EFFECTIVE ASSESSMENTS

Session Objectives
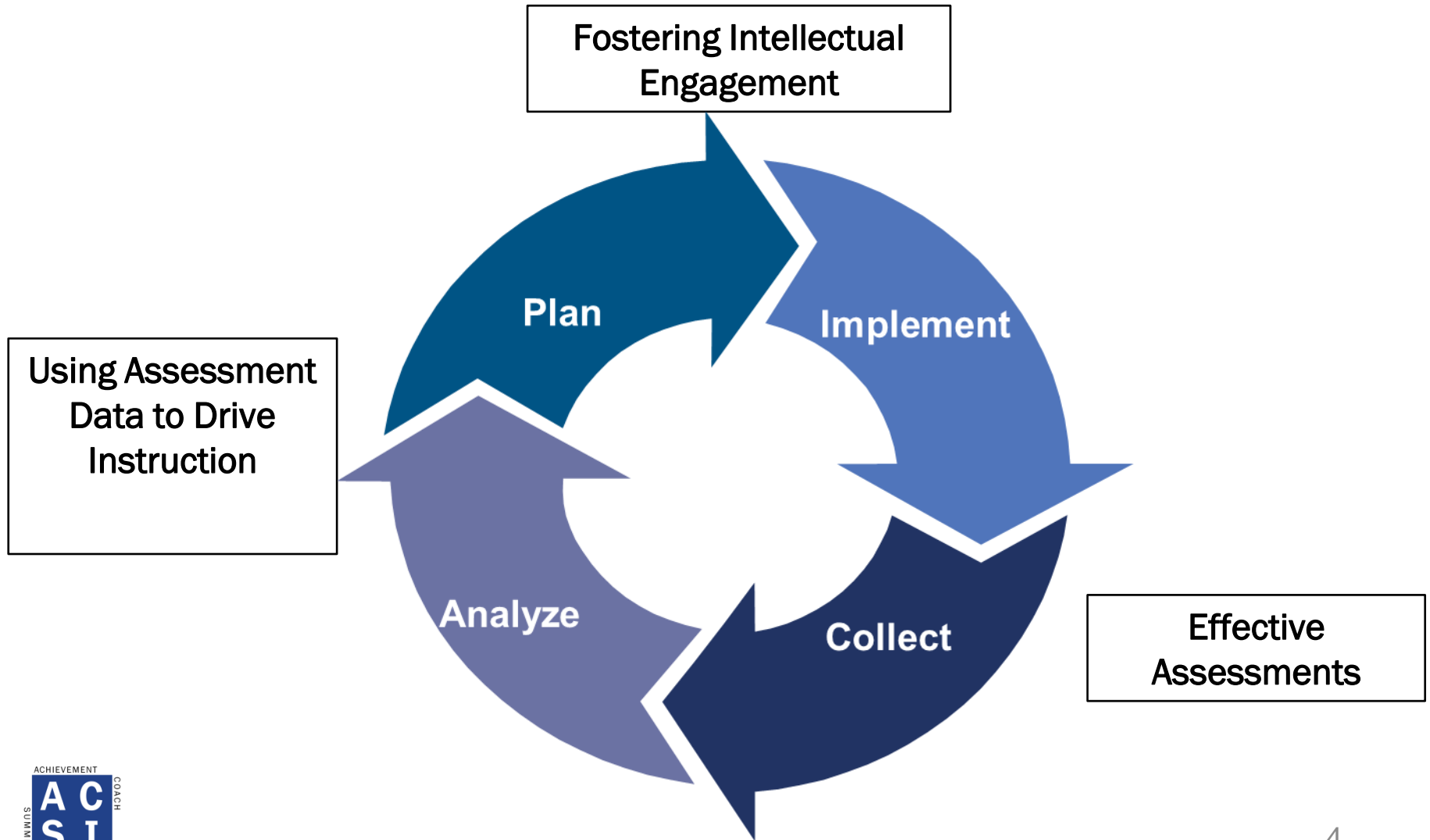
Apply concepts from today's presentation in planning concrete next steps towards…

- determining the **purpose** of assessments in monitoring student learning.

- creating true **value** in assessing students by properly integrating them into the teaching and learning cycle.

- incorporating the five elements of assessment design in creating balanced and well-designed assessment items which **accurately** measure what students know and can do.

Agenda

- **INTRODUCTION**

- DETERMINING THE **PURPOSE** OF AN ASSESSMENT

- IMPLEMENTING **VALUABLE** ASSESSMENT PRACTICES

- DESIGNING **ACCURATE** ASSESSMENTS

Monitoring and Adjusting in the Teaching and Learning Cycle

Fostering Intellectual Engagement

Plan

Implement

Using Assessment Data to Drive Instruction

Analyze

Collect

Effective Assessments

Assessments and the Learning Process

Testing: Dipstick versus Learning Tool
Make it Stick

"There are few surer ways to raise the hackles of many students and educators than talking about testing. The growing focus over recent years on standardized assessment, in particular, has turned testing into a lightning rod for frustration over how to achieve the country's education goals . . But if we stop thinking of testing as a dipstick to measure learning-if we think of it as practicing retrieval of learning from memory rather than "testing," we open ourselves to another possibility: ***the use of testing as a tool for learning.***"

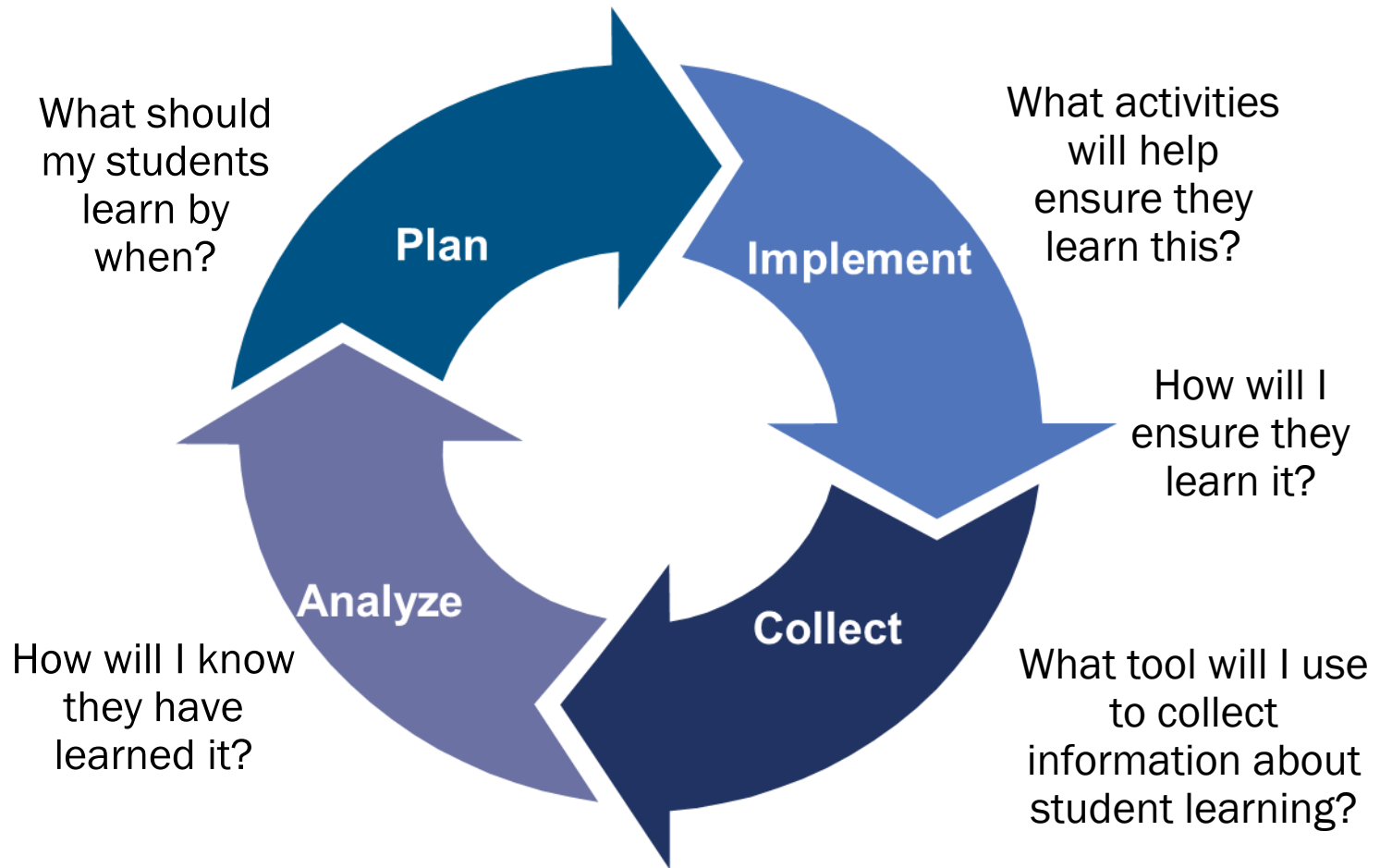(Brown, Roediger, & McDaniel, 2014)

