Using Teacher Evaluation to Increase Student Achievement in the Common Core

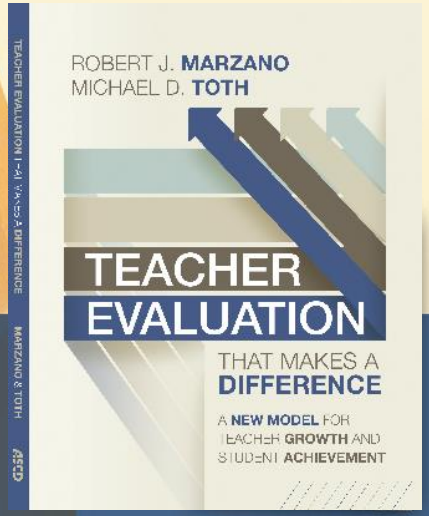
Michael D. Toth, CEO, Learning Sciences International

1.877.411.7114 | MarzanoCenter.com
Palm Beach Gardens, FL

Learning Sciences
MARZANO CENTER
TEACHER & LEADER EVALUATION

Learning Sciences International
LEARNING AND PERFORMANCE MANAGEMENT

New Book:
Teacher Evaluation that Makes a Difference
A New Model for Teacher Growth and Student Achievement



Coauthors
Teacher Evaluation that Makes a Difference (ASCD)

1.877.411.7114 | MarzanoCenter.com
Palm Beach Gardens, FL

About the Learning Sciences International and Learning Sciences Marzano Center

- Link teacher growth, development and evaluation and align to leadership growth, development and evaluation
- Conduct research and develop the next generation of tools and supports
- Support districts throughout their evaluation model adoption and implementation phases including professional development and next generation tools
- Provide training for teachers, coaches, principals and district leaders

About our audience

Level of understanding of CCSS:

1. I attended a session on the CCSS
2. I read the standards
3. I facilitated teachers unpacking of the CCSS
4. I facilitated teachers developing and teaching lessons on the CCSS
5. I observed, collected evidence, and gave feedback on CCSS in teachers' classrooms

About our audience

Which teacher evaluation framework for Instructional Practice evidence and scoring do you use?

1. State Model/Marzano
2. Danielson
3. Hybrid
4. Other

The Standards:

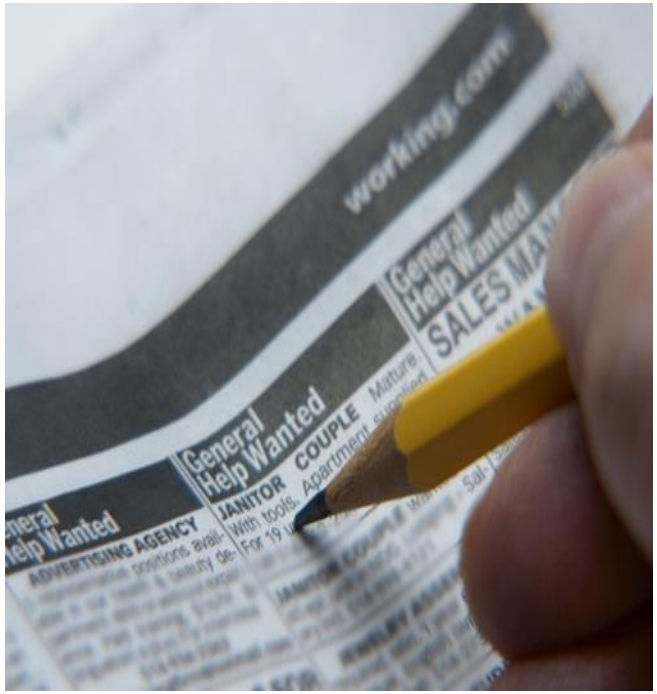
…Common Core State Standards focus on core conceptual understandings and procedures starting in the early grades, **thus enabling teachers to take the time needed to teach core concepts and procedures well—and to give students the opportunity to master them.**

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

Common Core = A New Worker

21st Century Work Force Study:

