



Day #1 Learning Outcomes...

- o Gain an awareness of the research regarding classroom assessment.
- o Understand the differences among obtrusive, unobtrusive, and student-generated assessments and how to use each in the classroom.
- o Learn essential practices for classroom assessment:
 - 1) Identify priority standards for informing classroom assessment development.
 - 2) Provide clear understanding of the learning goal through proficiency scale development.
 - 3) Provide instruction that focuses on the learning goal.
 - 4) Provide frequent and meaningful feedback.
 - 5) Provide opportunities for students to set goals, reflect on learning, and track their own progress.
- o Learn about common assessment development for monitoring student progress to essential content.
- o Learn data analysis practices related to classroom assessment.

888.849.0851 marzanoresearch.com

HANDOUT PAGE 2



1 On Your Own...

✧ You, yourself, and YOU!

*Please take a bit to complete the anticipation guide found in your handout on **page 3**.*



2 Elbow Partner...

✧ Someone sitting right next to you



Please share your “best hope” for these two days of training.

Also, please compare results on the anticipation guide you just completed.

3 **Close Partners...**



When I say go:

Please form groups of 2 or 3 with others sitting near you, but not at your table.

Take 60 seconds to introduce yourselves and then discuss the following question:

How do you define classroom assessment?

888.849.0851 marzanoresearch.com 

4 **Table Partner Groups...**



Let's get going:

Please consider each statement on the screen and determine your level of agreement.

Share some of your own experience and expertise in relation to each statement.

Time = 5 minutes

888.849.0851 marzanoresearch.com



Research by Jorissen, 2006

“Most teachers say they develop their assessment knowledge and practices on the job.”

888.849.0851 marzanoresearch.com



Research by Rick Stiggins, 2008

“We have trusted those we believe to be more knowledgeable in test item development to develop our assessments.”

(textbook and test-making companies)

888.849.0851 marzanoresearch.com



Popham and Stiggins, 2008

“We have misunderstood the significance and hence slighted the purpose of daily classroom assessment.”

888.849.0851 marzanoresearch.com 

Day #1 Learning Outcomes...

- o Gain an awareness of the research regarding classroom assessment.
- o Understand the differences among obtrusive, unobtrusive, and student-generated assessments and how to use each in the classroom.
- o Learn essential practices for classroom assessment:
 - 1) Identify priority standards for informing classroom assessment development.
 - 2) Provide clear understanding of the learning goal through proficiency scale development.
 - 3) Provide instruction that focuses on the learning goal.
 - 4) Provide frequent and meaningful feedback.
 - 5) Provide opportunities for students to set goals, reflect on learning, and track their own progress.
- o Learn about common assessment development for monitoring student progress to essential content.
- o Learn data analysis practices related to classroom assessment.

888.849.0851 marzanoresearch.com **HANDOUT PAGE 2** 

Classroom assessment is...

Anything a teacher does to gather information about a student’s knowledge or skill regarding a specific topic.

Marzano, R. (2010) *Formative Assessment and Standards-Based Grading*, Bloomington, IN, Marzano Research Laboratory

888.849.0851 marzanoresearch.com 

Why should we do it?

Assessment results are one type of feedback!

Hattie and Timperley (2007) synthesized the most current and comprehensive research on feedback and summarized findings. They calculated an overall average effect size of **0.79**, translating to a **29 percentile point gain**.

Another way of saying this is that a student at the 50th percentile in a classroom where feedback *was not* provided would be predicted to rise to the 79th percentile if he or she *was* provided with feedback.

What makes for effective feedback?

- Timely
- Specific and clear
- Corrective
- Fosters a growth mindset

888.849.0851 marzanoresearch.com



Why should we do it?

In a research review based on 250 empirical studies of classroom assessment that had been drawn from more than 800 published investigations, Paul Black and Dylan William concluded:

“The research reported here shows conclusively that formative assessment does improve learning.”

888.849.0851 marzanoresearch.com



Day #1 Learning Outcomes...

- o Gain an awareness of the research regarding classroom assessment.
- o **Understand the differences among obtrusive, unobtrusive, and student-generated assessments and how to use each in the classroom.**
- o Learn essential practices for classroom assessment:
 - 1) Identify priority standards for informing classroom assessment development.
 - 2) Provide clear understanding of the learning goal through proficiency scale development.
 - 3) Provide instruction that focuses on the learning goal.
 - 4) Provide frequent and meaningful feedback.
 - 5) Provide opportunities for students to set goals, reflect on learning, and track their own progress.
- o Learn about common assessment development for monitoring student progress to essential content.
- o Learn data analysis practices related to classroom assessment.

888.849.0851 marzanoresearch.com

HANDOUT PAGE 2





OBTRUSIVE

UNOBTRUSIVE

STUDENT-GENERATED

888.849.0851 marzanoresearch.com

HANDOUT PAGE 4



HANDOUT PAGE 4

Three Types of Assessment		
Assessment Type	Definition	Examples

Formative Assessment and Standards-Based Grading
Marzano, 2010

Marzano Research 2015 • marzanoresearch.com

Three Types of Assessment

Obtrusive

- Formalized, interrupt the normal flow of activity in the classroom
- pencil/paper tests, projects, quiz



888.849.0851 marzanoresearch.com 

The student will tell and write time from analog and digital clocks to the nearest five minutes.

888.849.0851 marzanoresearch.com 

OBTRUSIVE ASSESSMENT

Grade 2 Telling Time Assessment
Common Core 2.MD.3
The student will tell and write time from analog and digital clocks to the nearest five minutes.

Level 1

1. Write the correct time on the blank under each clock.





2. Find a partner. Count by 5's as far as you can up to 100 by completing this counting pattern:
5 10 15 _____ (keep going)

3. Fill in each blank to finish the description about one of the hands on the clock.
The longer hand on the clock is called the _____
The shorter hand on the clock is called the _____

4. Read each time and write it in the box using the correct format.

Time	Correct Format
Four o'clock	
Twenty-five minutes past eight	
Eleven thirty	

Three Types of Assessment

Unobtrusive

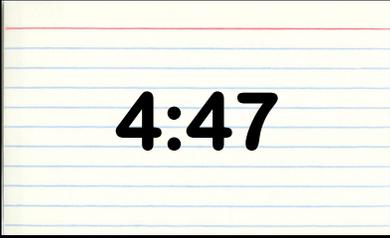
- Informal, do not interrupt the normal flow
- observations, listening for key ideas, watching for key actions or processes



888.849.0851 marzanoresearch.com 

The student will tell and write time from analog and digital clocks to the nearest five minutes.

888.849.0851 marzanoresearch.com 





Three Types of Assessment

Student-Generated

- Students generate their own ideas to show their current level of knowledge or skill



888.849.0851 marzanoresearch.com 



Can I show you how I can tell time on an analog clock? You give me a time, and I will move the hour and minute hands to the right place.

As we make decisions about student learning, we can **never** rely on a single assessment.