"Learning to Love Assessment"

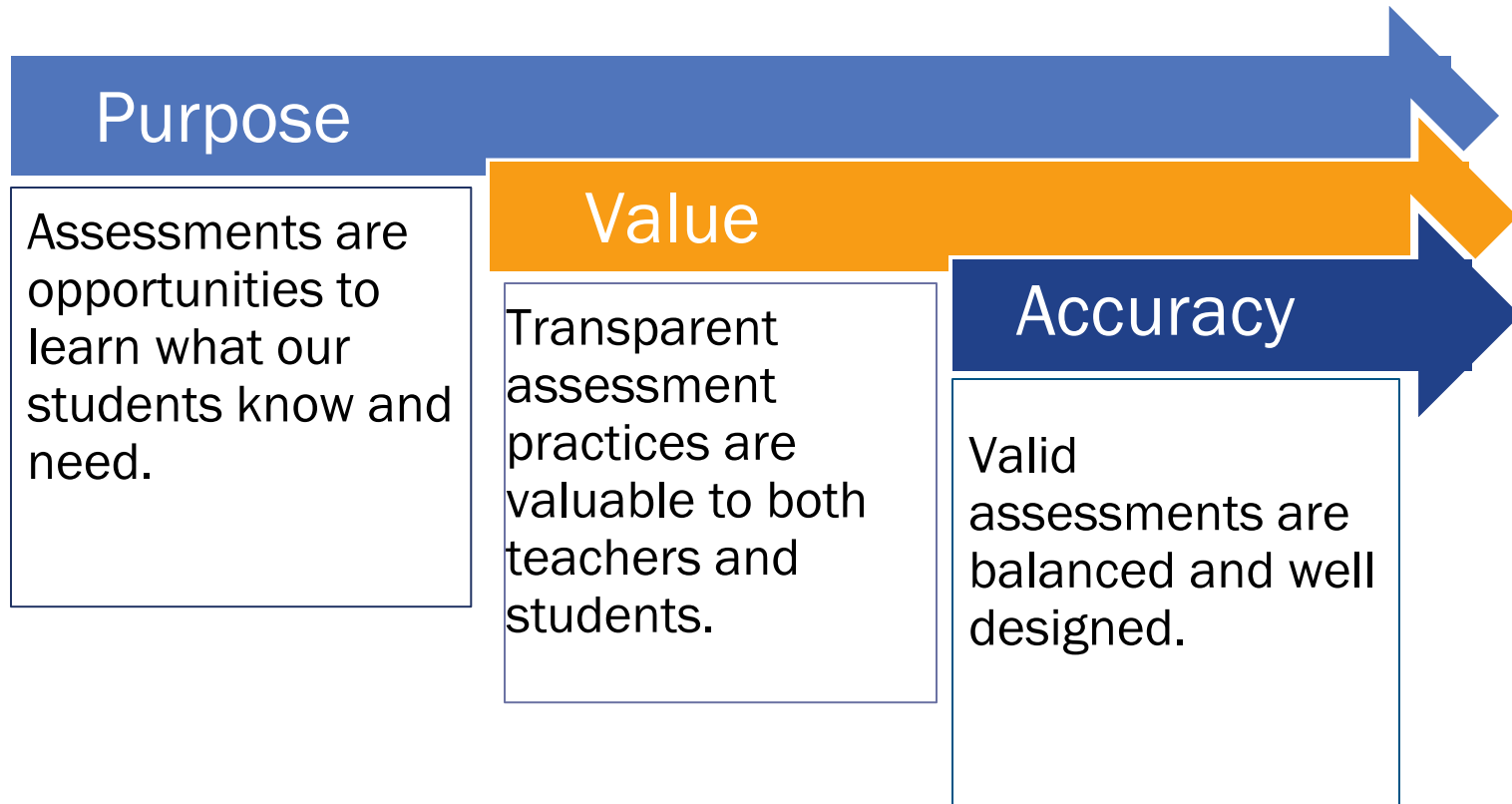Read the first page of the article and your assigned understandings.

- Complete Boxes 1-4 in the graphic organizer
- Discuss your responses with your group members
- Determine a spokesperson for your group
- Share out
- Apply

PREPARE for it: List 3 words that come to mind when you hear the word "assessment."
1. 2. 3.

1. SUMMARIZE it: What is the main idea of the article?	2. REACT to it: What was your reaction? Did you agree or disagree with the author? Why?
3. ANALYZE it: What caused the author's approach to assessments to change? What were the effects of these changes?	4. SOLVE it: What was the most important concept you took from the article?

APPLY it: How does this look in your classroom? What changes could you make to implement these ideas?

Where do Assessments Belong in the Teaching and Learning Cycle?

What should my students learn by when?

What activities will help ensure they learn this?

How will I ensure they learn it?

How will I know they have learned it?

What tool will I use to collect information about student learning?

Plan

Implement

Collect

Analyze

Effective Assessments

Purpose

Assessments are opportunities to learn what our students know and need.

Value

Transparent assessment practices are valuable to both teachers and students.

Accuracy

Valid assessments are balanced and well designed.

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The Purposes of Assessment

- **Think about ways you currently assess student learning throughout a unit of study.**
  - Take one minute to write down as many as you can on separate post-its

The Purposes of Assessment

Diagnostic Assessment: Used to determine students' knowledge and skills before a unit of instruction.

Formative Assessment: Used to monitor student learning and adjust ongoing instruction.

Interim Assessment: Measure students' knowledge and skills on a specific set of academic goals, typically within a particular time frame.

Summative Assessment: Measure student mastery of standards at the end of a unit of instruction.

Diagnostic Assessment

Formative Assessment

Interim Assessment

Summative Assessment

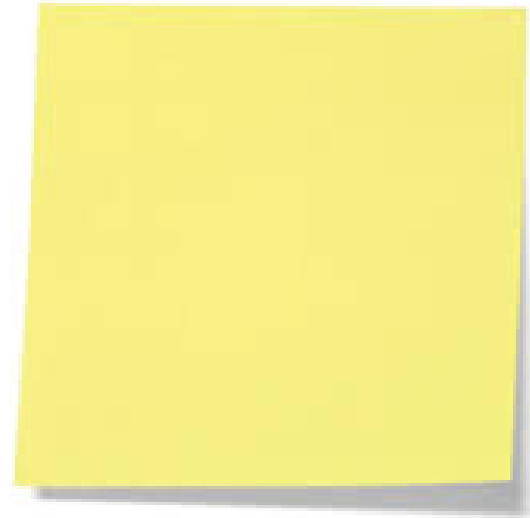The Purposes of Assessment

The Purposes of Assessment Activity

1. **Return to post-its.**
   – Sort assessments into purposes

2. **Reflect:**
   – Could you have sorted them differently? How and why?

Practice: Determining the Purpose

	Diagnostic	Formative	Interim	Summative
Purpose	To gauge students' knowledge and skills before a unit of instruction	To monitor student learning and adjust ongoing instruction	To measure student progress relative to an academic goal	To measure student mastery of standards at the end of a unit of instruction
Examples				
When administered				
How students use results				
How teachers use results				

Check for Understanding

Using the posters around the room, and table you created, respond to this question using the handout provided:

What are the purposes of assessment?

Key Takeaways

Assessment is a tool for learning when used
- to determine what students know
- to determine what students need to know
- to determine what students learned
- to plan instruction
- to help students gauge their progress

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Implementing Valuable Assessment Practices

Assessment practices which

create student ownership of learning include:

- Incorporating a **variety** of assessment approaches.
- Continuously providing task- involving **feedback**.
- Creating opportunities for **productive struggle**.
- Developing and utilizing **common assessments** when practical.

Teaching and Learning Cycle

A process by which teachers...