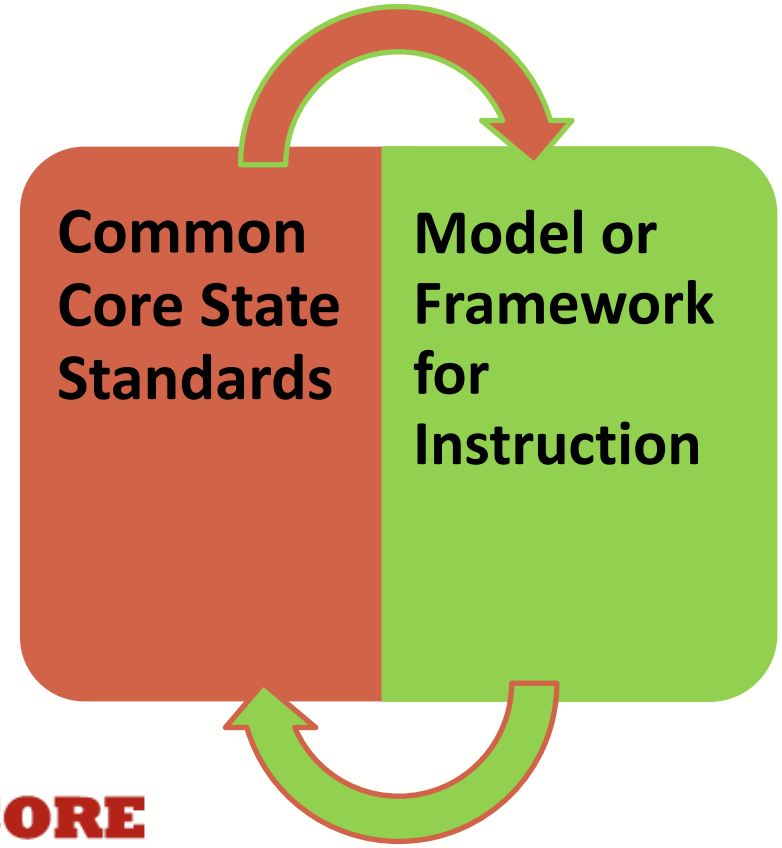
- **Employers rank these skills highest for jobs in the next ten years:**
  - Critical thinking, problem solving
  - Information technology Application
  - Teamwork/Collaboration
  - Creativity/Innovation
  - Communication
  - Self-direction
  - Social responsibility



What the standards intentionally don't provide, define or specify…

- a specified curriculum
- strategies for how teachers should teach
- a specific reading or content list
- the nature of advanced work beyond the Core
- the interventions needed for students well below grade level
- the full range of support for English language learners and students with special needs

The "What" and the "How"



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

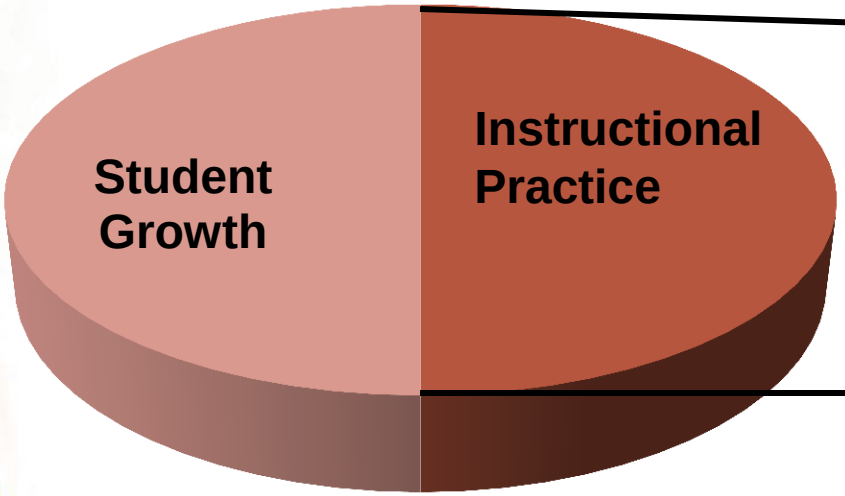
Align CCSS evidences in Framework with a deep understanding of instruction and rigor

Examine Common Core State Standards

Unpack the rich language and identify rigor

Examine where within a Framework does this rigor manifest and live

Florida Teacher Evaluation: Need to pick up CCSS implementation evidences



Need: Framework evidence to connect CCSS implementation with <u>observation and artifacts</u>

Framework for Teaching (4 domains, 22 components, 76 elements)

Domain 1: Planning and Preparation 1a: Demonstrating Knowledge of Content and Pedagogy 1b: Demonstrating Knowledge of Students 1c: Setting Instructional Outcomes 1d: Demonstrating Knowledge of Resources 1e: Designing Coherent Instruction 1f: Designing Student Assessments	**Domain 2: The Classroom Environment** 2a: Creating and Environment of Respect and Rapport 2b: Establishing a Culture of Learning 2c: Managing Classroom Procedures 2d: Managing Student Behavior 2e: Organizing Physical Space
Domain 4: Professional Responsibilities 4a: Reflecting on Teaching 4b: Maintaining Accurate Records 4c: Communicating with Families 4d: Participating in a Professional Community 4e: Growing and Developing Professionally 4f: Showing Professionalism	**Domain 3: Instruction** 3a: Communicating with Students 3b: Using Questioning and Discussion Techniques 3c: Engaging Students in Learning 3d: Using Assessment in Instruction 3e: Demonstrating Flexibility and Responsiveness