888.849.0851 marzanoresearch.com 

All assessments have measurement error.

Observed score = true score + error

888.849.0851 marzanoresearch.com 

One cause of measurement error...



- Student not feeling well on the day of the assessment.

888.849.0851 marzanoresearch.com 

What are some sources of measurement error?

- Student not feeling well on the day of the assessment.
- Poor test questions
- Visual and verbal distractions
 - Fire drill, bee in the room, window open, SNOW!!!
- Too many assessments on the same day!!
- Biological accidents
- Biased test questions
- Inadequate opportunity to learn

888.849.0851 marzanoresearch.com 

Which of these can we control?

- Student not feeling well on the day of the assessment.
- **Poor test questions**
- Visual and verbal distractions
 - Fire drill, bee in the room, window open, SNOW!!!
- **Too many assessments on the same day!!**
- Biological accidents
- **Biased test questions**
- **Inadequate opportunity to learn**

888.849.0851 marzanoresearch.com 

Day #1 Learning Outcomes...

- Gain an awareness of the research regarding classroom assessment.
- Understand the differences among obtrusive, unobtrusive, and student-generated assessments and how to use each in the classroom.
- **Learn essential practices for classroom assessment:**
 - 1) **Identify priority standards for informing classroom assessment development.**
 - 2) Provide clear understanding of the learning goal through proficiency scale development.
 - 3) Provide instruction that focuses on the learning goal.
 - 4) Provide frequent and meaningful feedback.
 - 5) Provide opportunities for students to set goals, reflect on learning, and track their own progress.
- Learn about common assessment development for monitoring student progress to essential content.
- Learn data analysis practices related to classroom assessment.

888.849.0851 marzanoresearch.com **HANDOUT PAGE 2** 

What the Research Says about Learning Goals...

Learning targets convey to students the **destination for the lesson** – what to learn, how deeply to learn it, and exactly how to demonstrate their new learning. In our estimation (Moss & Brookhart, 2009) and that of others (Seidle, Rimmel, & Prenzel, 2005; Stiggins, Arter, Chappuis, & Chappuis 2009), the intention for the lesson is one of the most important things students should learn. **Without a precise description of where they are headed, too many students are “flying blind.”**

Moss, Brookhart, Long (2011). Knowing Your Learning Target. Educational Leadership. 68 (6). Pp. 66-69

HANDOUT PAGE 6

The starting place for all effective instruction is designing and communicating clear learning goals.

Marzano (2009)

Our collective goal is that the largest possible percentage of our



How many of you feel like this about the content you are responsible for teaching in comparison to the instructional time available?



HOW do we know what is important enough to assess?

888.849.0851 marzanoresearch.com

MARZANO Research

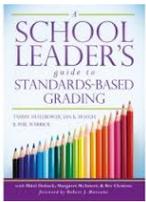
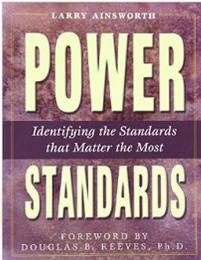


The idea of providing clear learning goals is not only Dr. Marzano's... other educational researchers share his train of thought.

888.849.0851 marzanoresearch.com 

"The ideas are simple, but the orchestration of these ideas, that's where the hard part comes in."

Lee Wolfe, GIPS Principal



888.849.0851 marzanoresearch.com 



Priority Standards



Supporting Standards

888.849.0851 marzanoresearch.com 

Priority Learning Goal

The learner will tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.

WHAT?

888.849.0851 marzanoresearch.com 

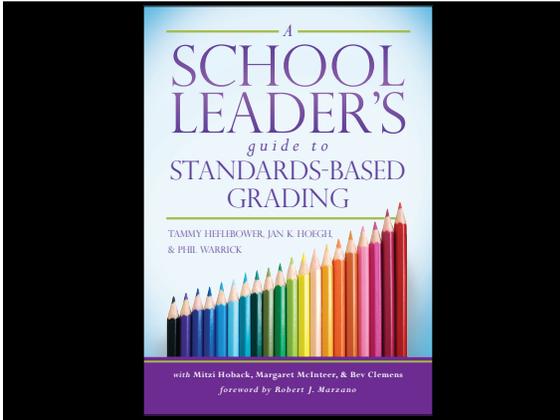
- **WHAT** must ALL students know and be able to do by the end of the year?
- **WHAT** must I monitor progress to (assess)?
- **WHAT** will inform the feedback I offer my students?

888.849.0851 marzanoresearch.com 



HOW do we identify priority and supporting standards?

888.849.0851 marzanoresearch.com 



Criteria for Prioritized Standards **HANDOUT PAGE 7**

Before teams begin to identify prioritized standards, they must understand the criteria for determining which standards should be prioritized. According to Larry Ainsworth (2003), there are three criteria to consider when determining which standards to prioritize:

1. **Endurance**—Knowledge and skills that will last beyond a class period or course
2. **Leverage**—Knowledge and skills that cross over into many domains of learning
3. **Readiness**—Knowledge and skills important to subsequent content or courses

Our experience has indicated that two additional criteria should also be considered:

1. **Teacher judgment**—Knowledge of content area and ability to identify more- and less-important content
2. **Assessment**—Student opportunity to learn content that will be assessed

As an example of how teachers can evaluate a specific standard for these five criteria,

**Determine the main idea of a text;
recount the key details and explain how
they support the main idea.**

Endurance?
Leverage?
Readiness?
Teacher Judgment?
Assessment Connected?

888.849.0851 marzanoresearch.com MARZANO Research



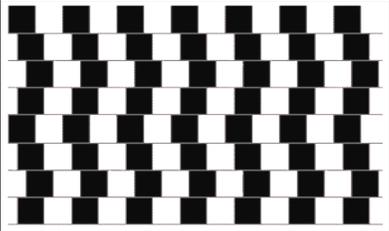
COMMON CORE
STATE STANDARDS INITIATIVE
PREPARING AMERICA'S STUDENTS FOR COLLEGE & CAREER

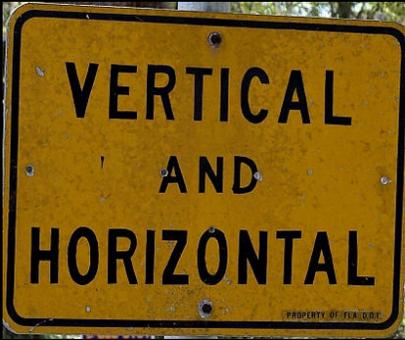
Determine the main idea of a text;
recount the key details and explain how
they support the main idea.

Endurance?	X
Leverage?	X
Readiness?	X
Teacher Judgment?	X
Assessment Connected?	X

888.949.0851 marzanoresearch.com 

HORIZONTAL PRIORITIZATION





VERTICAL
AND
HORIZONTAL

PROPERTY OF STATELODE

Let's try it...

Please work with your elbow partner(s) to complete handout page 8.

Priority or Supporting Standards – Work collaboratively to make decisions about each standard below.