- Plan – Develop curriculum, instruction, and assessments

- Implement – Teach

- Collect – Gather indicators of student progress

- Analyze – Identify trends, patterns, and misconceptions; decide what needs more reinforcement or re-teaching

- Plan – Refine the plan based on analysis of the data
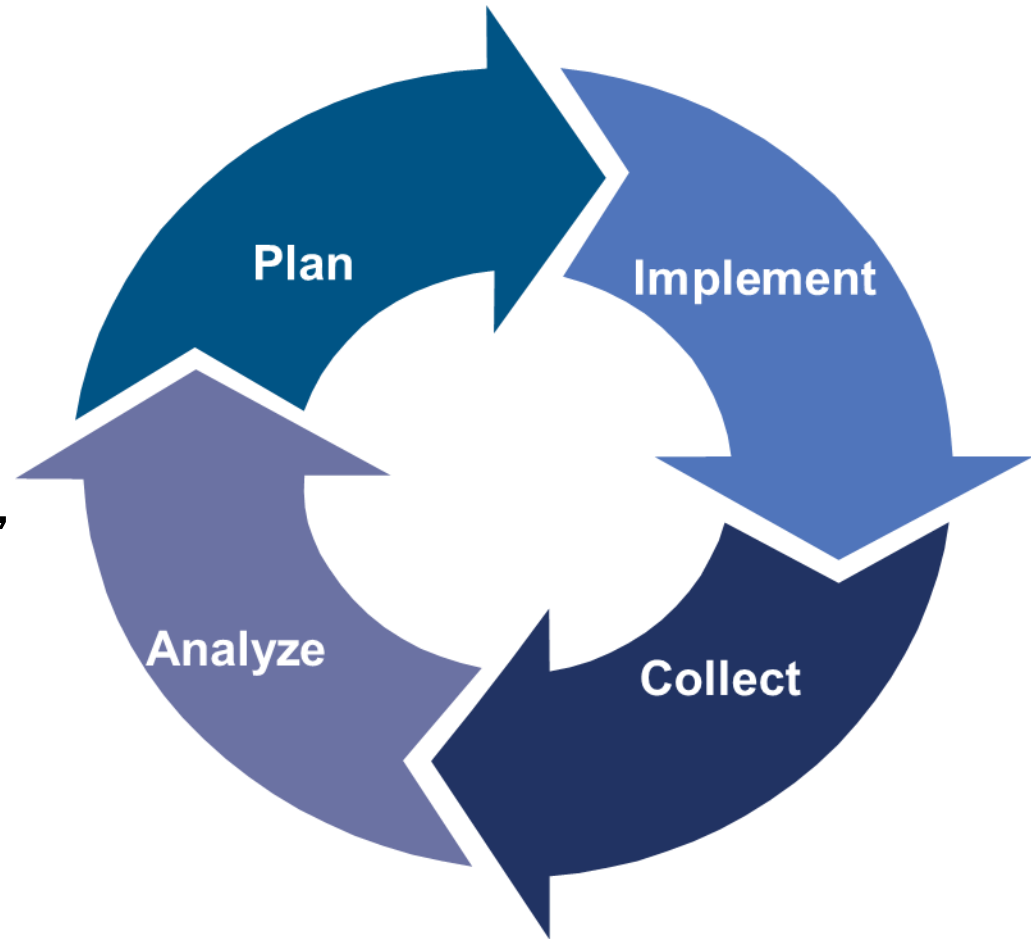
Let's Learn about the Olympics

We're off to the Olympics!

What do we Know?

1. Kahoot.it

2. Type in game pin #

3. Type your first name and first letter of your last name

Objectives

- Describe places of interest in Rio De Janeiro.

- Identify current political issues and how they are impacting the games.

- Identify current headlines and how they are impacting people's interest in the games.

Z Chart

Title

The "gist" of your topic

Three important ideas associated with your topic
1.
2.
3.

Picture representation(s) of your topic

Why is this important?

With Your Group...

1. Research

2. Complete "Z" Chart

3. Plan Presentation
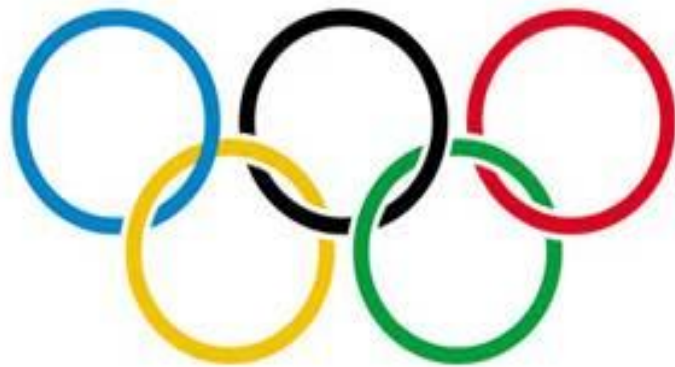
4. Practice and Critique

5. Refine

Graphic Organizer

Geography · Politics · Headlines · Impact · Questions

Here we go!

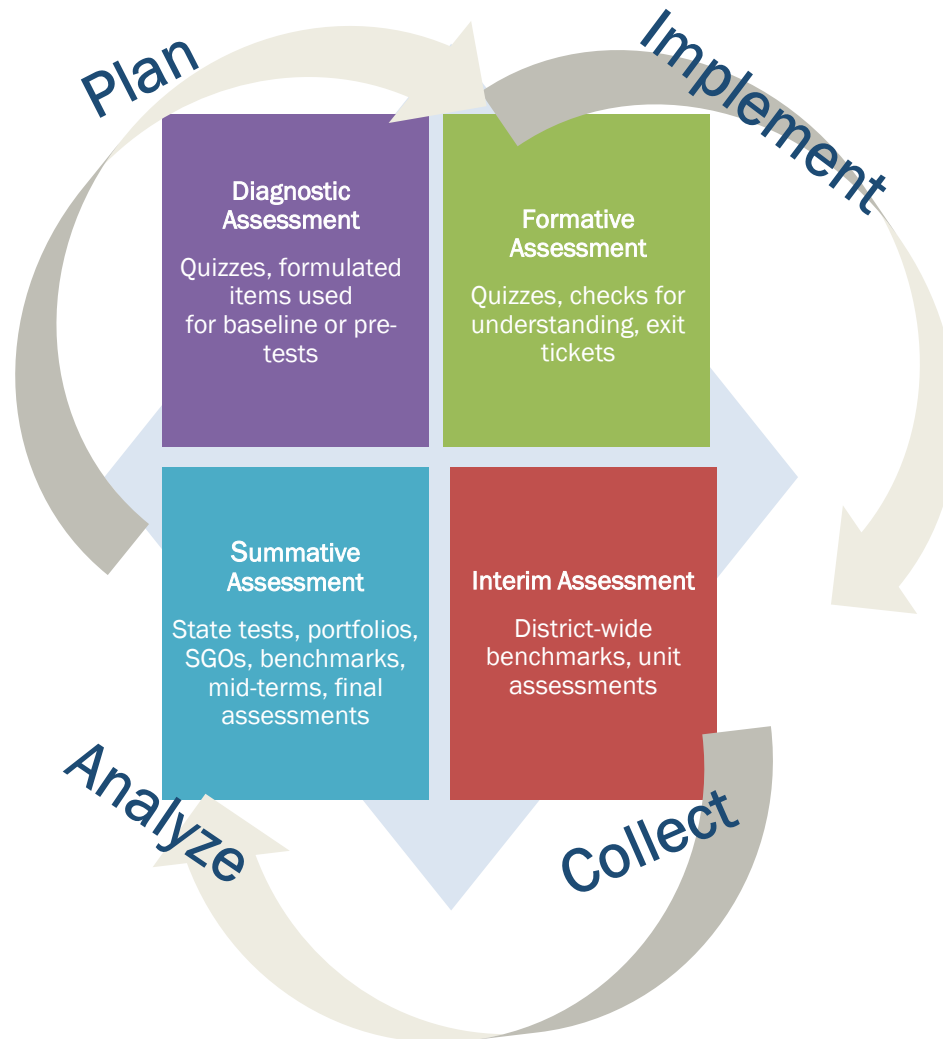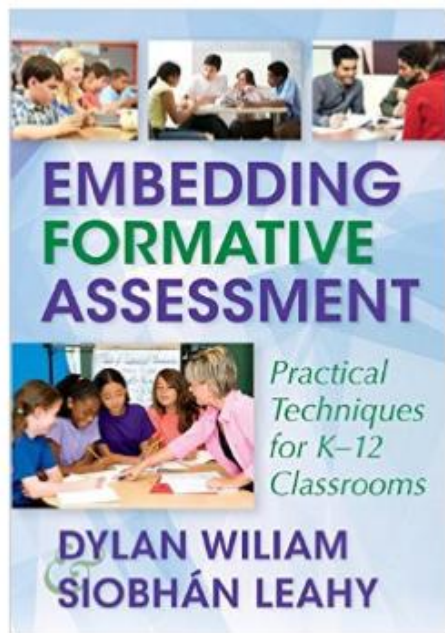presentation → gallery walk → assessment

Show us what you know!

- Write a one minute essay on what you've learned. Be sure to include how the politics, places of interest and headlines are impacting the games.

Monitoring and Adjusting Instruction

Plan

Implement

Diagnostic Assessment

Quizzes, formulated items used for baseline or pre-tests

Formative Assessment

Quizzes, checks for understanding, exit tickets

Summative Assessment

State tests, portfolios, SGOs, benchmarks, mid-terms, final assessments

Interim Assessment

District-wide benchmarks, unit assessments

Analyze

Collect

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Incorporate a Variety of Approaches

Resources we love for assessment strategies!