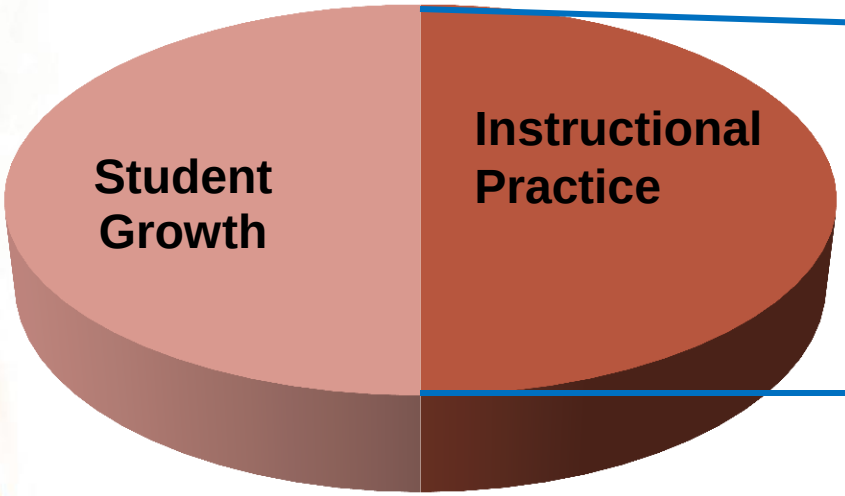
Framework for Teaching

Domain 1: Planning and Preparation	Domain 2: The Classroom Environment
1a: Demonstrating Knowledge of Content and Pedagogy 1b: Demonstrating Knowledge of Students **1c: Setting Instructional Outcomes** 1d: Demonstrating Knowledge of Resources **1e: Designing Coherent Instruction** **1f: Designing Student Assessments**	2a: Creating and Environment of Respect and Rapport **2b: Establishing a Culture of Learning** 2c: Managing Classroom Procedures 2d: Managing Student Behavior 2e: Organizing Physical Space
Domain 4: Professional Responsibilities	**Domain 3: Instruction**
4a: Reflecting on Teaching 4b: Maintaining Accurate Records 4c: Communicating with Families 4d: Participating in a Professional Community 4e: Growing and Developing Professionally 4f: Showing Professionalism	**3a: Communicating with Students** **3b: Using Questioning and Discussion Techniques** **3c: Engaging Students in Learning** **3d: Using Assessment in Instruction** 3e: Demonstrating Flexibility and Responsiveness

If we are just measuring teachers and want to align to CCSS, we can pretty much stop here.

If our goal is to grow and develop teachers in order to connect CCSS implementation to student growth measures, then it also requires a deeper *Model of Instruction*.

Florida Teacher Evaluation: Need to connect CCSS implementation to student achievement



Need: leading and lagging measures that teachers can connect to their CCSS implementation and instructional practice improvements to student growth measures

What is a Model of Instruction Suitable for CCSS?

- Framework for planning units and lessons
- Framework for decision making for planning for use of instructional strategies
- Taxonomy of cognitive processing levels
- Process for tracking student progress for both content knowledge *and* cognitive processing levels
- Continuous instructional improvement cycle linked to student achievement results

Leading and Lagging Indicators

Leading Indicators

Performance Scales

(Lesson Objectives and Unit Learning Goal)

Unit Assessments

Lagging Indicators

End of Course/ Benchmark Assessments

State Assessment/VAM

Classroom

Observations

Linking Curriculum, Assessment, Teaching and Student Learning with Alignment to Common Core *within a Model of Instruction*

State Model/Marzano Teacher Evaluation Model

STUDENT ACHIEVEMENT

Domain 1: Classroom Strategies and Behaviors (41 Elements)
Routine Segments (5 Elements)
Content Segments (18 Elements)
On the Spot Segments (18 Elements)

Domain 2: Planning and Preparing (8 Elements)
Lesson and Units (3 Elements)
Use of Materials and Technology (2 Elements)
Special Needs of Students (3 Elements)

Domain 3: Reflecting on Teaching (5 Elements)
Evaluating Personal Performance (3 Elements)
Professional Growth Plan (2 Elements)

Domain 4: Collegiality and Professionalism (6 Elements)

Promoting a Positive Environment (2 Elements)

Promoting Exchange of Ideas (2 Elements)

Promoting District and School Development (2 Elements)

Domain 4: Collegiality and Professionalism (6 Elements)

Promoting a Positive Environment (2 Elements)

Promoting Exchange of Ideas (2 Elements)

Promoting District and School Development (2 Elements)

Domain 1: Classroom Strategies and Behaviors **(Common Core Alignment)**

Lesson Segment Involving Routine Events

Learning Goals & Feedback
- Providing Clear Learning Goals and Scales to Measure those Goals
- Tracking Student Progress
- Celebrating Student Success

Rules & Procedures
- Establishing Classroom Routines
- Organizing Physical Layout of the Classroom for Learning