P = Priority S = Supporting

_____ Determine a theme of a story, drama, or poem from details in the text

_____ Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing

_____ Measure areas by counting unit squares

_____ Fluently add and subtract multi-digit whole numbers using the standard algorithm

_____ Ask questions about data to determine the factors that affect the strength of electric and magnetic forces

_____ Use observations of the sun, moon, and stars to describe patterns that can be predicted

_____ Explain that currency must be converted to make purchases in other countries

888.849.0851 marzanoresearch.com Marzano Research 2015 • marzanoresearch.com

The process of prioritizing standards helps to determine what is monitored in the classroom through one of the three kinds of assessment.

888.849.0851 marzanoresearch.com 

Day #1 Learning Outcomes...

- Gain an awareness of the research regarding classroom assessment.
- Understand the differences among obtrusive, unobtrusive, and student-generated assessments and how to use each in the classroom.
- **Learn essential practices for classroom assessment:**
 - 1) Identify priority standards for informing classroom assessment development.
 - 2) **Provide clear understanding of the learning goal through proficiency scale development.**
 - 3) Provide instruction that focuses on the learning goal.
 - 4) Provide frequent and meaningful feedback.
 - 5) Provide opportunities for students to set goals, reflect on learning, and track their own progress.
- Learn about common assessment development for monitoring student progress to essential content.
- Learn data analysis practices related to classroom assessment.

888.849.0851 marzanoresearch.com **HANDOUT PAGE 2** 



The *foundation* for a high-quality classroom assessment is...

a high-quality proficiency scale.

888.849.0851 marzanoresearch.com



Let's learn more about what proficiency scales are by previewing the "telling time" proficiency scale...



888.849.0851 marzanoresearch.com

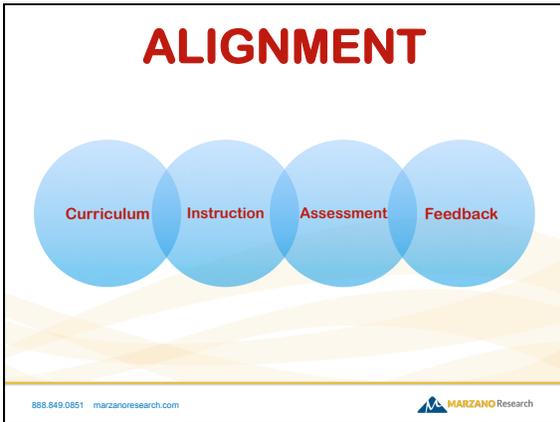


Let's move priority standards to a very usable format that provides instructional information and serves as a foundation for assessment development...

Proficiency Scales.

888.849.0851 marzanoresearch.com







The student will be able to:

- Tell time to the hour, half-hour, and quarter-hour.
- Tell and write time from analog clocks to the nearest five minutes.
- Solve real-world problems involving elapsed time.

888.849.0851 marzanoresearch.com MARZANO Research

The student will be able to:

- 2 Tell time to the hour, half-hour, and quarter-hour. (Simple content)**
- 3 Tell and write time from analog clocks to the nearest five minutes. (at the level of the standard)**
- 4 Solve real-world problems involving elapsed time. (complex content)**

888.849.0851 marzanoresearch.com 

Proficiency Scale
HANDOUT PAGE 9

4	In addition to exhibiting level 3 performance, in-depth inferences and applications that go BEYOND what was taught in class
3	No major errors or omissions regarding any of the information and/or processes (SIMPLE OR COMPLEX) that were explicitly taught
2	No major errors or omissions regarding the SIMPLER details and processes BUT major errors or omissions regarding the more complex ideas and processes
1	With HELP, a partial knowledge of some of the simpler and complex details and processes
0	Even with help, no understanding or skill demonstrated

888.849.0851 marzanoresearch.com 

Proficiency Scale

4	In addition to exhibiting level 3 performance, in-depth inferences and applications that go BEYOND what was taught in class
3	No major errors or omissions regarding any of the information and/or processes (SIMPLE OR COMPLEX) that were explicitly taught
2	No major errors or omissions regarding the SIMPLER details and processes BUT major errors or omissions regarding the more complex ideas and processes
1	With HELP, a partial knowledge of some of the simpler and complex details and processes
0	Even with help, no understanding or skill demonstrated

 **3** **No major errors or omissions regarding any of the information and/or processes (SIMPLE OR COMPLEX) that were explicitly taught**

 **Learning Goal**

888.849.0851 marzanoresearch.com 

Proficiency Scale

4	In addition to exhibiting level 3 performance, in-depth inferences and applications that go BEYOND what was taught in class
3	No major errors or omissions regarding any of the information and/or processes (SIMPLE OR COMPLEX) that were explicitly taught
2	No major errors or omissions regarding the SIMPLER details and processes BUT major errors or omissions regarding the more complex ideas and processes
1	With HELP, a partial knowledge of some of the simpler and complex details and processes
0	Even with help, no understanding or skill demonstrated

Proficiency Scale

4	In addition to exhibiting level 3 performance, in-depth inferences and applications that go BEYOND what was taught in class
3	No major errors or omissions regarding any of the information and/or processes (SIMPLE OR COMPLEX) that were explicitly taught
2	No major errors or omissions regarding the processes BUT omissions regarding complex ideas and processes
1	With HELP, a partial knowledge of some of the simpler and complex details and processes
0	Even with help, no understanding or skill demonstrated



Vocabulary

Score 2.5	No major errors or omissions regarding score 2.0 content, and partial success at score 3.0 content
2.0	The student will demonstrate proficiency, such as: <ul style="list-style-type: none"> • nearest, analog, clock, digital, minute, time, a.m., p.m. • tell and write time from digital clocks to the nearest five minutes (2.MD.7) • identify the hands on an analog clock • count by 5s to 60 • tell time to the hour, half-hour, and quarter-hour
Score 1.5	Partial success at score 2.0 content, and major errors or omissions regarding score 3.0 content
1.0	With help, partial success at score 2.0 content and score 3.0 content
Score 0.5	With help, partial success at score 2.0 content but not at score 3.0 content
0.0	Even with help, no success

Proficiency Scale

4	In addition to exhibiting level 3 performance, in-depth inferences and applications that go BEYOND what was taught in class
3	No major errors or omissions regarding any of the information and/or processes (SIMPLE OR COMPLEX) that were explicitly taught
2	No major errors or omissions regarding the SIMPLER details and processes BUT major errors or omissions regarding the more complex ideas and processes
1	With HELP, a partial knowledge of some of the simpler and complex details and processes
0	Even with help, no understanding or skill demonstrated

Please review all of the levels on the proficiency scale.

