Service Index
The Research

Many states have seen drastic drops in student test scores after making the transition to new assessments based on more rigorous standards. For districts that haven’t shifted their instructional practices to meet the challenges of today’s increasingly demanding standards, this is troubling news.

The Learning Sciences International research team looked at more than two million data points in one of the largest available databases of classroom observations and found that teachers are facing some serious challenges. Fewer than 6% of the lessons observed in the database were devoted to the highest level of cognitively complex tasks involving hypothesis generation and testing.

Now, even the best teachers are working hard to make the critical shifts in their pedagogy that will help students succeed with standards.

The data have shed light on an urgent need. In response, we’ve developed the Marzano Center Essentials for Achieving Rigor, a model of instruction explicitly designed to give teachers a clear road map that makes the journey toward increased rigor more efficient and focused.

A Non-Evaluative Model of Instruction

The Essentials provides a safe, evaluation-free zone for teachers to continue to grow as they practice and hone classroom strategies aligned to rigor. It gives them just the right guidance, support, coaching, and resources to make instructional changes that will help their students achieve.

Teachers love the Essentials because the model works with any evaluation system that a school currently has in place, but it doesn't evaluate. Rather, its chief objective is to help educators focus on research-based, core classroom instructional strategies that build students’ higher-order thinking skills, such as analysis, reasoning, hypothesis generation and testing, and decision-making.

Figure 1: Highest frequency strategies associated with lecture, practice, and review.

<table>
<thead>
<tr>
<th>Strategy</th>
<th>0%</th>
<th>5%</th>
<th>10%</th>
<th>15%</th>
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<td>Identifying Critical Information</td>
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<td>12.5%</td>
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<tr>
<td>Practicing Skills, Strategies, and Processes</td>
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<tr>
<td>Chunking Content into “Digestible Bites”</td>
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<td></td>
<td>11.8%</td>
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<td>Reviewing Content</td>
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<td><strong>47%</strong></td>
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Figure 2: Lowest frequency strategies, among the most critical for developing cognitively complex skills.

<table>
<thead>
<tr>
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</thead>
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<tr>
<td>Hypothesis Generation and Testing</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Revising Knowledge</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Organizing Students for Cognitively Complex Tasks</td>
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<td></td>
<td>0.9%</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
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<td></td>
<td><strong>3.2%</strong></td>
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</tbody>
</table>
COMPONENTS OF MARZANO CENTER ESSENTIALS FOR ACHIEVING RIGOR ARE DESIGNED TO SUPPORT AND FACILITATE:

- Standards-based planning
- Clear criteria for success
- Essential classroom conditions for learning
- Data reflection and action
- Peer collaboration

The model helps teachers intentionally plan for and teach rigorous lessons, reflect on their progress, collaborate with peers engaged in the same work, and monitor their students for the desired results—all in an environment designed to nurture, guide, and engage.

We developed the Essentials for Achieving Rigor because reports indicate that most U.S. teachers are not prepared to teach to the level of rigor required by new state college and career readiness standards.

To learn more and find out what educators are saying about the Essentials for Achieving Rigor, call or visit:

1.877.411.7114
MarzanoCenter.com

STUDENT-CENTERED PEDAGOGY

Rigorous instruction calls for educators to move away from traditional "sage on the stage" teaching methods. Instead, teachers will guide students toward accepting ownership of their own learning, empowering learners of all ages and abilities to solve complex, real-world problems whether they work individually or in collaborative groups.

The Essentials will help teachers develop expertise in releasing autonomy to students, creating a student-centered pedagogy in which the learner owns most of the responsibility for the learning—a key factor in raising achievement.

CLOSE ACHIEVEMENT GAPS

Drops in student test scores can serve as a powerful call to action. The Essentials equips teachers with focused professional development—core classroom practices, planning and reflection tools, collaborative strategies, data analysis, and formative assessments—to move all students toward increased rigor.

As teachers perfect these skills, rigorous instruction essentially becomes embedded into their daily work. In turn, it becomes natural for them to spend a larger portion of classroom time teaching cognitively complex skills that engage and prepare students for the new assessments.