Lesson Segments Addressing Content

Interacting With New Knowledge
- Identifying Critical Information
- Organizing Students to Interact with New Knowledge
- Previewing New Content
- Chunking Content into "Digestible Bites"
- Processing of New Information
- Elaborating on New Information
- Recording and Representing Knowledge
- Reflecting on Learning

Practicing & Deepening Knowledge
- Reviewing Content
- Organizing Students to Practice and Deepen Knowledge
- Using Homework
- Examining Similarities and Difference
- Examining Errors in Reasoning
- Practicing Skills, Strategies, and Processes
- Revising Knowledge

Generating & Testing Hypothesis
- Organizing Students for Cognitively Complex Tasks
- Engaging Students in Cognitively Complex Tasks Involving Hypothesis Generation and Testing
- Providing Resources and Guidance

Lesson Segments Enacted on the Spot

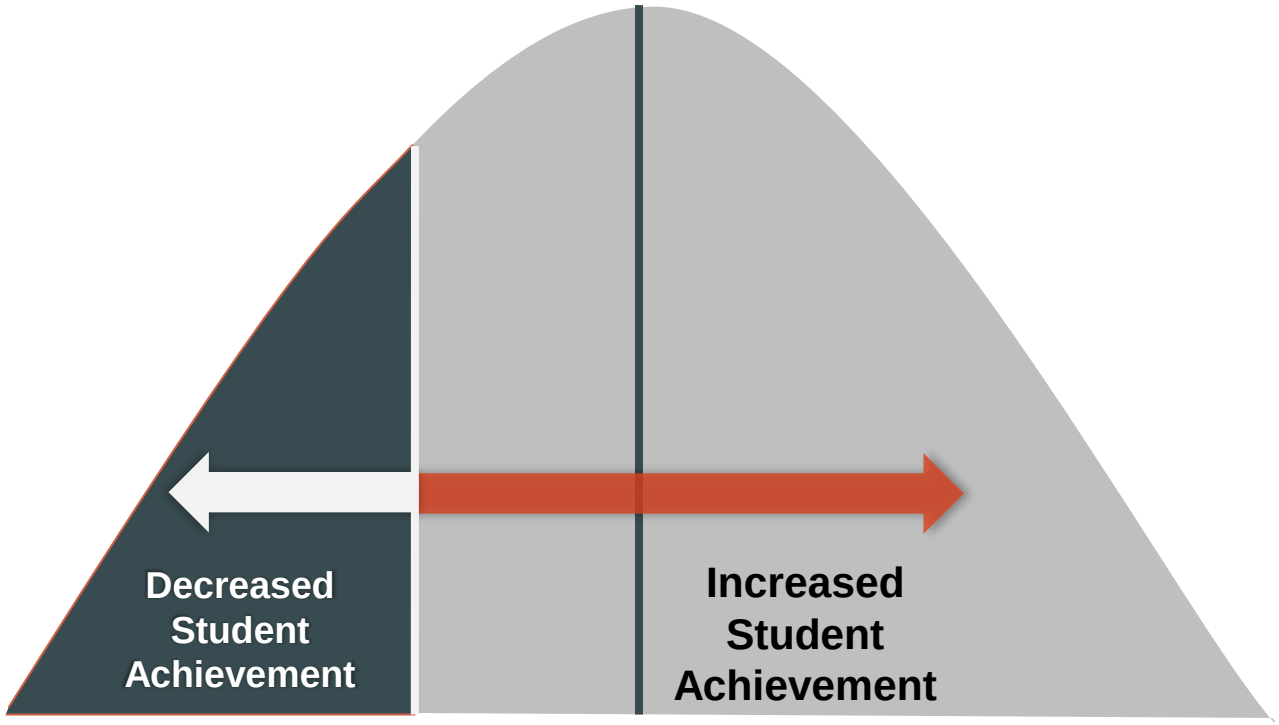
Student Engagement
- Noticing When Students are Not Engaged
- Using Academic Games
- Managing Response Rates
- Using Physical Movement
- Maintaining a Lively Pace
- Demonstrating Intensity and Enthusiasm
- Using Friendly Controversy
- Providing Opportunities for Students to Talk about Themselves
- Presenting Unusual or Intriguing Information

Adherence to Rules & Procedures
- Demonstrating "Withitness"
- Applying Consequences for Lack of Adherence to Rules and Procedures
- Acknowledging Adherence to Rules and Procedures

Teacher/Student Relationships
- Understanding Students' Interests and Backgrounds
- Using Verbal and Nonverbal Behaviors that Indicate Affection for Students
- Displaying Objectivity and Control

High Expectations
- Demonstrating Value and Respect for Low Expectancy Students
- Asking Questions of Low Expectancy Students
- Probing Incorrect Answers with Low Expectancy Students

Typical bell curve of student results from teachers using a research-based strategy