4	In addition to exhibiting level 3 performance, in-depth inferences and applications that go BEYOND what was taught in class
3	No major errors or omissions regarding any of the information and/or processes (SIMPLE OR COMPLEX) that were explicitly taught
2	No major errors or omissions regarding the SIMPLER details and processes BUT major errors or omissions regarding the more complex ideas and processes
1	With HELP, a partial knowledge of some of the simpler and complex details and processes
0	Even with help, no understanding or skill demonstrated

888.849.0851 marzanoresearch.com MARZANO Research

HANDOUT PAGE 10

The Five-Step Process for Developing Proficiency Scales

- 1) Determine the topic of the proficiency scale.
- 2) Determine the language of score 3.0 (the target learning goal).
- 3) Determine vocabulary related to the target learning goal and record it in score 2.0.
- 4) Determine prerequisite knowledge and skills and record it in score 2.0.
- 5) Discuss how a student might demonstrate a score 4.0 performance.

Topic: _____

Score 4.0 – More complex
Demonstrations of learning that go above and beyond what was explicitly taught
The learner will:
Score 3.0 – The target learning goal/expectation for all
The learner will:
Score 2.0 – The simpler stuff
Foundational knowledge, simpler procedures, isolated details, vocabulary
The learner will:
Score 1.0 – With help, the student can perform Score 2.0 and 3.0 expectations
Score 0.0 – Even with help, the student cannot perform expectations

STEP #1...

Determine the topic of the proficiency scale.



888.849.0851 marzanoresearch.com

MEASUREMENT, DATA, STATISTICS, AND PROBABILITY		
Time		
Grade 2		
Score 4.0	In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught. The student will: • solve real-world problems involving elapsed time • write correct digital time from an analog clock and the reverse	
Score 3.5	In addition to score 3.0 performance, partial success at score 4.0 content	
Score 3.0	The student will: • tell and write time from analog clocks to the nearest five minutes (2.MD.7)	Sample Activity: What Time Is It? Materials: analog clock in the classroom Procedure: Periodically during the day, the student will tell and/or write the time, also indicating what happens is going at particular time of the school day.
Score 2.5	No major errors or omissions regarding score 2.0 content, and partial success at score 3.0 content	
Score 2.0	The student will recognize or recall specific vocabulary, such as: • nearest, analog, clock, digital, minute, time, a.m., p.m. The student will perform basic processes, such as: • tell and write time from digital clocks to the nearest five minutes (2.MD.7) • identify the hands on an analog clock • count by 5s to 60 • tell time to the hour, half-hour, and quarter-hour	Sample Activities: Beat the Timer Center Activity: Materials: cards with different times to the five minutes; apps with digital clocks showing different times to the five minutes; egg timer Procedure: The student will match the times with the correct clock, trying to beat the egg timer.
Score 1.5	Partial success at score 2.0 content, and major errors or omissions regarding score 3.0 content	
Score 1.0	With help, partial success at score 2.0 content and score 3.0 content	
Score 0.5	With help, partial success at score 2.0 content but not at score 3.0 content	
Score 0.0	Even with help, no success	

Let's practice

The student will solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately.



888.849.0851 marzanoresearch.com

Topic: Word Problems with Money

Score 4.0	The student will:
Score 3.0	The student will:
Score 2.0	The student will:

STEP #2...

Determine the language of score 3.0 (the target learning goal).

888.849.0851 marzanoresearch.com



The student will solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately.

888.849.0851 marzanoresearch.com



Topic: Word Problems with Money

Score 4.0	
Score 3.0	<p>The student will:</p> <ul style="list-style-type: none"> Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies Use \$ and ¢ symbols appropriately
Score 2.0	

STEP #3...

Determine vocabulary related to the target learning goal and record it in score 2.0.

888.849.0851 marzanoresearch.com

MARZANO Research

Topic: Word Problems with Money

Score 4.0	The student will:
Score 3.0	<p>The student will:</p> <ul style="list-style-type: none"> Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies Use \$ and ¢ symbols appropriately
Score 2.0	<p>The student will:</p> <ul style="list-style-type: none"> Recognize or recall specific terminology, such as: \$, ¢, value, coin, penny, nickel, dime, quarter, dollar, all together, remaining

STEP #4...

Determine prerequisite knowledge and skills and record it in score 2.0.

888.849.0851 marzanoresearch.com 

Topic: Word Problems with Money

Score 4.0	The student will:
Score 3.0	The student will: <ul style="list-style-type: none">• Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies• Use \$ and ¢ symbols appropriately
Score 2.0	The student will: <ul style="list-style-type: none">• Recognize or recall specific terminology, such as: \$, ¢, value, coin, penny, nickel, dime, quarter, dollar, all together, remaining• Identify coin values (quarter, dime, nickel, penny)• Add or subtract different coins to determine a total amount of money or money remaining

STEP #5...

Discuss how a student might demonstrate a score 4.0 performance.

888.849.0851 marzanoresearch.com 

Topic: Word Problems with Money	
Score 4.0	The student will: <ul style="list-style-type: none"> Count back change from money values up to \$10.00
Score 3.0	The student will: <ul style="list-style-type: none"> Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies Use \$ and ¢ symbols appropriately
Score 2.0	The student will: <ul style="list-style-type: none"> Recognize or recall specific terminology, such as: \$, ¢, value, coin, penny, nickel, dime, quarter, dollar, all together, remaining Identify coin values (quarter, dime, nickel, penny) Add or subtract different coins to determine a total amount of money or money remaining

Day #1 Learning Outcomes...

- Gain an awareness of the research regarding classroom assessment.
- Understand the differences among obtrusive, unobtrusive, and student-generated assessments and how to use each in the classroom.
- Learn essential practices for classroom assessment:**
 - Identify priority standards for informing classroom assessment development.
 - Provide clear understanding of the learning goal through proficiency scale development.**
 - Provide instruction that focuses on the learning goal.
 - Provide frequent and meaningful feedback.
 - Provide opportunities for students to set goals, reflect on learning, and track their own progress.
- Learn about common assessment development for monitoring student progress to essential content.
- Learn data analysis practices related to classroom assessment.

888.849.0851 marzanoresearch.com **HANDOUT PAGE 2** 

Score 0.0	Even with help, no understanding or skill demonstrated
-----------	--



Proficiency Scale "Look Fors"

Scales SHOULD be:

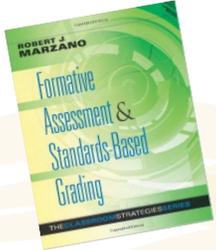
- Related to the learning goal
- Posted and able to be read by students
- Written in student-friendly language (when appropriate)
- Referenced during the lesson

Students SHOULD be able to explain:

- The meaning of the levels of performance articulated in the scale

Writing Scales in Student-Friendly Language

HANDOUT PAGE 11



888.849.0851 marzanoresearch.com 

**The student will ask and answer questions
to demonstrate understanding of a text,
referring explicitly to the text as the basis
for the answers.**

888.849.0851 marzanoresearch.com 

4	
3	I can ask and answer questions to show that I understand a text and I can refer to the text as the basis for my answers.
2	
1	

888.849.0851 marzanoresearch.com 

4	I can ask and answer questions to show that I understand a beyond grade-level text. I can infer answers to questions about a beyond grade-level text and identify in the text evidence for my answer.
3	I can ask and answer questions to show that I understand a text and I can refer to the text as the basis for my answers.
2	I can tell the meaning of words such as <i>answer, ask, basis, detail, explicit, question, refer, text</i> . I can answer teacher-provided questions to show that I understand a text.
1	With help from my teacher or someone else, I can identify the meaning of words such as <i>answer, ask, detail, question, refer, text</i> . With help from my teacher or someone else, I can identify the answer to teacher-provided questions about a text.