SCHOOLS ARE ALREADY SEEING RESULTS

Educators receiving early training on the Essentials for Achieving Rigor are already reporting a noticeable improvement in classroom instruction. Put into practice, it is "absolutely exciting" to see teaching with increased rigor, says one Florida high school principal. "As we support more of our teachers moving in that direction, it’s going to directly impact student achievement. Ultimately, we need to develop kids who, when they leave us, are critical thinkers and problem solvers."
Successful standards-based instruction starts with teaching students foundational knowledge and skills that can be built upon throughout the instructional cycle. This type of instruction requires extended processing and application of knowledge and asks students to go beyond what is taught by asking questions and experimenting with their new knowledge.

**Core Instruction**
Discover how to use criteria for success to identify critical content and group students as they process, elaborate, record, and represent their knowledge.

**Outcomes:**
- Identify appropriate strategies for foundational learning and plan for the desired result
- Observe the impact of foundational strategies on students in order to adapt instruction
- Plan foundational lessons based on rigorous standards

**Prerequisite:** None  
**Product Code:** PD000-MEAR-001

**Deepening Core Instruction**
Explore how to manage student response rates with questioning sequence techniques, as well as help students practice skills, examine similarities and differences, analyze their reasoning, and revise their knowledge.

**Outcomes:**
- Identify appropriate strategies for guiding deeper thinking and plan for the desired result
- Observe the impact of deeper thinking strategies on students in order to adapt instruction
- Plan deeper thinking lessons based on rigorous standards

**Prerequisite:** None  
**Product Code:** PD000-MEAR-002

**Facilitating Complex Learning**
Learn how to organize students and provide guidance and support as students engage in cognitively complex tasks, such as investigation, problem-solving, experimental inquiry, and decision-making.

**Outcomes:**
- Identify appropriate strategies for facilitating complex learning and plan for the desired result
- Anticipate the guidance and support necessary for complex learning
- Observe the impact of complex learning strategies on students in order to adapt instruction
- Plan lessons for complex learning based on rigorous standards

**Prerequisite:** None  
**Product Code:** PD000-MEAR-003

**Coaching for Implementation (C4I)**
Learning Sciences International offers on-site coaching sessions intended as a follow-up to training where an expert consultant facilitates a team of instructional leaders in classroom observation or artifact examination, feedback, and coaching to strengthen the implementation of the Marzano Center Essentials for Achieving Rigor.

**Options:**
- Classroom Visits: Instructional coaches visit classrooms after which they debrief and learn ways to provide specific feedback using Growth Tracker (max. 5 people)
- Examining Artifacts: Growth Tracker is used to study artifacts (lesson plans, performance scales, student work) to analyze teacher practice (max. 20 people)

**Audience (varies):**
- Teacher Mentors  
- Instructional/ Curriculum Coaches  
- Building Administrators  
- Central Office Instructional/Curriculum Support

**Duration:** 1 day

**Prerequisites:**  
Corresponding training from the Strengthening Instruction Pathway or the Enhancing Instruction Pathway; Growth Tracker licenses/accounts

**Applicable to all sessions in the Essentials for Achieving Rigor series**

**Audience:** (max. 50 people)  
- Teachers and Teacher Mentors  
- Instructional/ Curriculum Coaches  
- Building Administrators  
- Central Office Instructional  
- Curriculum Support

**Duration:** 1 day

* Except: Coaching for Implementation, Designing Implementation, Professional Learning Communities (PLCs), Leadership Team Coaching (LTC), and Designing Units to Reach Rigor.
**Learning Targets & Scales**
Successful standards-based planning begins with understanding the complexity that the standards require and building a progression of learning. Participants will create and implement rigorous learning targets and performance scales. They will understand the difference between declarative and procedural knowledge and how they relate to planning, cognitive, and conative processes required by the standards, and what and how learning targets are used to create a progression of performance levels.

**Outcomes:**
- Unpack essential and supplemental standards
- Use a taxonomy or cognitive tool (Marzano/Bloom/Webb) to identify levels of cognition required by standards
- Distinguish between a learning target and an activity or assignment
- Use standards to create rigorous learning targets
- Create a scale that describes the levels of performance

**Prerequisites:** Core Instruction, Deepening Core Instruction, Facilitating Complex Learning

**Product Code:** PD000-MEAR-004

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**Monitor & Measure**
In this hands-on session, teachers learn how to use rigorous learning targets and performance scales to make instructional decisions and drive formative assessment. Teachers will create formative assessments to track student progress, plan to monitor student learning, and discover how to encourage student ownership of learning.