ES=0

Domain 1: Classroom Strategies and Behaviors **(Common Core Alignment)**

Lesson Segment Involving Routine Events

Learning Goals & Feedback
- **Providing Clear Learning Goals and Scales to Measure those Goals**
- Tracking Student Progress
- Celebrating Student Success

Rules & Procedures
- Establishing Classroom Routines
- Organizing Physical Layout of the Classroom for Learning

Lesson Segments Addressing Content

Interacting With New Knowledge
- **Identifying Critical Information**
- **Organizing Students to Interact with New Knowledge**
- Previewing New Content
- Chunking Content into "Digestible Bites"
- Processing of New Information
- Elaborating on New Information
- **Recording and Representing Knowledge**
- Reflecting on Learning

Practicing & Deepening Knowledge
- Reviewing Content
- **Organizing Students to Practice and Deepen Knowledge**
- Using Homework
- **Examining Similarities and Difference**
- **Examining Errors in Reasoning**
- **Practicing Skills, Strategies, and Processes**
- **Revising Knowledge**

Generating & Testing Hypothesis
- Organizing Students for Cognitively Complex Tasks
- **Engaging Students in Cognitively Complex Tasks Involving Hypothesis Generation and Testing**
- Providing Resources and Guidance

Lesson Segments Enacted on the Spot

Student Engagement
- Noticing When Students are Not Engaged
- Using Academic Games
- Managing Response Rates
- Using Physical Movement
- Maintaining a Lively Pace
- Demonstrating Intensity and Enthusiasm
- Using Friendly Controversy
- Providing Opportunities for Students to Talk about Themselves
- Presenting Unusual or Intriguing Information

Adherence to Rules & Procedures
- Demonstrating "Withitness"
- Applying Consequences for Lack of Adherence to Rules and Procedures
- Acknowledging Adherence to Rules and Procedures

Teacher/Student Relationships
- Understanding Students' Interests and Backgrounds
- Using Verbal and Nonverbal Behaviors that Indicate Affection for Students
- Displaying Objectivity and Control

High Expectations
- Demonstrating Value and Respect for Low Expectancy Students
- Asking Questions of Low Expectancy Students
- Probing Incorrect Answers with Low Expectancy Students

Applying Knowledge…. Basis of CCSS

DQ 2

- Students are introduced to both declarative and procedural knowledge.

DQ 3

- Students practice and deepen their knowledge and skills.

DQ 4

- Students question their new knowledge and apply it as they explore real world problems and extensions.

Learning Goal

"What"

Daily Objective

Day-to-Day Instructional Target

"How"