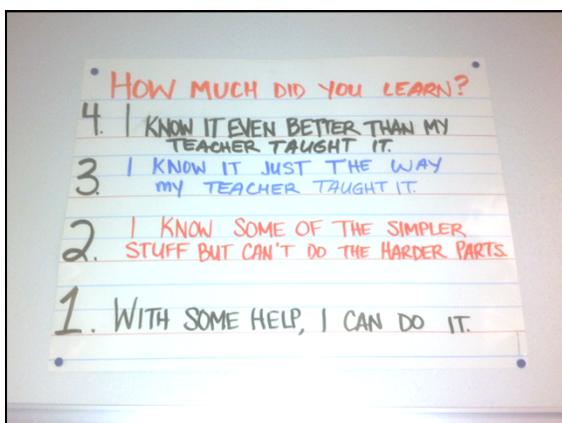
888.849.0851 marzanoresearch.com MARZANO Research

Getting to “Student-Friendly Language”

- Do one scale at a time.
- Start by explaining content and performance at levels 3, 2, and then 4.
- When possible, have the class participate in rewriting the content at each score value in a manner that makes it clear for the student.

Formative Assessment and Standards-Based Grading, pages 45-46

888.849.0851 marzanoresearch.com MARZANO Research



Level 4

- . Shines Brightly at All Times
 - . Achieves the Highest
 - . Follows All Directions
- . Responsible at All Time
 - . Always Prepared
 - . Philanthropist
- . Creative Accomplishments
- . Technical Accomplishments

EGOT Level
Emmy, Grammy, Oscar, Tony

888.849.0851 marzano MARZANO Research

Level 3

- . Shines at All Times
- . Strives for the Highest
- . Follows All Directions
- . Responsible at All Time
 - . Always Prepared
- . Creative Accomplishments
- . Technical Accomplishments

Grammy Level

888.849.0851 marzano MARZANO Research

Level 2

- . Sparks Sometimes
 - . Willing to Try
 - . Minimum Effort
- . Follows Directions
- . Responsible Most of the Time
 - . Not Always Prepared
 - . Distracting at Time
- . Technical Accomplishments

Gold Album Level

888.849.0851 marzano MARZANO Research

Level 1

- . Sparks Rarely
- . Tries When It's Easy
- . Minimum Effort
- . Need Frequent Reminders
- . Not Prepared
- . Distracting at Time
- . Rare Accomplishments

One Hit Wonder Level

888.849.0851 marzano MARZANO Research

Level 0

- . Never Sparks
- . No Effort
- . Needs Constant Reminders
- . Not Prepared
- . Distracts Others
- . Makes Excuses

YouTube Failure Level

888.849.0851 marzano MARZANO Research



Discussion Questions

- 1) What is meant by a proficiency scale being written in "student- friendly language?"
- 2) What benefit may result from asking students to be involved in rewriting scales in student-friendly language?

888.849.0851 marzanoresearch.com MARZANO Research

Day #1 Learning Outcomes...

- Gain an awareness of the research regarding classroom assessment.
- Understand the differences among obtrusive, unobtrusive, and student-generated assessments and how to use each in the classroom.
- Learn essential practices for classroom assessment:
 - 1) Identify priority standards for informing classroom assessment development.
 - 2) Provide clear understanding of the learning goal through proficiency scale development.
 - 3) Provide instruction that focuses on the learning goal.**
 - 4) Provide frequent and meaningful feedback.**
 - 5) Provide opportunities for students to set goals, reflect on learning, and track their own progress.**
- Learn about common assessment development for monitoring student progress to essential content.
- Learn data analysis practices related to classroom assessment.

HANDOUT PAGE 13

<p>Important Idea #1...</p> <p>Proficiency scales provide clear focus for instruction to essential learning goals.</p> 	<p>Note:</p>
<p>Important Idea #2...</p> <p>Proficiency scales serve as the framework for a high-quality classroom assessment.</p> 	
<p>Important Idea #3...</p> <p>Proficiency scales ensure alignment of curriculum, instruction, assessment, and feedback.</p> 	

An important idea...

Proficiency scales provide clear focus for instruction to learning goals.



888.849.0851 marzanoresearch.com

HANDOUT PAGE 13

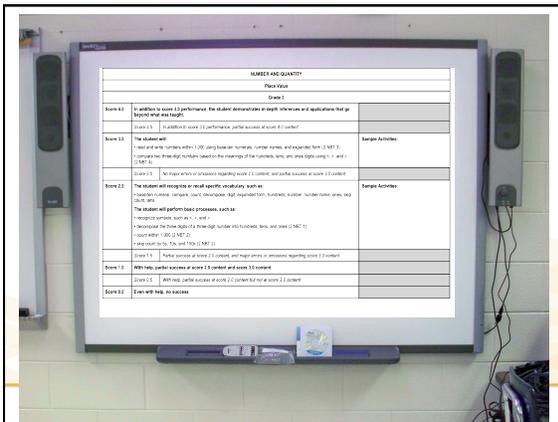
MARZANO Research

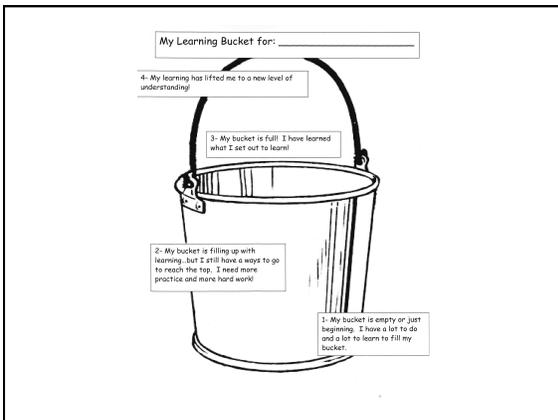
It is critical that we use scales frequently with our learners to ensure that they understand what they need to know and be able to do.

How do we teach our students about proficiency scales?