**Outcomes:**
- Align assessment and instruction with standards using performance scales
- Use performance scales for formative purposes
- Design assessment tasks to track progress of learning targets
- Help students track their own progress

**Prerequisite:** Learning Targets & Scales

**Product Code:** PD000-MEAR-005

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**Instructional Decision-Making**
Teachers need to use instructional strategies strategically and efficiently for students to meet rigorous standards. In this session, teachers learn to purposefully select, implement, and align instructional strategies with standards-based performance scales so students can succeed with a rigorous learning progression.

**Outcomes:**
- Understand how performance scales drive selection of instructional strategies
- Understand how levels of cognitive complexity and student autonomy relate to rigor
- Plan lessons that scaffold to rigorous standards

**Prerequisites:** Learning Targets & Scales, Monitor & Measure

**Product Code:** PD000-MEAR-010

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**SUPPLEMENTARY BOOK SERIES**
Learning Sciences International recommends that teachers using Essentials for Achieving Rigor read this collection of books to gain a deeper understanding of the model.

Co-written by Dr. Marzano and Learning Sciences consultants, each book addresses key areas of teacher effectiveness and shows educators how to have the most positive impact on student learning and teacher growth.

- **Product Code:** BPP140001
  **ISBN:** 987-1-941112-00-7
- **Product Code:** BPP140007
  **ISBN:** 987-1-941112-06-9
- **Product Code:** BPP140005
  **ISBN:** 987-1-941112-04-5
- **Product Code:** BPP140006
  **ISBN:** 987-1-941112-05-2
- **Product Code:** BPP140004
  **ISBN:** 987-1-941112-03-8
- **Product Code:** BPP140008
  **ISBN:** 987-1-941112-07-6
- **Product Code:** BPP140009
  **ISBN:** 987-1-941112-08-3
- **Product Code:** BPP140010
  **ISBN:** 987-1-941112-09-0
- **Product Code:** BPP140003
  **ISBN:** 987-1-941112-02-1
- **Product Code:** BPP140012
  **ISBN:** 987-1-941112-01-4

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LearningSciences.com | 1.877.411.7114
Conditions for Learning
Learn to construct and plan to implement strategies necessary to design a learning environment that provides a foundation for achieving rigor, encourages student autonomy, and enhances instruction. Discover how-to strategies and teach associated conative skills, as well as how to tailor to student needs.

Outcomes:
- Plan for the desired result of strategies that set the conditions for learning
- Take student needs and situations into account when planning strategies that set the conditions for learning
- Plan to monitor for the desired results of conditions and strategies in the classroom
- Incorporate conative skills while establishing conditions

Prerequisite: None
Product Code: PD000-MEAR-006

Vocabulary for Learning
This hands-on session guides participants through the Marzano six-step process for vocabulary instruction and provides examples of implementation. Participants have an opportunity to plan specific activities that will help them implement each step in their own classrooms.

Outcomes:
- Understand how criteria for success drives vocabulary instruction
- Monitor and track student progress of vocabulary instruction
- Integrate vocabulary instruction into rigorous standards-based lessons
- Plan to monitor students’ understanding of vocabulary term

Prerequisite: None
Product Code: PD000-MEAR-027

Monitoring for Learning
In a standards-based classroom, teachers must continuously check where students are in their learning. Learn how to use classroom formative assessment to help students hit their learning targets. This hands-on session gives teachers techniques, tools, and resources to monitor for learning during a lesson, use assessment tasks, and adapt instruction based on student evidence.

Outcomes:
- Plan to monitor during a lesson toward a learning target
- Plan how to identify evidence of effective instruction
- Apply appropriate monitoring techniques to check for evidence of learning
- Adapt instruction based on monitoring evidence

Prerequisite: None
Product Code: PD000-LSI-026

Designing Units to Reach Rigor
Help students achieve at the highest level possible by designing a unit using the techniques outlined in previous trainings. Collaborate with others and receive feedback as you tie together the lessons learned. In this hands-on session, educators will enhance their toolboxes with instructional strategies and resources.