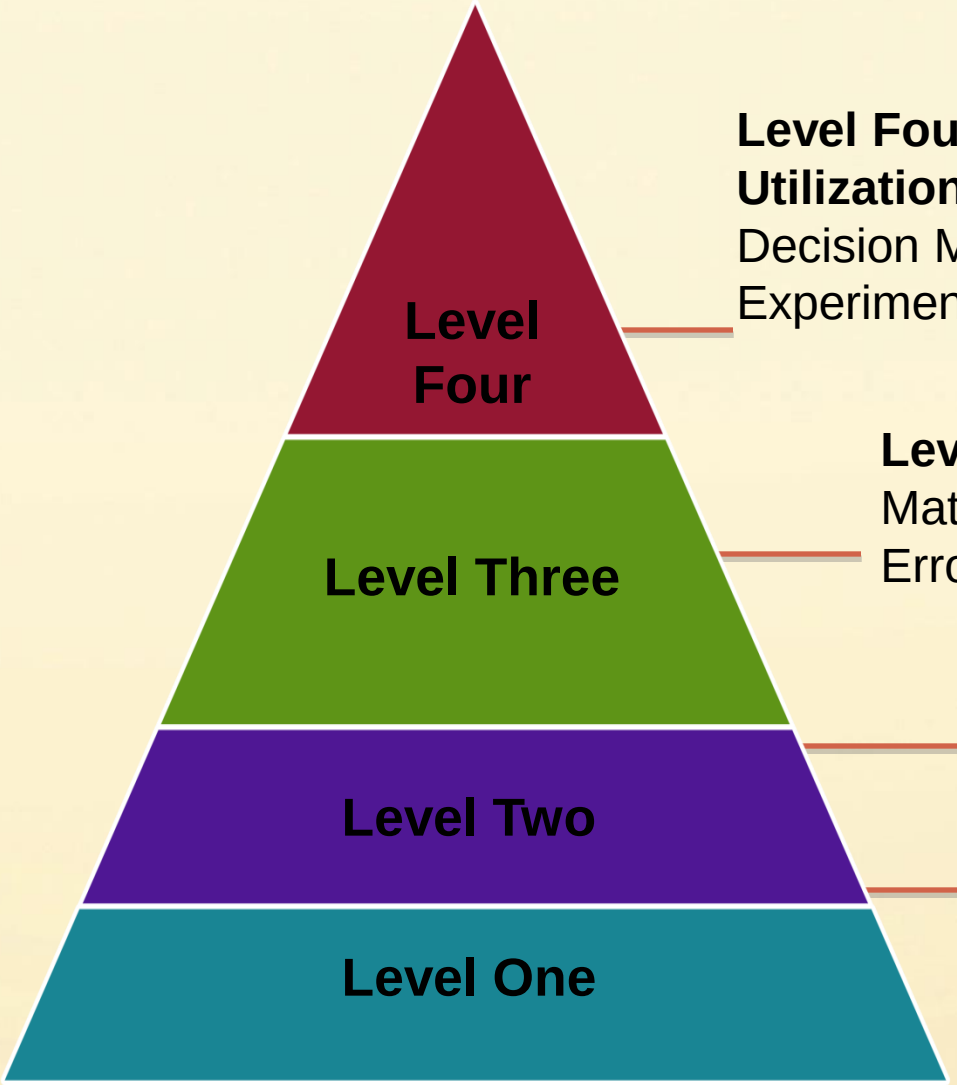
Activity

Guided learning experiences that take place in a classroom setting

Assignment

Learning experiences designed to be completed independently in a class or as a homework opportunity to extend classroom learning

CREATING SCALE TASKS AND ASSESSMENTS



Level Four: Knowledge Utilization
Decision Making, Problem Solving, Experimenting, Investigating

Level Three: Analysis
Matching, Classifying, Analyzing Errors, Generalizing, Specifying

Level Two: Comprehension
Integrating, Symbolizing

Level One: Retrieval
Recognizing, Recalling, Executing

Scaffolding of Content

Learning Goal

- A learning goal identifies what students will learn or be able to do over time and within a unit of instruction.
- Are created from state standards/CCSS

Learning Targets

- Day-to-Day Curricular Targets that scaffold with escalating complexity and align with the increasingly difficult levels of the taxonomy and formal scale

Activities & Assignments

- Learning activities and assignments are designed to scaffold with increasing complexity to advance students toward mastery of the learning goal.

Marzano Teacher Evaluation Model

When these strategies are used, here is the typical effect on raising student achievement (percentile gain corrected):

Note Taking	17%
Practice	14%
Setting Goals/Objectives	25%
Student Discussion/Chunking	17%
Summarizing	19%
Tracking Student Progress and Using Scoring Scales	34%

Building Vocabulary	20%
Effort and Recognition	14%
Graphic Organizers	13%
Homework	15%
Identifying Similarities and Differences	20%
Interactive Games	20%
Nonlinguistic Representations	17%

A Correlational Study: What Works in Oklahoma Schools

Correlations were associated with a **31 percentile point increase** in student achievement.

Domain 2-4

DOMAIN 2: PLANNING AND PREPARING

Planning and Preparing for Lessons and Units

1. Effective Scaffolding of Information within Lessons
2. Lessons within Units
3. Attention to Established Content Standards

Planning and Preparing for Use of Resources and Technology

1. Use of Available Traditional Resources
2. Use of Available Technology

Planning and Preparing for Special Needs of Students

1. Needs of English Language Learners
2. Needs of Special Education Students
3. Needs of Students Who Lack Support for Schooling

DOMAIN 3: REFLECTING ON TEACHING

Evaluating Personal Performance

1. Identifying Areas of Pedagogical Strength and Weakness
2. Evaluating the Effectiveness of Individual Lessons and Units
3. Evaluating the Effectiveness of Specific Pedagogical Strategies and Behaviors

Developing and Implementing a Professional Growth Plan

1. Developing a Written Growth and Development Plan
2. Monitoring Progress Relative to the Professional Growth and Development Plan

DOMAIN 4: COLLEGIALITY AND PROFESSIONALISM

Promoting a Positive Environment

1. Promoting Positive Interactions with Colleagues
2. Promoting Positive Interactions about Students and Parents

Promoting Exchange of Ideas and Strategies

1. Seeking Mentorship for Areas of Need or Interest
2. Mentoring Other Teachers and Sharing Ideas and StrategieS

Promoting District and School Development

1. Adhering to District and School Rules and Procedures
2. Participating in District and School Initiatives

Big Idea: Domain 2

What will I do to develop effective lessons organized into a cohesive unit?

- Planning is key to attainment of CCSS
- There is a direct causal relationship between planning and teachers' intentional use of instructional strategies

Unit Planning

Step 1: Choose standards that will be included in the unit of instruction.