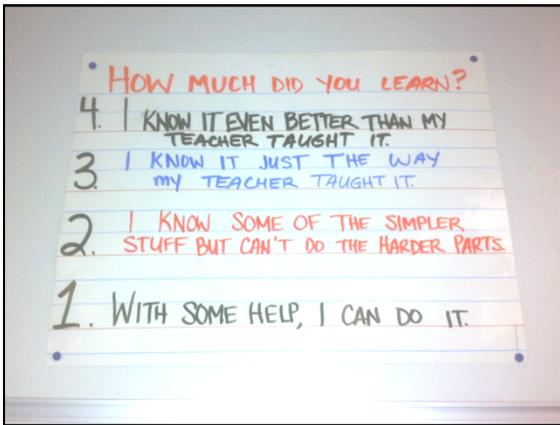
888.849.0851 marzanoresearch.com











Level 4

- . Shines Brightly at All Times
- . Achieves the Highest
- . Follows All Directions
- . Responsible at All Time
- . Always Prepared
- . Philanthropist
- . Creative Accomplishments
- . Technical Accomplishments

EGOT Level
Emmy, Grammy, Oscar, Tony

888.849.0851 marzano MARZANO Research

Another important idea...

Proficiency scales serve as the framework for a high-quality classroom assessment.



888.849.0851 marzanoresearch.com 

Three types of assessment items to measure the knowledge and skills defined...

- **Level 2 items:** Simpler details and processes that have been explicitly taught
- **Level 3 items:** Complex ideas and processes that have been explicitly taught
- **Level 4 items:** Inferences and applications that go beyond what was taught

888.849.0851 marzanoresearch.com 

Score 4.0	In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications the beyond what was taught. The student will: <ul style="list-style-type: none"> • solve real-world problems involving elapsed time • write correct digital time from an analog clock and the reverse
Score 3.5	In addition to score 3.0 performance, partial success at score 4.0 content
Score 3.0	The student will: <ul style="list-style-type: none"> • tell and write time from analog clocks to the nearest five minutes (2.MD.7)
Score 2.5	No major errors or omissions regarding score 2.0 content, and partial success at score 3.0 content
Score 2.0	The student will recognize or recall specific vocabulary, such as: <ul style="list-style-type: none"> • nearest, analog, clock, digital, minute, time, a.m., p.m. The student will perform basic processes, such as: <ul style="list-style-type: none"> • tell and write time from digital clocks to the nearest five minutes (2.MD.7) • identify the hands on an analog clock • count by 5s to 60 • tell time to the hour, half-hour, and quarter-hour

2. Find a partner. Count by 5's as far as you can up to 100 by completing this counting pattern:

5 10 15 ____ ____ ____ (keep going)

3. Fill in each blank to finish the description about one of the hands on the clock.

The longer hand on the clock is called the _____.

The shorter hand on the clock is called the _____.

4. Read each time and write it in the box using the correct format.

Time	Correct Format
Four o'clock	
Forty-five minutes past eight	
Eleven-thirty	

8. Write the correct time to the nearest five minutes on the blank below each clock.



888.849.0851 marzanoresearch.com 

Level 4:

9. Read the short word problem and answer the question.

Robert began folding his clothes at 8:15. p.m. He was finished at 8:30 p.m. How long did he fold?

_____ minutes

to use the correct format for telling time.

11. Write the time your teacher shows you on a digital clock on the analog clock face below.



Let's explore this idea a bit further...

HERITABLE TRAITS ITEM SORT

888.849.0851 marzanoresearch.com 

Another important idea...

Proficiency scales serve as the framework for a high-quality classroom assessment.

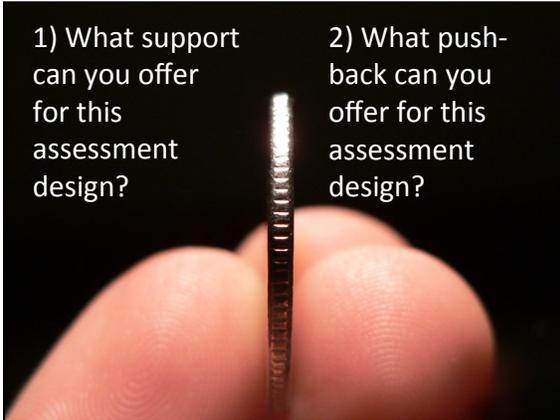


888.849.0851 marzanoresearch.com 

Let's explore this idea a bit further...

- 1) Please use pages 39-41 in your handout. Spend a bit of time on your own to familiarize yourself with the content on these three pages.
- 2) Choose one or two items in each level. Determine how well the item/task aligns to the proficiency scale.

888.849.0851 marzanoresearch.com 



1) What support can you offer for this assessment design?

2) What push-back can you offer for this assessment design?

A Different Assessment Design...

Name: _____ Date: _____ Period: _____

Unit 1A Test – Algebra 1: Free Response

(Multiple Representation, Domain & Range, Create & Analyze Graphs)

Read the question carefully and answer each question. The following are three different relations (mapping, graph and table). For each relation provide the Domain, Range, "is the relation a function: yes or no?" and explain why the relation is a function or why the relation is NOT a function.

1. (DR) * the domain and range function. Explain.

Domain (L3): _____ Explain (L3): _____

Range (L3): _____

Function: yes or no? (L2): _____

2. (DR)

x	y
8	8
6	6
4	4
2	6
0	8

Domain (L3): _____ Explain (L3): _____

Range (L3): _____

Function: yes or no? (L2): _____

A third important idea...

Proficiency scales ensure alignment of curriculum, instruction, assessment, and feedback.

888.849.0851 marzanoresearch.com
MARZANO Research

What makes for effective feedback?

- Timely
- Specific and clear
- Corrective
- **Fosters a growth mindset**

888.849.0851 marzanoresearch.com

ONE INDIVIDUAL STUDENT'S RESULTS

- **Score 2.0**
– Student answered all the items/tasks correctly
- **Score 3.0**
– Student answered a portion of the items/tasks correctly
- **Score 4.0**
– Student did not answer any of the items/tasks correctly

888.849.0851 marzanoresearch.com

Score 3.0	The student will: • tell and write time from analog clocks to the nearest five minutes (2.MD.7)	
	Score 2.5	<i>No major errors or omissions regarding score 2.0 content, and partial success at score 3.0</i>
Score 2.0	The student will recognize or recall specific vocabulary, such as: • analog, clock, digital, minute, nearest, time, a.m., p.m. The student will perform basic processes, such as: • tell and write time from digital clocks to the nearest five minutes (2.MD.7) • identify the hands on an analog clock • count by 5s to 60 • tell time to the hour, half-hour, and quarter-hour • Write time using the correct format	
	Score 1.5	<i>Partial success at score 2.0 content, and major errors or omissions regarding score 3.0</i>
Score 1.0	With help, partial success at score 2.0 content and score 3.0 content	

**Dweck, Mindset:
The New Psychology of Success, 2007**



888.849.0851 marzanoresearch.com 

can't



888.849.0851 marzanoresearch.com 

don't



888.849.0851 marzanoresearch.com 

...YET

888.849.0851 marzanoresearch.com 

Day #1 Learning Outcomes...