Outcomes:
- Use standards to create rigorous learning targets and performance scales
- Align assessments with standards using performance scales
- Take student needs and situations into account when planning strategies that set the conditions for learning
- Use performance scales to drive the selection of instructional strategies
- Plan to monitor for the desired result of foundational and deepening strategies
- Plan for predictable challenges of foundational and deepening strategies
- Use a performance scale as a basis for reflective action
- Determine the most effective instructional decisions for students

Duration: 2 days
Prerequisites: Learning Targets & Scales, Monitor & Measure, Instructional Decision-Making
Product Codes: PD000-LSI-022-D1 PD000-LSI-022-D2

“The training I received was priceless as far as my teaching career is concerned. I will be forever grateful as will my students this year and in the years to come.”
— Ellen Miller, Teacher, Florida
Learning Targets & Scales for Leaders
Learn to provide feedback to support teachers when constructing and implementing rigorous learning targets and performance scales to help students understand what they are learning and drive instructional decisions. School leaders will have the opportunity to discuss how to provide feedback as teachers create or strengthen targets and scales for the classroom.

Outcomes:
(Leaders will be able to provide feedback as teachers)
- Analyze standards to unpack and establish learning targets
- Categorize learning targets into levels of cognitive complexity
- Organize targets into a scale describing levels of expected performance
- Create a scale that describes the levels of performance
- Develop an implementation plan for using learning targets, goals, and scales

Aligns with Learning Targets & Scales for teachers.

Audience: (max. 50) Administrators
Duration: 1 day
Product Code: PD000-MEAR-004-L

Monitor & Measure for Leaders
Learn to provide feedback to support teachers as they use rigorous learning targets from a performance scale to make instructional decisions (monitor) and drive formative assessment (measure). Leaders will discuss the importance of connecting assessments with the progression of learning embedded in a performance scale. They will examine how teachers plan to monitor student learning in both formal and informal ways to track student progress using evidence and discover how to encourage student ownership of learning by helping students track their own progress.

Outcomes:
(Leaders will be able to provide feedback as teachers)
- Align assessment with standards using performance scales
- Use performance scales for formative purposes
- Design assessment tasks to track student progress of each learning target using various types of assessments
- Help students track their own progress
- Plan approaches to celebrating student progress

Aligns with Monitor & Measure for teachers.

Instructional Decision-making for Leaders
Discuss how to support and provide valuable feedback to help teachers develop expertise in instructional decision-making. School leaders will enhance their understanding of the instructional decision-making process in order to more effectively support teachers as they plan to scaffold to rigorous standards in their classrooms.

Outcomes:
(Leaders will able to provide feedback as teachers)
- Specify instructional strategies in a learning progression to best help students learn critical content
- Evaluate selection and implementation of research-based instructional strategies
- Plan lessons that scaffold to rigorous standards efficiently and strategically

Aligns with Instructional Decision-making for teachers.

Audience: (max. 50) Administrators
Duration: 1 day
Product Code: PD000-MEAR-010-L

Monitoring for Learning
In a standards-based classroom, teachers must continuously check where students are in their learning. Learn how to use classroom formative assessment to help students hit their learning targets. This hands-on session gives teachers techniques, tools, and resources to monitor for learning during a lesson, using assessment tasks, and adapt instruction based on student evidence.

Outcomes:
- Plan to monitor during a lesson toward a learning target
- Plan how to identify evidence of effective instruction
- Apply appropriate monitoring techniques to check for evidence of learning
- Adapt instruction based on monitoring evidence

Prerequisite: None
Product Code: PD000-LSI-026

Essentials PD for Leaders
Raise the bar for rigorous instruction with enhanced implementation and a whole-school approach to the Marzano Center Essentials for Achieving Rigor.