Review the Effective Assessment Strategy Grid

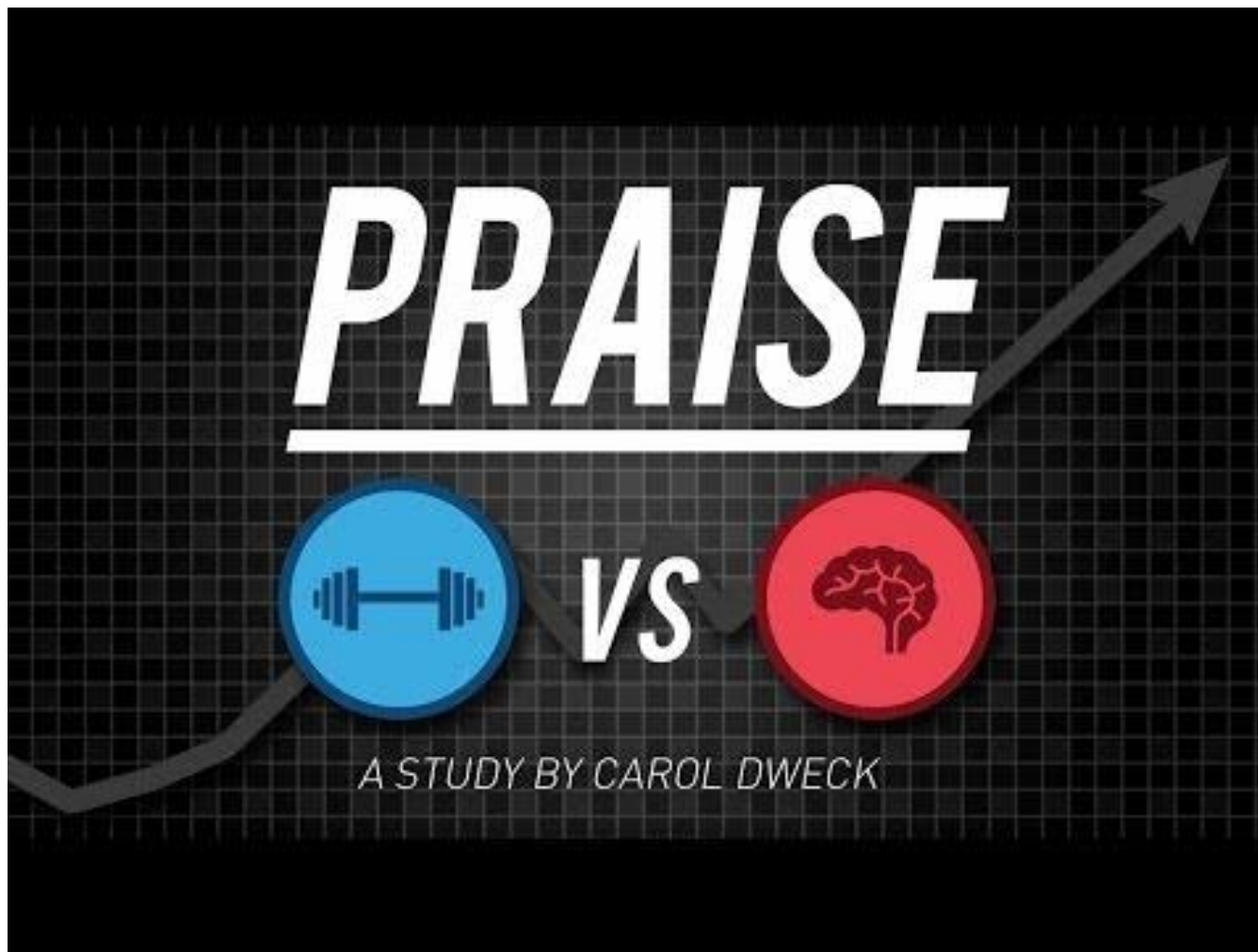**Indicate one new strategy you would like to use and explain how you would use it in your classroom.**

EMBEDDING FORMATIVE ASSESSMENT

Practical Techniques for K–12 Classrooms

DYLAN WILIAM & SIOBHÁN LEAHY

Effective Assessment Strategy Grid

Oral Language

Strategy	
Accountable Talk	
Noticing nonverbal cues	
Value lineups	
Retellings	
Think-Pair-Share	
Think-Pair-Square	
Novel Ideas Only	

Nancy FREY

CHECKING FOR UNDERSTANDING
2ND EDITION
FORMATIVE ASSESSMENT TECHNIQUES FOR YOUR CLASSROOM
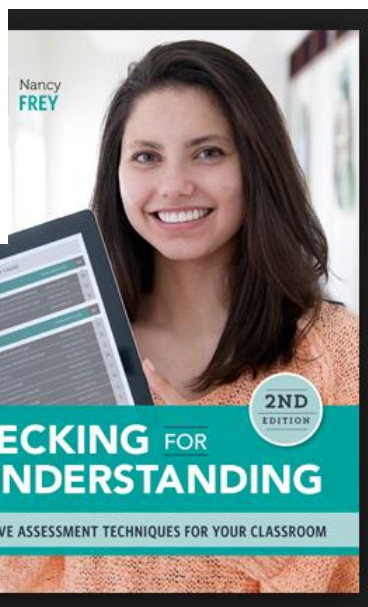
Provide Valuable Feedback

Feedback Activity

Feedback Should Be More Work For The Recipient Than The Donor

- Focus on the reaction of the students, not the feedback.
- Develop a growth mindset in your students.
- Design feedback as part of a system.
- Focus more on longer time for feedback.
- Concentrate on personal bests, not efforts or ranks.
- Make feedback into detective work.
- Provide comment-only grading.
- Use focused feedback.

Provide Valuable Feedback

The Praise Makeover	
Before	**After**
"Great Job!"	"I like the way you tried all kinds of strategies on this problem until you finally got it."
"I'm proud of you"	"You went back to check your work – that extra step was a great idea."
"You got an A!"	"Those extra problems you did really made a difference."
"You're so smart"	"It was a long, hard assignment, but you stuck to it and got it done. That's great!"
"Don't worry, some people just aren't good at math"	"I like the effort you put in on this. I know you're frustrated, but we'll keep at it and find your best way to master this."

Productive Struggle Leads to Success

SUCCESS

SUCCESS

What people think it looks like

What it really looks like

TheLeaderinMe.org

#TLIM

Create Opportunities for Productive Struggle

Productive Struggle in the Classroom

What is the teacher doing?	What are the students doing?	What else do you notice? (materials, resources, use of space and time, etc.)

Productive Struggle Leads to Student Ownership

Active learning methods such as self-quizzing, elaboration, and reflection cause students to:

- Reconsolidate memory
- Create mental models
- Broaden mastery
- Foster conceptual learning
- Improve versatility
- Prime the mind for learning

Common Assessments

Common assessments help to:

- provide guidance to drive instruction in more focused way
- provide consistency within departments
- show students that they are being held to high expectations/standards
- consolidate learning by bringing it all together

Check for Understanding

Which assessment practice is your area of strength and which is your area for growth?

Variety

Feedback

Productive Struggle

Common Assessments

Key Takeaways

Assessment practices which

create student ownership of learning include:

- Incorporating a **variety** of assessment approaches.
- Continuously providing task-involving **feedback**.
- Creating opportunities for **productive struggle**.
- Developing and utilizing **common assessments** when practical.