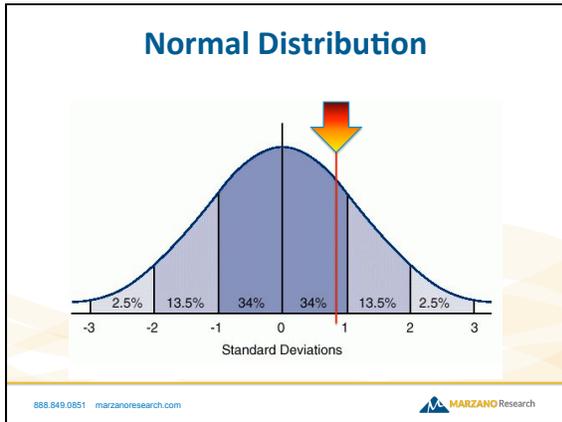
- Gain an awareness of the research regarding classroom assessment.
- Understand the differences among obtrusive, unobtrusive, and student-generated assessments and how to use each in the classroom.
- Learn essential practices for classroom assessment:
 - 1) Identify priority standards for informing classroom assessment development.
 - 2) Provide clear understanding of the learning goal through proficiency scale development.
 - 3) Provide instruction that focuses on the learning goal.**
 - 4) Provide frequent and meaningful feedback.**
 - 5) Provide opportunities for students to set goals, reflect on learning, and track their own progress.**
- Learn about common assessment development for monitoring student progress to essential content.
- Learn data analysis practices related to classroom assessment.

888.849.0851 marzanoresearch.com **HANDOUT PAGE 2** 

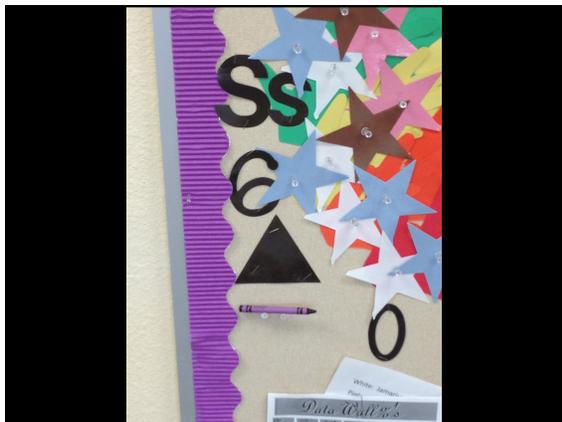
Having Students Chart Progress on Learning Goals

- 48 experimental-control studies were conducted at Marzano Research Laboratory.
- **This practice is associated with a 32-percentile point gain in student achievement.**

888.849.0851 marzanoresearch.com **HANDOUT PAGE 15** 















Student _____

Keeping Track of my Learning

Name: J. H.

Learning Goal: Understand and use decimals and percents.

My score at the beginning: 2 My goal is to be at 3 by Nov 30th

Specific things I am going to do to improve: Work 15 min. three times a week.

LEARNING GOAL: Decimals and Percents.

a. Oct. 5 th	2	f. Nov. 26	3
b. Oct. 12	2	g.	
c. Oct. 19	2	h.	
d. Oct. 26	2	i.	
e. Oct. 30	3	j.	
k. Nov. 12	3		

© UP Publishing & Associates HANDOUT PAGE 15

Tracking My Own Learning

Student Name: J. H. Date: _____

Learning Goal: Understand and use decimals and percents.

My score at beginning: 2 My goal: 3 by Nov 30th

a. Oct 5 (2)	2
b. Oct 12 (2)	2
c. Oct 19 (2)	2
d. Oct 26 (2)	2
e. Oct 27 (3)	3
f. Oct 27 (3)	3
g.	
h.	

- 4 I make no mistakes; I understand completely.
- 3 I make no major mistakes; maybe I still have not understood what is important.
- 2 I make some major mistakes; my score shows I don't understand some important ideas.
- 1 I make many major mistakes; I just don't understand yet.

HANDOUT PAGE 15

Three Types of Assessment

Obtrusive

- o Formalized, interrupt the normal flow of activity in the classroom
 - pencil/paper tests, projects, quiz

Common assessment is a specific *obtrusive* assessment.



888.849.0851 marzanoresearch.com 

High-quality classroom assessment includes:

- On-going informal assessment of individual students and the group as a whole (determined by the individual teacher)
- Formal assessment of individual students and the group as a whole (determined by the individual teacher)
- Common assessments given across a grade level or course (determined by a group of teachers)
- Large scale assessment (MAP, NeSA, etc.)

888.849.0851 marzanoresearch.com 

High-quality classroom assessment includes:

- On-going informal assessment of individual students and the group as a whole (determined by the individual teacher)
- Formal assessment of individual students and the group as a whole (determined by the individual teacher)
- **Common assessments given across a grade level or course (determined by a group of teachers)**
- Large scale assessment (MAP, NeSA, etc.)

888.849.0851 marzanoresearch.com 

A common assessment is an important monitoring tool regarding student learning...let's establish some common understanding about it!

888.849.0851 marzanoresearch.com



HANDOUT PAGE 17

Let's all read the introduction to understand the context of the article...

888.849.0851 marzanoresearch.com

The Case for Common Formative Assessments
By Rick and Becky Dufour and Robert Eaker

We received a question from a principal of a high-performing middle school who wrote: "Although we have made significant growth in many of the core components of a professional learning community we continue to struggle with the perception of teacher autonomy as a result of attempting to create common assessments. A number of teachers continue to believe that common assessments restricts their ability to differentiate instruction from their colleagues...our staff still remains hesitant to fully engage in meaningful collaboration which would result in creating common assessments and sharing instructional practices."

We have offered our own arguments as to why assessments created by a team of teachers are superior to the formal assessments developed by a teacher working in isolation.

1. Team-developed common assessments are more efficient.

If five teachers teaching the same course or grade level are responsible for ensuring all students acquire the same knowledge and skills, it make sense those teachers would work together to determine the best methods to assess student learning. A team of teachers could divide responsibilities for creating a unit and developing assessments. Teachers working in isolation replicate and duplicate effort. They work hard, but they do not work smart.

2. Team-developed common assessments are more equitable.

The use of common assessments increases the likelihood that students will have access to the same curriculum, acquire the same essential knowledge and skills, take assessments of the same rigor, and have their work judged according to the same criteria. We have witnessed repeated examples of teachers who were emphatic about the need for consistency, equity, and fairness in terms of how they were dealt with as adults, being completely unconcerned about the inconsistency, inequity, and lack of fairness that characterized the assessment of student learning in their school. If every teacher has license to assess whatever and however he or she determines, according to criteria unique to and often known only by that teacher, schools will never be institutions that truly model a commitment to equity.

3. Team-developed common formative assessments are more effective in monitoring and improving student learning.

We have cited several researchers who have concluded that team-developed common formative assessments are one of the most powerful strategies available to educators for improving student achievement. We know of no research concluding the formal assessments created by individual teachers working in isolation advance student learning.

10

Now...please number off 1-4, beginning with the discussion facilitator.