LTC = Learning Sciences International Leadership Team Coaching
Designing Implementation
Raising the bar for rigorous instruction requires solid leadership, a committed faculty, and an action plan that supports and maintains the vision. In this training, your leadership team will develop a plan for implementing Marzano Essentials with training on the instructional model, Professional Learning Communities (PLCs), and supporting school leader growth through focus groups. They will learn how to protect common planning time to support teacher growth, create common scales and assessments, and strengthen instructional intervention and enrichment.

Outcomes:
- Learn the purpose for a school-wide model of instruction and how to facilitate change that enhances student achievement
- Conditions and expectations for increasing classroom rigor
- The value of building and mentoring PLCs
- The importance of monitoring student progress and teacher growth
- Develop an implementation plan

Recommended Progression:
- Leadership Team builds an implementation plan during this session
- Whole school participates in Monitoring for Learning, Core Instruction, Learning Targets & Scales, Monitor & Measure, Deepening Core Instruction, and Facilitating Complex Learning
- PLC Facilitator Training and Leadership Team Coaching enhance implementation

Prerequisites: None
Audience: (max. 50) Leadership Team Members
Duration: 1 Day
Product Code: PD000-LSI-024-E

PLC Facilitator Training
Teacher leaders will assess their current use of PLCs, learn techniques to support and encourage new and experienced teachers, and identify next steps to mentor and build collaborative learning communities. The characteristics of an effective PLC will be identified as participants take a hands-on approach to establishing a culture of shared responsibility, positively impacting instructional practice and student growth while increasing leadership capacity.

Outcomes:
- Responsibilities and skills required for facilitating a successful PLC
- Conditions, purpose, logistics, and work of a PLC
- Stages of team development
- Using common language and performance scales
- Formative and summative assessment to track student progress
- Increased use of student-centered instructional strategies
- Problem-solving enrichment and interventions for students
- Engaging in instructional rounds to observe others

Recommended Progression:
Learning Sciences recommends the first PLC day occur after Designing Implementation but before the first Core Instruction session. The second PLC day should occur after Monitor & Measure.

Audience: (max. 50)
- Teachers Leaders
- Teacher Mentors
- Instructional/Curriculum Coaches
- Building Administrators

Duration: 2 Days (not consecutive)
Product Codes: PD000-LSI-025-D1 PD000-LSI-025-D2

Leadership Team Coaching (LTC)
On-site coaching sessions where an expert consultant facilitates examination of artifacts, data analysis, classroom observation, iObservation training, and feedback to strengthen the implementation of the Essentials for Achieving Rigor. Participants discuss the Coaching and Feedback Tool, ways to provide teacher feedback, and next steps in improving their instructional coaching practice. The building administrator receives an individualized session on implementation support and monitoring of anticipated outcomes.

Outcomes:
- Coaching strategies to support teacher implementation
- Viewing virtual classroom(s) after which participants share observations and learn ways to provide specific feedback for growth to teachers
- Examining artifacts that accompany the virtual classroom visit
- Reviewing Growth Tracker data

Prerequisites:
- The corresponding training. For instance, in order to participate in Leadership Team Coaching-Core Instruction, instructional leaders must have participated in the Core Instruction training.
- Growth Tracker license and accounts

Audience: (max. 20)
- Teacher Mentors
- Instructional/ Curriculum Coaches
- Building Administrators
- Central Office Instructional/ Curriculum Support

Duration: 1 Day/Session
Become a Learning Sciences Marzano Center Certified Results Coach. Make a significant and sustained impact on teacher practice and drive student achievement to new heights.
Coaching for Sustainability

**WHAT IT IS**
A competency- and evidence-based coaching certification to develop strong instructional leaders who can lead and sustain instructional initiatives. This innovative, five-tier certification will galvanize your district’s leadership coaching to impact teacher practice and student achievement.

**HOW IT WORKS**
Because the entire program is developed through our data-focused content modules, it provides results-driven coaching along with tools and technology to support, measure, and sustain the shifts.

**WHAT IT DOES**
This program leads coaches to the critical instructional shifts required by rigorous standards, building their capacity to support and guide teachers through implementation. It helps schools create and sustain leadership coaching programs that serve multiple purposes, improving their use of:
- Professional development training
- Coaching practices
- Professional Learning Communities (PLCs)
- Support for struggling teachers
- New teacher inductions
- Instructional leader development

PD Progression for Coaching Certification