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The Assessment Design Modules
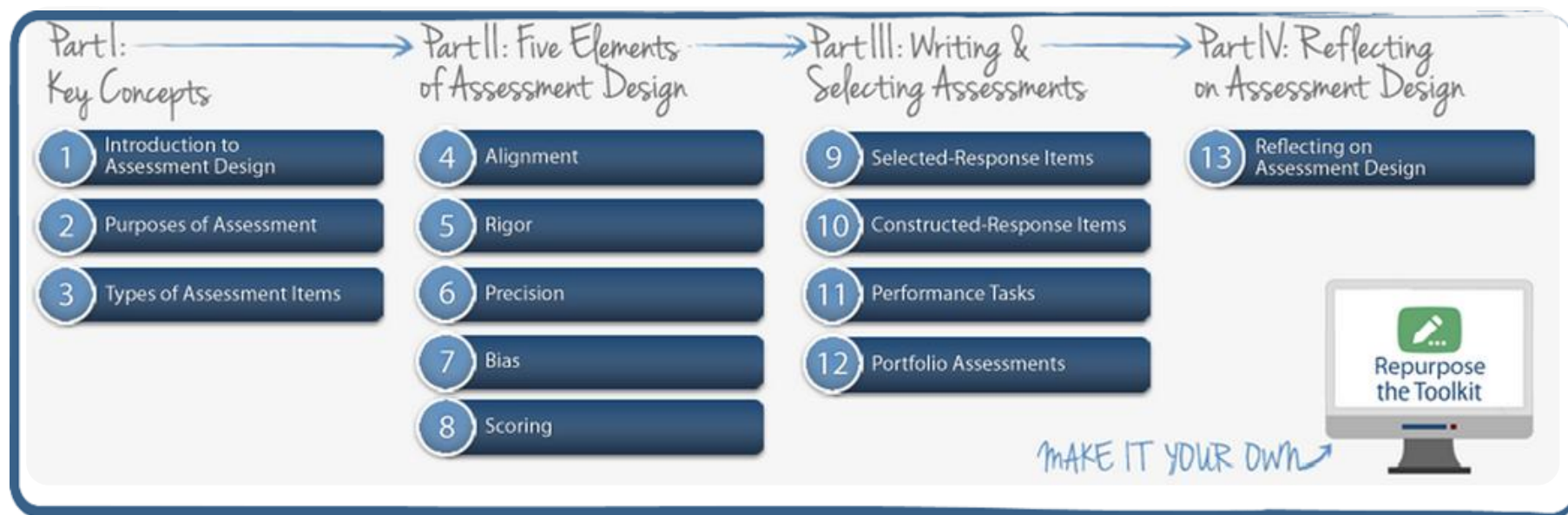
- 4 parts divided into 13 modules:
  - Part I: Key Concepts
  - Part II: Five Elements of Assessment Design
  - Part III: Writing & Selecting Assessments
  - Part IV: Reflecting on Assessment Design

Assessment Design Checklist

ASSESSMENT CHECKLIST

FIVE ELEMENTS OF ASSESSMENT DESIGN	☐	QUESTIONS
ALIGNMENT	☐	Is each assessment item aligned with the standard you intend to teach and measure?
RIGOR	☐	Does the level of rigor of each assessment item match the level of rigor of the skill you intend to measure?
	☐	Does the assessment measure a range of student thinking and understanding so that it measures what all students know and can do?
PRECISION	☐	Are all items well formatted?
	☐	Are the instructions for the assessment and each assessment item precise so that students understand where and how to address the item?
	☐	Are all assessment items free of typos and factual errors?
	☐	Does the assessment and each assessment item have all of the information that students will need to demonstrate their knowledge and skills?
	☐	Does the assessment and each assessment item indicate how many points each assessment item is worth (if relevant) and how much time students have to complete their work?
	☐	For multiple-choice items, is the prompt framed in the positive? Are the choices consistent in form, content and length? Are they ordered in a logical sequence? Are they all plausible?
	☐	For performance tasks and portfolio assessments, have you considered the "what, who, how and when" factors (if applicable)?
BIAS	☐	Did you ensure that each assessment item does not provide an advantage or disadvantage to any group of students because of their personal characteristics, such as race, gender, socioeconomic status or religion?
SCORING	☐	Have you developed a well-designed answer key(s), scoring guide(s) and/or rubric(s), as appropriate?
	☐	Do your answer keys and scoring guides include rationales for why choices are correct or incorrect? Do they include exemplar answers (if applicable)?
	☐	Are the dimensions in your rubric aligned to the standard(s) you will assess? Are they distinct from one another?
	☐	Does each descriptor in your rubric include a precise description of student performance for a particular dimension and performance level? Is each descriptor discrete from the descriptor in the performance level before and after it?
	☐	Are all teachers who are scoring your assessment using the same criteria?

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The Assessment Design Blueprint

ASSESSMENT BLUEPRINT

1. Determine the Primary Purpose of the Assessment	

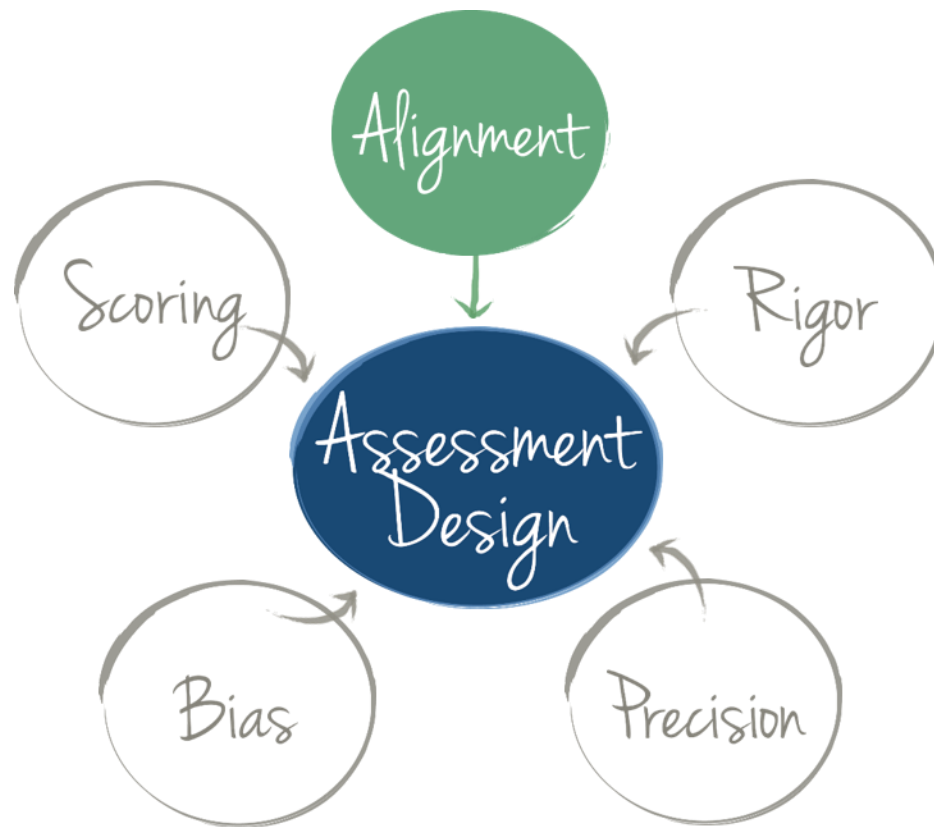| 2. Standard(s) (one per row)	3. Skill(s) (one per row)	4. Level(s) of Rigor	5. Possible Type(s) of Items

6. Write and/or Select Assessment Items					
Item #	Standard(s) and/or Skill(s)	Type of Item	Level of Rigor	# of Points	% of Assessment
TOTAL					

ASSESSMENT

Elements of Assessment Design: Alignment

An assessment aligned with standards measures student performance on those standards.

Alignment: Unpacking the Standard

Does each assessment item align with the standard you intend to teach and measure?

1. Read the Standard.

   Compare and contrast treatments of the same topic, or of various perspectives, in several primary and secondary sources; analyze how they relate in terms of themes and significant historical concepts.

2. Identify and clarify meanings of terminology used within the standard.

   RH.9-10.9: Compare and contrast treatments of the same topic, or of various perspectives, in several primary and secondary sources; analyze how they relate in terms of themes and significant historical concepts.

3. Nouns = content necessary, while verbs = what students need to do.

   – Verbs = *compare, contrast, analyze, relate*

   – Nouns = *treatments, "same topic," "several sources" primary, and secondary, themes, significant historical concepts*

# Alignment: Determine the Skills and Assessment

4. Determine skills necessary for students to fully demonstrate understanding of standards.

— *Summarizing articles; Compare and contrast over multiple sources; Differentiate primary and secondary sources; Recognize point of view/bias*

5. Discuss rationale for each skill.

6. Identify formative, diagnostic, interim and summative assessment strategies that could be used to assess this standard.

