, within one assignment)	Classroom assignment or assessment results; MAP results	Teacher; Student



Focus on game-changers.

Image:
<https://localtvwhotv.files.wordpress.com/2017/05/fireworks.jpg?quality=85&strip=all&w=1200>



(Bernhardt, 2009)

What are the game-changing data
in your landscape for your role?
For teachers in their roles?



Data Analysis

There are many ways to analyze data...

- Item analysis
- Subgroup comparison
- Comparison with goal/target
- Measurement of growth
- Coding of themes
- Grouping
- Identification of patterns/trends

Principal example: How would you analyze?

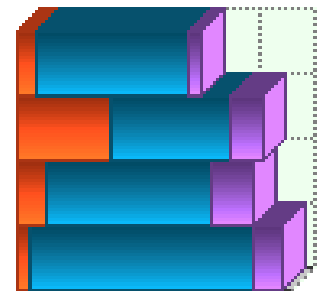
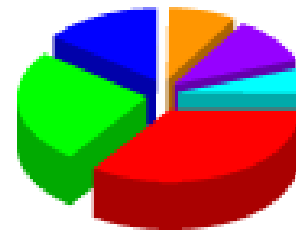
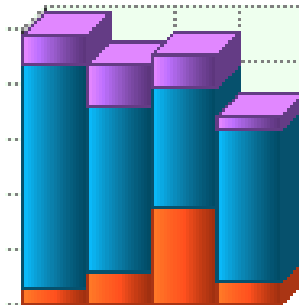
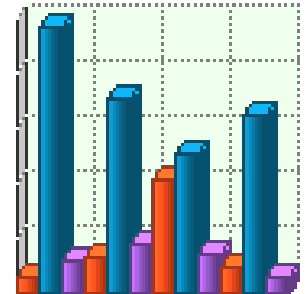
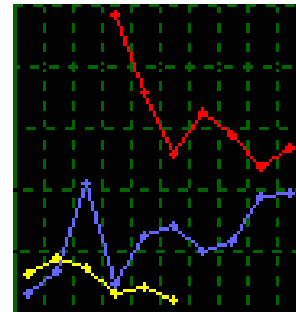
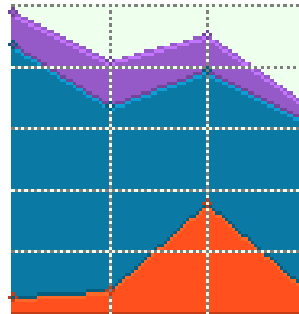
2016-2017 SCDE Parent Survey Results				
Percent of Parents Agreeing or Strongly Agreeing with Statements - 3 Year Trend				
Home-School Relations, Learning Environments, Social and Physical Environment, and IGP Sections				
	Richland Two			SC
	2015	2016	2017	2017
	n=1924	n=1411	n=1752	n=54954
Home-School Relations				
I AM SATISFIED WITH HOME-SCHOOL RELATIONS AT MY CHILD'S SCHOOL.	69.0	72.9	73.0	73.8
My child's school considers changes based on what parents say.	48.3	52.4	57.4	56.5
My child's school gives me information about what my child should be learning in school.	75.5	75.4	74.3	72.6
My child's school includes me in decision-making.	68.6	70.4	72.3	71.9
My child's school returns my phone calls or e-mails promptly.	83.5	81.8	82.5	81.7
My child's school schedules activities at times that I can attend.	79.0	80.8	81.1	80.2
My child's school treats all students fairly.	68.9	70.3	72.7	72.7
My child's teachers contact me to say good things about my child.	53.0	55.5	56.5	59.0
My child's teachers invite me to visit my child's classrooms during the school day.	49.8	53.6	55.7	49.9
My child's teachers tell me how I can help my child learn.	62.7	64.5	65.5	63.5
The principal at my child's school is available and welcoming.	77.1	80.6	81.0	83.1
Learning Environment				
I AM SATISFIED WITH THE LEARNING ENVIRONMENT AT MY CHILD'S SCHOOL.	88.1	87.9	89.0	87.2
My child's school has high expectations for student learning.	92.8	93.2	94.5	91.9
My child's teachers encourage my child to learn.	91.1	92.7	93.9	91.8
My child's teachers give homework that helps my child learn.	90.0	90.0	91.8	88.1
My child's teachers provide extra help when my child needs it.	84.2	83.1	85.7	83.1

Principal example: How would you analyze?

[illegible]

Reports

- Many assessment systems provide data analysis in the form of reports.
- There are pros and cons to using pre-analyzed data in reports.



What is the most critical thing you need to remember when you analyze data as a principal?



Teacher example: How would you analyze?

Report Criteria

Class
Is: MATH501 - Mathematics

22 rows in report

Student	2017 SC Ready				
English Proficiency	Math > Standards > Algebraic Thinking and Operations	Math > Standards > Geometry	Math > Standards > Measurement and Data Analysis	Math > Standards > Number Sense and Base Ten	Math > Standards > Number Sense and Operations- Fractions
	Middle	Middle	Middle	High	Middle
9 - English Speaker II	Low	Middle	Middle	Middle	High
9 - English Speaker II	Low	Low	Middle	Middle	Low
9 - English Speaker II	Low	Low	Middle	High	Middle
9 - English Speaker II	Low	Low	Middle	Low	Low
9 - English Speaker II	Low	Low	Middle	Middle	Middle
9 - English Speaker II	Low	Low	Low	Low	Middle
9 - English Speaker II	Middle	High	Middle	High	Middle
9 - English Speaker II	Middle	High	Middle	High	High
9 - English Speaker II	Middle	Middle	High	Low	Middle
9 - English Speaker II	Middle	Middle	Low	Middle	Middle
9 - English Speaker II	Middle	High	High	High	High
9 - English Speaker II	High	High	High	High	High

Teacher example: How would you analyze?

1. A
2. C
3. D
4. A
5. A

Teacher example: How would you analyze?

1.	A	A-29	B-0	C-1	D-0
2.	C	A-10	B-6	C-8	D-6
3.	D	A-15	B-5	C-3	D-7
4.	A	A-5	B-5	C-10	D-10
5.	A	A-30	B-0	C-0	D-0

Coaching Rules

Make certain...

- To scaffold what you ask teachers to do.
- The teacher owns the data.
- The teacher owns the analysis.
- To remember that your goal is developing data literacy.
- To avoid jargon and intimidation.





Data literacy is the ability to gather, interpret, and use multiple data sources effectively to improve student learning.

What is the most critical thing you
need to remember when you
coach teachers as they analyze
data?





I can...

- Identify game-changing data for my role versus game-changing data for teachers.
- Identify the most critical thing I need to remember when I analyze data as a principal.
- Identify the most critical thing I need to remember when coaching teachers to analyze data.

Application

Coach a Teacher to Improve Data Analysis

Please complete the professional learning activity associated with this session to help you apply your learning.



Image:
<http://blog.atomiclearning.com/highed/sites/blogs.atomiclearning.com/files/images/bigstock-lightbulb-vector.png>

References

Bernhardt, V. L. (2009). *Data, data everywhere: Bringing all the data together for continuous school improvement*. Larchmont, NY: Eye on Education, Inc.