Step 2: Write Learning Goals Based on the Standards

- Analyze the standards included in the unit
- Develop an overarching goal statement
- Ensure it expresses the “point” of all of the standards

Example: Learning Goals

Standard: RI.6.1 *Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text*

Learning Goal: Students will be able to cite examples from the text to support their analyses and inferences drawn from the text

Standard: RI.6.3 *Analyze in detail how a key individual, event or idea is introduced, illustrated, and elaborated in a text (e.g., through examples or anecdotes)*

Learning Goal: Students will be able to analyze in detail how a key individual, event or idea is introduced, illustrated, and elaborated in a text

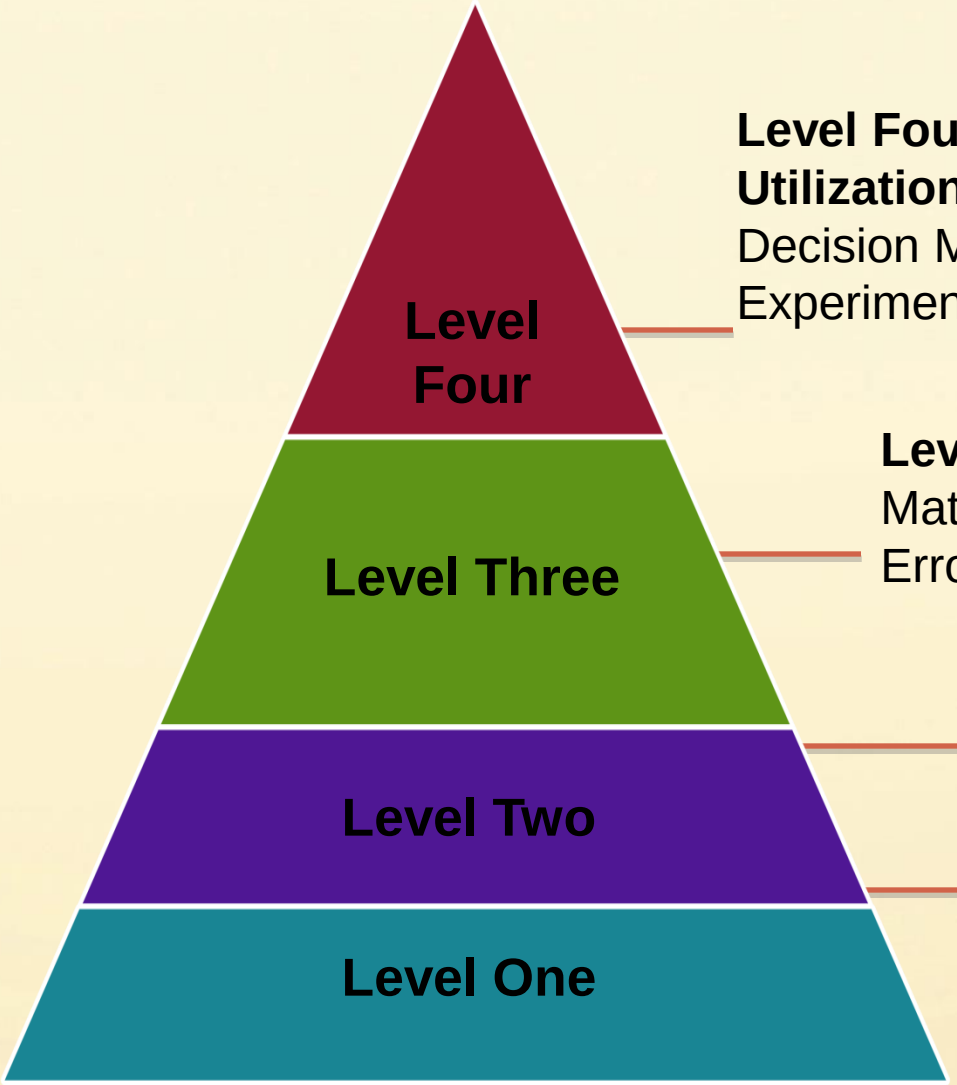
Step 3: Create a Scale

- This scale is used as a tool to organize the unit.
- A scale is a learning progression, or continuum showing distinct levels of learning towards a goal.
- The overarching learning goal is the target at level 3.0 on this scale for the unit.
- Level 2 represents a simpler goal, or a stair step to the target
- Level 4 is a more complex goal, or an extension beyond the goal.

Scale Template

4	**MORE COMPLEX GOAL**
3	**TARGET GOAL**
2	**SIMPLER GOAL**
1	With help from the teacher, the student has partial success with the unit content.
0	Even with help, the student has no success with the unit content.