— *Non-content related articles to compare and contrast (high interest)*

— *Close reading activity, Station activity (analyzing documents from different sources/points of view: Abolition of Slavery, Gettysburg Address, New York Times article, Closure with question about each of the statements)*

— *Unit test (open ended question)*

— *Timed Document Based Question*

— *Research Paper*

Alignment: Determine the Skills and Assessment

Unit: _____

Standard	Skill(s)	Assessment Type (diagnostic, formative, interim, summative)	Assessment Strategy/Tool

Elements of Assessment Design: Rigor
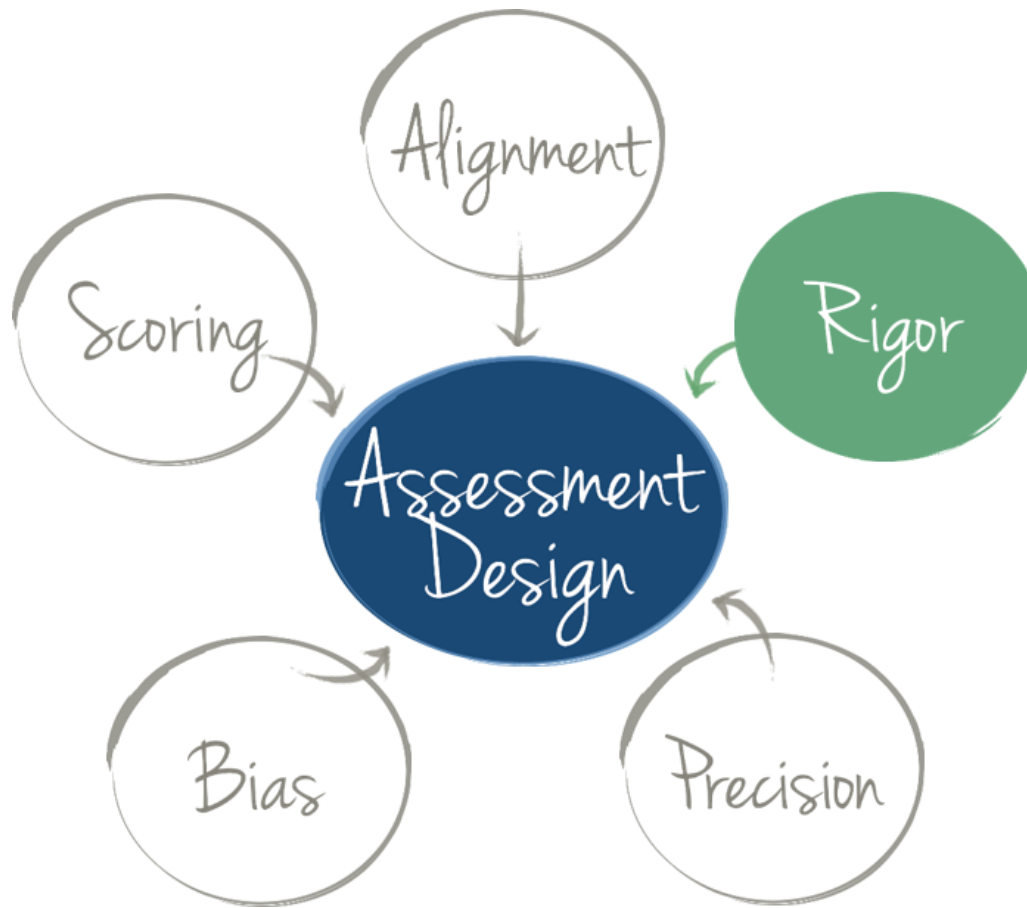
An assessment has "an appropriate level of rigor" if...

It includes items that match the level of rigor of the skill or skills you intend to measure.

It measures a range of student thinking and understanding so that it can determine what all students know and can do.

Understanding Rigor

Range of Rigor/Depth of Knowledge	
Why does it matter?	An assessment that **accurately reflects the range of rigor** of the course and instruction increases **the validity of inferences** educators can make about student learning. Provides **access points** to students of varying ability.
What does it look like?	The assessment requires a **range of thinking skills** as proposed by Webb's Depth of Knowledge (DOK) that reflects the **rigor of the course.**

Identifying Level(s) of Rigor

Depth of Knowledge Wheel (DOK)
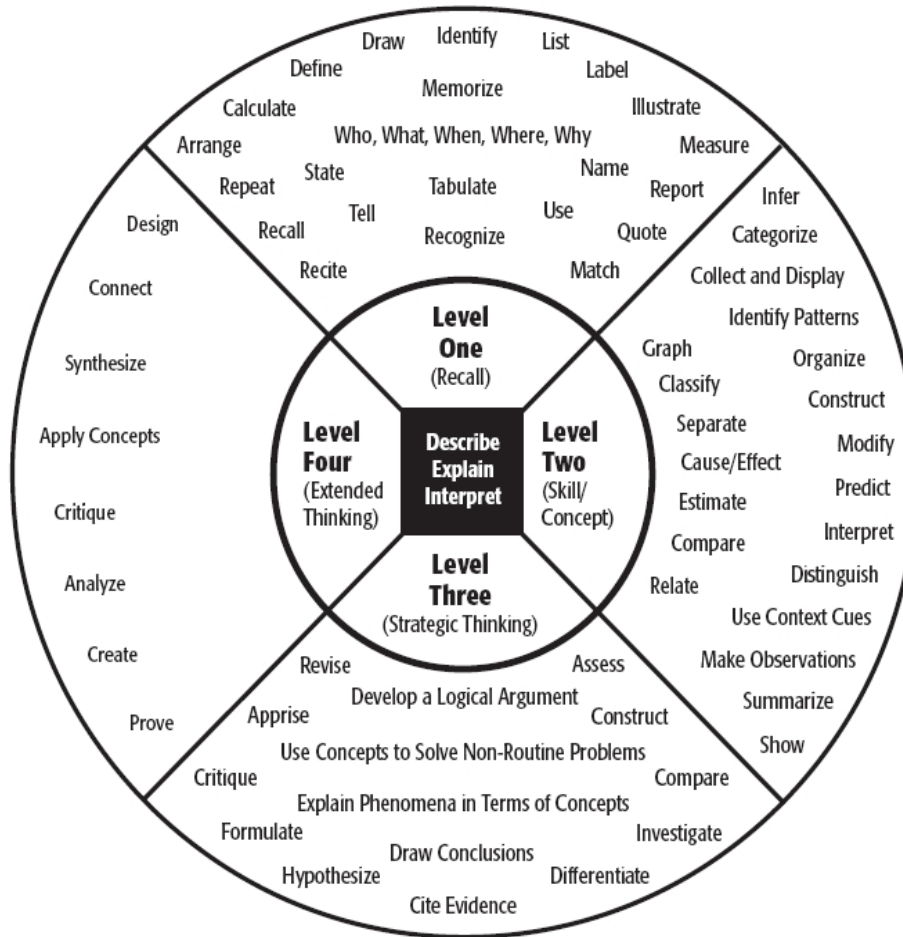
Practice: Identifying the Level of Rigor

Activity: Turn and Talk

Work with a neighbor to explain which level of the DOK wheel each activity represents and <u>why</u> it fits that level.

Choose two insects that you have observed and compare them.

Level 2: Basic Skills and Concepts

Name a food group.

Level 1: Recall and Reproduction

Create an in-depth character analysis, including textual and historical support for choices and perform said character.

Level 4: Extend Thinking

Identify two examples when a fork would not be the right utensil to use and explain why.

Level 3: Strategic Thinking and Reasoning

Rigor and Questioning Research

How does high quality questioning promote learning?

- Stimulate thinking
- Clarify understanding
- Reveal misconceptions
- Deepen understanding
- Hear alternate views
- Make connections

Rigor and Questioning

QUESTION CREATION CHART
(Q Chart)

	Is	Did	Can	Would	Will	Might
Who						
What						
Where						
When						
How						
Why						

Create questions by using one word from the left hand column and one word from the top row.

The further down and to the right you go, the more complex and high-level the questions.

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Rigor and Questioning

Does each assessment item align with the standard you intend to teach and measure? Does the assessment item reflect the appropriate level of rigor?

RH.9-10.9: Compare and contrast treatments of the same topic, or of various perspectives, in several primary and secondary sources; analyze how they relate in terms of themes and significant historical concepts.

- What is the main disagreement between the two authors?
- What would author X say in response to author Y?
- Why might these two authors have different views on the same topic?

Rigor and Questioning Activity

Group Activity:

Working in your small group, **create 3 - 4 questions** you could use to assess the standard you unpacked on the Alignment Tool.

Questions should represent a **range of rigor**.

Use the **Q Chart** and the **Depth Knowledge Wheel** to help with this.