888.849.0851 marzanoresearch.com

The Case for Common Formative Assessments
By Rick and Becky Dufour and Robert Eaker

We received a question from a principal of a high-performing middle school who wrote: "Although we have made significant growth in many of the core components of a professional learning community we continue to struggle with the perception of teacher autonomy as a result of attempting to create common assessments. A number of teachers continue to believe that common assessments restricts their ability to differentiate instruction from their colleagues...our staff still remains hesitant to fully engage in meaningful collaboration which would result in creating common assessments and sharing instructional practices."

We have offered our own arguments as to why assessments created by a team of teachers are superior to the formal assessments developed by a teacher working in isolation.

1. Team-developed common assessments are more efficient.

If five teachers teaching the same course or grade level are responsible for ensuring all students acquire the same knowledge and skills, it make sense those teachers would work together to determine the best methods to assess student learning. A team of teachers could divide responsibilities for creating a unit and developing assessments. Teachers working in isolation replicate and duplicate effort. They work hard, but they do not work smart.

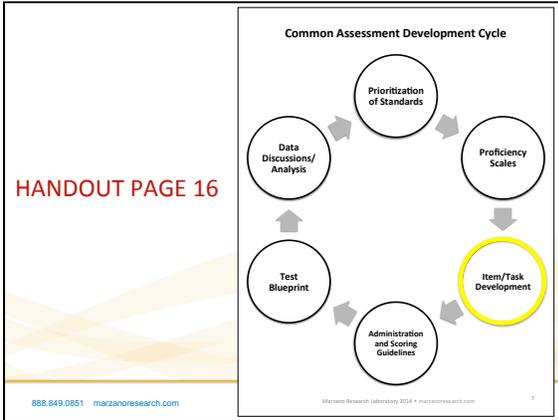
2. Team-developed common assessments are more equitable.

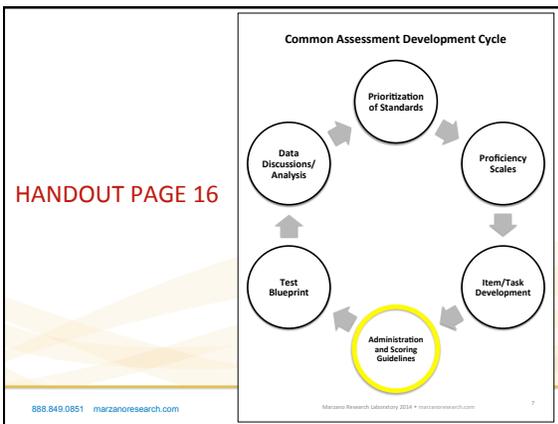
The use of common assessments increases the likelihood that students will have access to the same curriculum, acquire the same essential knowledge and skills, take assessments of the same rigor, and have their work judged according to the same criteria. We have witnessed repeated examples of teachers who were emphatic about the need for consistency, equity, and fairness in terms of how they were dealt with as adults, being completely unconcerned about the inconsistency, inequity, and lack of fairness that characterized the assessment of student learning in their school. If every teacher has license to assess whatever and however he or she determines, according to criteria unique to and often known only by that teacher, schools will never be institutions that truly model a commitment to equity.

3. Team-developed common formative assessments are more effective in monitoring and improving student learning.

We have cited several researchers who have concluded that team-developed common formative assessments are one of the most powerful strategies available to educators for improving student achievement. We know of no research concluding the formal assessments created by individual teachers working in isolation advance student learning.

10







Common Summative Assessment 2
Reading Comprehension
 Answer Key Grade 3

Suggested proficient responses are listed below each question. Accept other student answers if it makes sense according to these passages. If the student has an incomplete answer, ask the student: "Tell me more about your answer."

Within the Text

- Summarize the **important events** from the story.
Student may include 3-4 of the following events in sequence:
 - Penelope and Lai May were waiting in line to ride the roller coaster.
 - Penelope was nervous.
 - Her friend encouraged her.
 - When the ride first started, Penelope was afraid but she felt better as she realized it was fun.
 - After the ride was over, Penelope wanted to ride again.
- What was the **main problem** in the story? How was the problem solved?
Possible Problem:
 - Penelope was scared to ride the roller coaster*Possible solution:*
 - She went ahead and rode the roller coaster.

38
3 tens
8 ones

Chapter 6

Place Value

School Day Count

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

2.OA.3
Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.

2.NBT.2
Count within 1000; skip-count by 5s, 10s, and 100s.

2.NBT.3
Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.

2.NBT.4
Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons.

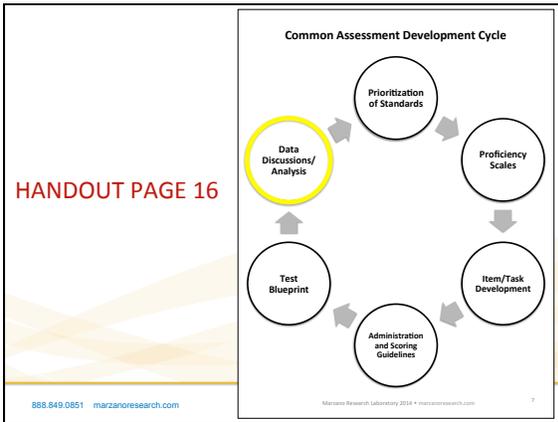
2.MD.7
Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.

888.849.0851 marzanoresearch.com

PLACE VALUE COMMON ASSESSMENT BLUEPRINT

Standard	Score 2.0	Score 3.0	Score 4.0	Total
2.OA.3	5	3	1	9
2.NBT.2	5	4	1	10
2.NBT.3	3	2	1	6
2.NBT.4	5	2	1	8
2.MD.7	3	2	1	6

888.849.0851 marzanoresearch.com

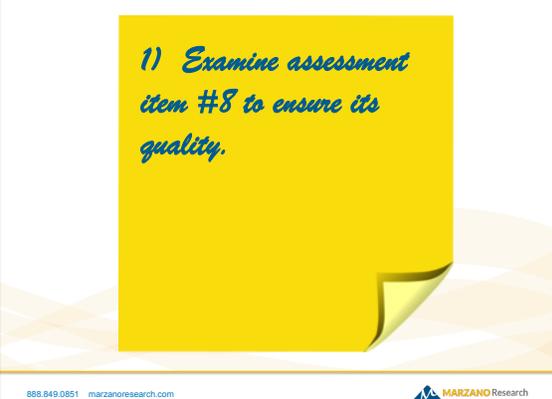


Typically, a common assessment results in data discussions to inform next steps in the instructional process.

888.849.0851 marzanoresearch.com

MARZANO Research

<p>Locate the example data set on page 20 of your handout. On your own, please analyze the data. Make some observations presented in the data.</p>	<p>Share your observations with your table partners. Use these observations to complete step 3.</p>	<p>As table partners, <u>write</u> two or three action steps that might result from the data analysis process.</p>



1) Examine assessment item #8 to ensure its quality.

888.849.0851 marzanoresearch.com 



Thank You!

888.849.0851 marzanoresearch.com 