CREATING SCALE TASKS AND ASSESSMENTS



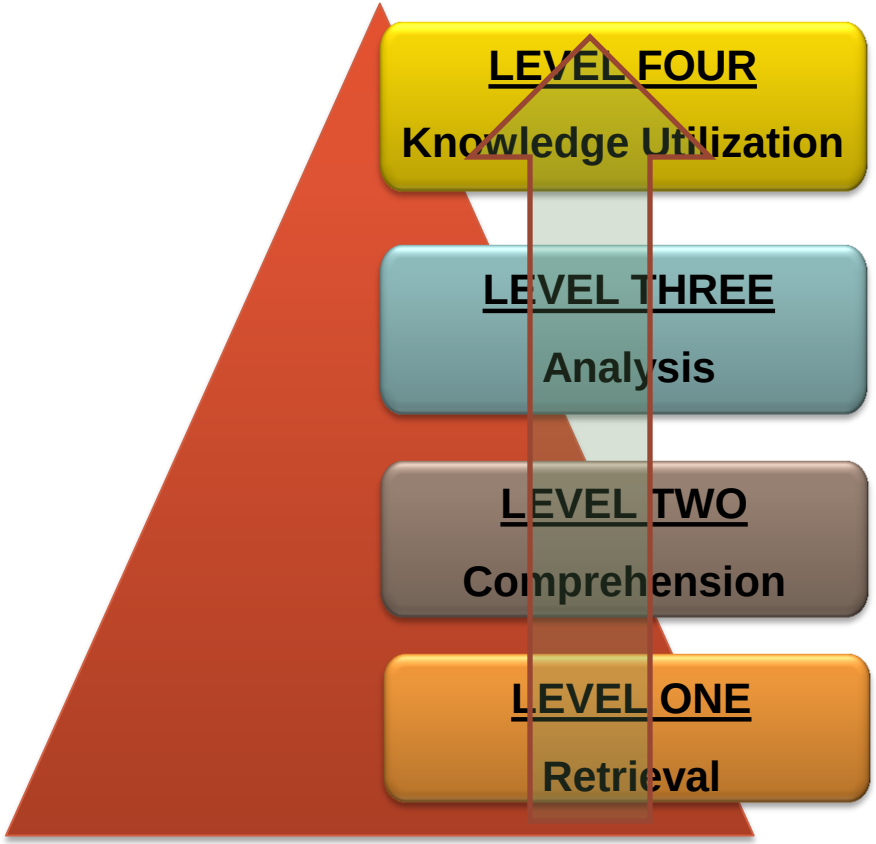
Level Four: Knowledge Utilization
Decision Making, Problem Solving, Experimenting, Investigating

Level Three: Analysis
Matching, Classifying, Analyzing Errors, Generalizing, Specifying

Level Two: Comprehension
Integrating, Symbolizing

Level One: Retrieval
Recognizing, Recalling, Executing

Scaffolding Lessons: Implementing the Taxonomy



4	MORE COMPLEX GOAL
3	TARGET GOAL
2	SIMPLER GOAL
1	With help from the teacher, the student has partial success with the unit content.
0	Even with help, the student has no success with the unit content.

Sample Scale- 2nd Grade Science

4	The student : compares the different ways in which plants and animals breathe and find nourishment.
3	The student: explains what plants and animals need to survive
2	The student : recognizes and recalls specific terminology such as: plant; animal; survival recalls accurate information about the survival needs of animals and plants, such as - Both animals and plants need food, water, and air to survive - Plants absorb nutrients and air through their roots and leaves - Animals use respiration (lungs) to breathe and digestion to process nutrients.
1	With help from the teacher, the student has partial success with the **unit content.**
0	Even with help, the student has no success with the unit content.

Step 10: Develop Aligned Assessments

- Pre-, post-, and formative assessment
- Develop questions for each level of the scale (tiered items)
- Use Marzano's Taxonomy to identify cognitive level
- Use assessments to track student progress

Big Idea: Test Less, Assess More

4 types of assessment:

1. observation
2. traditional
3. student created assessment
4. probing discussions

- Don't need a sheet of paper or artifact in your hand to assess.
- Once you know a student is at a level on the scale (are convinced), don't assess it any more. Move to the next level.

Linking Curriculum, Assessment, Teaching and Student Learning with Alignment to Common Core *within a Model of Instruction*

What are Sources of Evidence that can identify CCSS implementation?

Domain 1: Classroom Strategies & Behaviors

- Formal observation(s)
- Informal, announced observation
- Informal, unannounced observation
- Student surveys
- Videos of classroom practice
- Student work

Domain 2: Planning and Preparing

- Planning conference or pre-conference
- Lesson and unit planning documents

Domain 3: Reflecting on Teaching

- Self-assessment
- Reflection conference
- Professional Growth Plan
- Conferences
- Discussions
- Artifacts

Domain 4: Collegiality & Professionalism

- Conferences
- Discussions
- PLC meeting agendas and artifacts
- Lesson study minutes, agendas

LearningSciences MARZANO CENTER TEACHER & LEADER EVALUATION

LearningSciencesInternational LEARNING AND PERFORMANCE MANAGEMENT

For more information, contact us or visit:

www.MarzanoCenter.com

MToth@LearningSciences.com

1.877.411.7114 | MarzanoCenter.com
Palm Beach Gardens, FL