Elements of Assessment Design: Precision

Alignment

Scoring

Rigor

Assessment Design

Bias
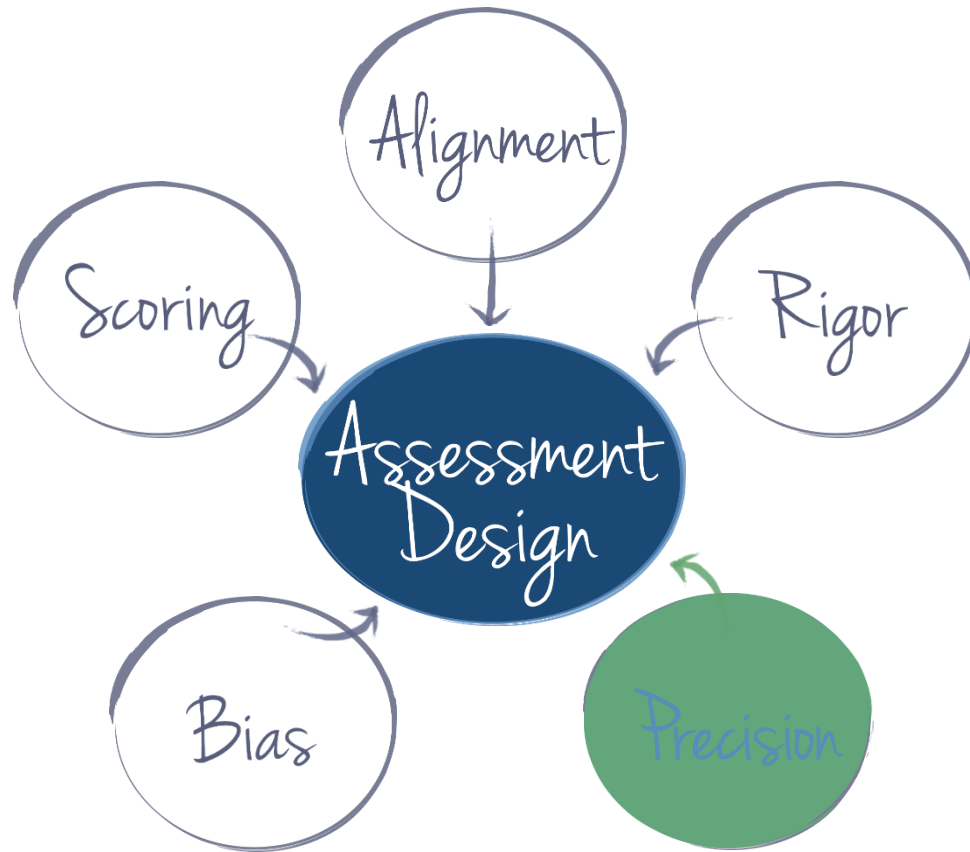
Precision

A precise assessment measures students' knowledge and skills, not their misinterpretations or lack of unrelated background knowledge.

Key Concepts in Precision

Well-designed assessments…

1. are formatted in a logical order

2. do **NOT** contain typos or factual errors

3. contain accurate and clear instructions

4. include all of the information students need to demonstrate their knowledge and skills

Key Concepts in Precision

How could this item be constructed to be made more precise?

Marcus has 34 marbles. He puts an equal number of marbles into four bags. For 1a–1d, choose Yes or No to indicate whether each number sentence could be used to find the number of marbles that Marcus puts in each bag.

a. $36 \times 4 =$

b. $36 \div 4 =$

c. $36 \times = 36$

d. $36 \div = 36$

How could this item be constructed to be made more precise?

Marcus has 34 marbles. He puts an equal number of marbles into four bags. For 1a–1d, choose Yes or No to indicate whether each number sentence could be used to find the number of marbles that Marcus puts in each bag.
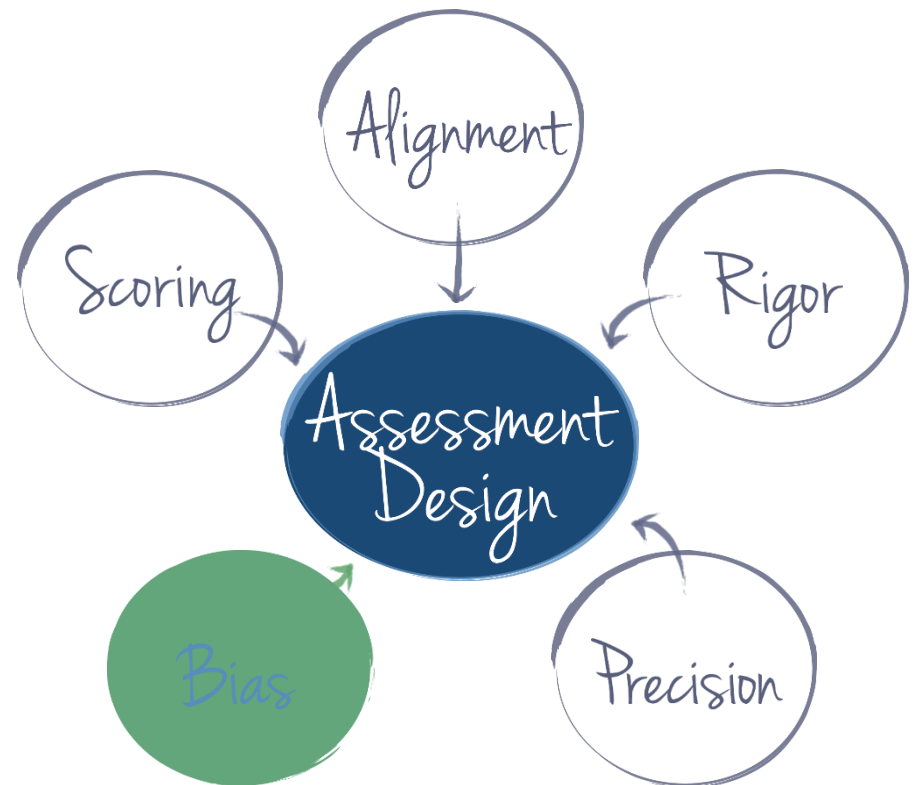
a. 36 x 4 = ⬭

b. 36 ÷ 4 = ⬭

c. 36 ⬭ x = 36

d. 36 ⬭ ÷ = 36

Elements of Assessment Design: Bias

An unbiased assessment
- measure students' knowledge and skills
- do not measure differences amongst students because of their personal characteristics

Is this an Example of Bias?

Which of the following measures could be the length of a typical hole in a golf course?

    a. 300 inches

    b. 300 feet

    c. 300 yards

    d. 300 miles

Is this an Example of Bias?

Which of the following measures could be the length of a typical hole in a golf course?

    a. 300 inches

    b. 300 feet

    c. 300 yards

    d. 300 miles

What is the source of bias?

Familiarity with Golf

Measurement Units

Socioeconomic Status
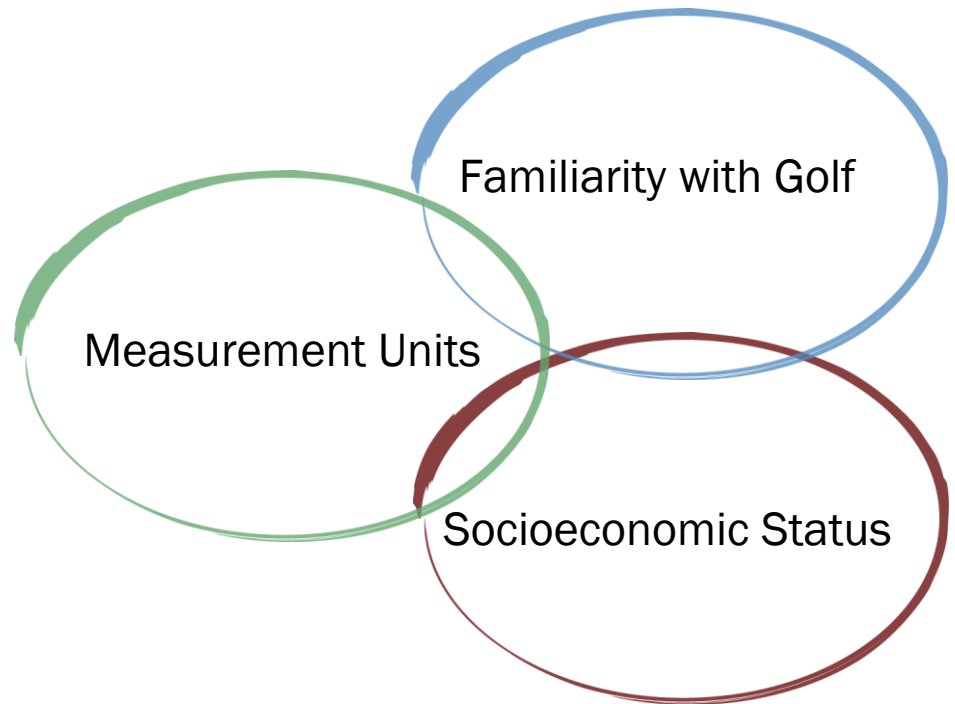
Detecting Bias

- Remember, bias does not mean that assessment items cannot include *any* references to topics that may interest some groups of students and not others. That would make designing assessments nearly impossible.
- It's difficult to detect your own bias.

Precision and Bias Activity

Go back to the questions you created in the previous activity.   Trade.

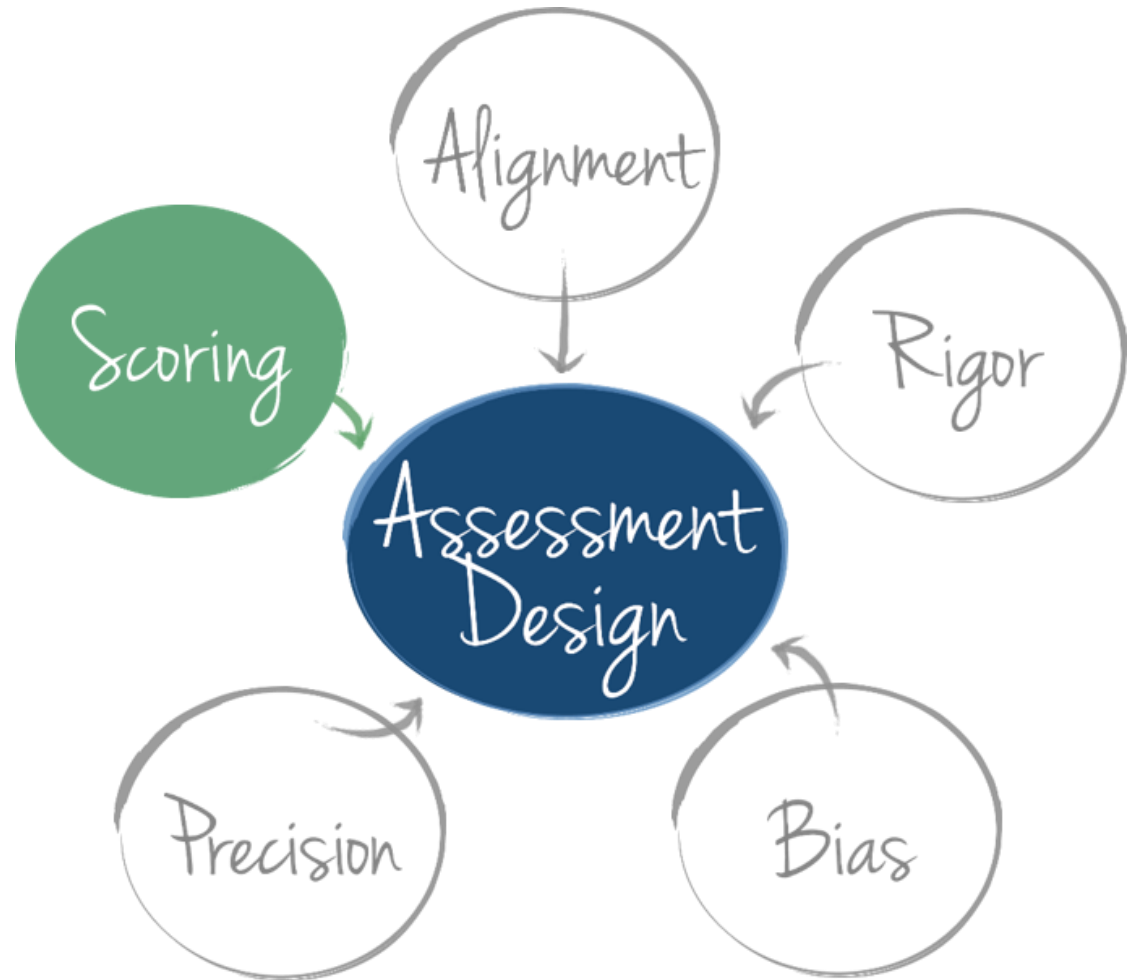Evaluate each question for **precision** and **bias.**

Were any of the questions biased in any way?

How could they be improved?

Elements of Assessment Design: Scoring

An assessment that has an appropriate scoring strategy measures students' knowledge and skills, not how the assessment is scored or who scores it.
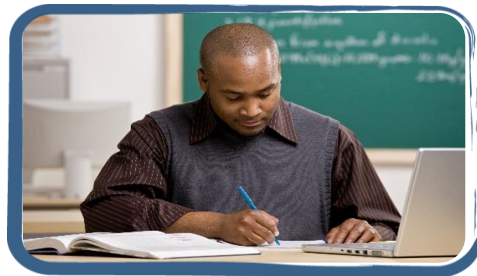
Effective Scoring Methods Include...

Scoring Guides

Answer Keys

Rubrics

Scoring Options

Scoring Options

Go back to the **list of assessment strategies** you created earlier.

Choose one and **decide the best possible scoring option.** Be prepared to **explain why** you chose this scoring option.

How could another scoring option change the data?
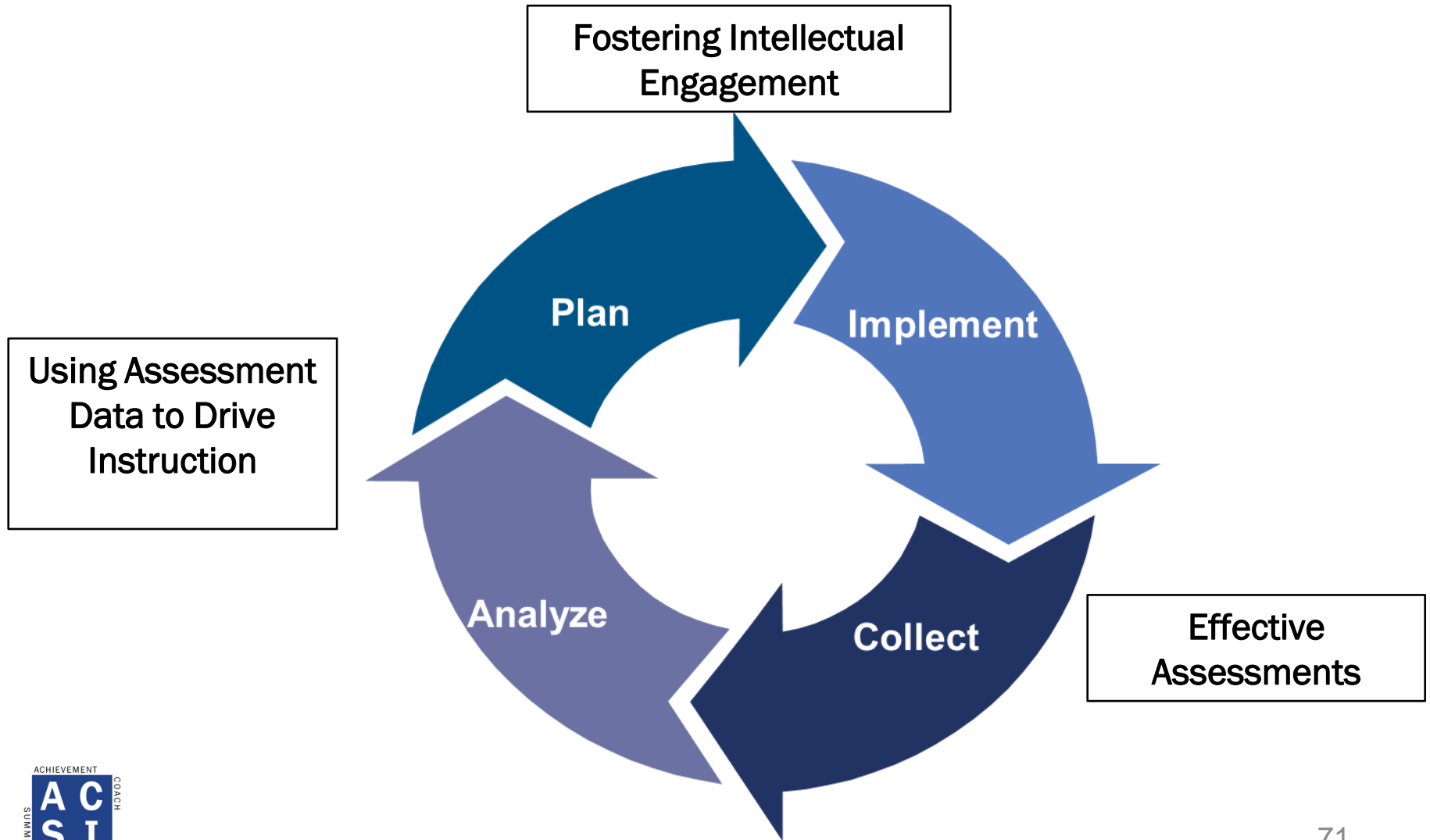
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Key Takeaways

Assessments should
- align to standards.
- match the level of rigor of the standard and include a range of rigor.
- be constructed with precision.
- be checked for bias.
- utilize an appropriate scoring method.

Monitoring and Adjusting in the Teaching and Learning Cycle

Fostering Intellectual Engagement

Using Assessment Data to Drive Instruction

Plan

Implement

Analyze

Collect

Effective Assessments

Tying it all Together

If you were riding in an elevator with your superintendent, a parent, a student and a colleague, and they asked you about the assessment cycle, what would you say? Write your one-minute explanation.

Closure

5 R's of Reflecting

- *Restate:* What did you learn?

- *React:* What is your opinion?

- *Relate:* How does it relate to you?

- *Respond:* With a question.

- *Realize:* Why is it important?

Closure

Set a SMART Goal
for your practice

Specific
Measurable
Action-Oriented
Realistic
Time-bound

Closure

Now that you've set a goal,

make it stick!

No goal: 0%

Set a goal: 20%

Write it down: 35%

Accountability partner: 51%

Specific action steps: 86%