# Teaching for Rigor:
Three Challenges for Curriculum Directors

The Marzano Center Essentials for Achieving Rigor model embeds professional development in teachers' daily instruction and helps align curriculum goals through a common language of instruction.

A new model of instruction provides the "how" to teach for rigor.

The Marzano Center Essentials for Achieving Rigor model has been developed to meet challenges for curriculum specialists implementing college and career readiness standards. The model:

- **Supports a focused shift in pedagogy**
  Gives teachers a road map for planning units of instruction, grounds instruction in 13 essential strategies and a clear learning progression, facilitates feedback and collaboration, and provides real-time formative data that allows teachers to assess and adjust their practice.

- **Unifies school culture**
  Aligns programs and curricula around an instructional model and a common language of instruction. Teachers across grades and departments, parents, community, and staff share a common language and common expectations for student learning aligned to rigorous standards. The model thus helps foster an aligned understanding of the goals and progression of the curriculum.

- **Provides formative feedback**
  Allows teachers to monitor student progress and make adjustments in their instruction before the end of a unit or year. Because the model helps teachers adjust their instruction in real time, it helps focus instruction to close achievement gaps.
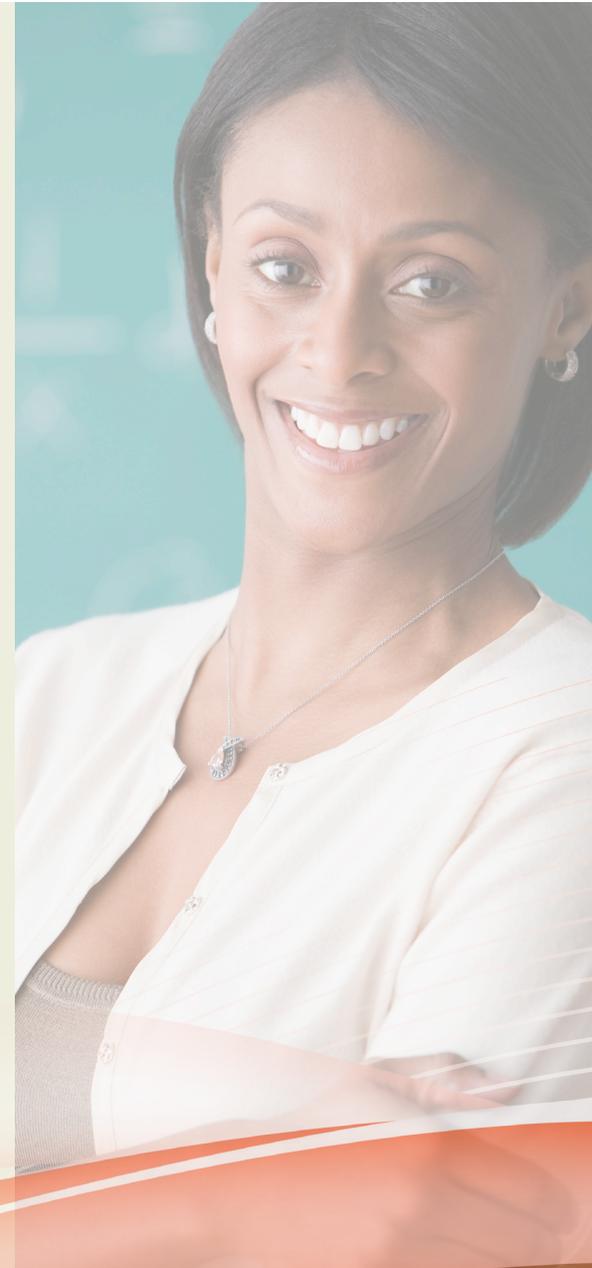
Introduction

Curriculum specialists implementing new college and career readiness standards across the nation are facing a number of challenges. While most districts are fairly far along in the process of implementing rich curriculum and textbooks to complement the standards, curriculum developers are still working hard to ensure that all educators in the system understand and embrace a view of curriculum that is focused on outcomes rather than content. In their 2012 paper, *From Common Core to Curriculum: Five Big Ideas*, McTighe and Wiggins note that "we should think of curriculum as the pathway toward a destination. . . . Our conception is that curriculum should be framed and developed in terms of worthy outputs, i.e., desired performances by the learner, not simply a listing of content inputs."

This focus on "worthy outputs" calls for a reassessment, then, not just of content but of teacher classroom skills that will complement the new curriculum and that are directly responsive to the desired effects called for by college and career readiness standards.

However, teachers still report that they want and need targeted professional development in pedagogy and supportive training to help them teach lessons and units aimed at achieving rigor. Such support and training is especially crucial now, as experts worry that the achievement gap may widen with new, more rigorous state standards unless pedagogical needs are addressed.

These reports are more than anecdotal. Indeed, multiple states have already shown troubling drops in student scores with assessments aligned to college and career readiness standards. Our analysis of more than 2 million data points at Learning Sciences International has revealed a significant finding: Less than 6% of observed classroom lessons are devoted to higher-order thinking skills and cognitively complex learning— analysis, hypothesis generation and testing, reasoning, decision-making—those skills that are the foundation of rigorous standards such as Common Core, college and career readiness standards, and other aligned state standards.

Our analysis of more than 2 million data points at Learning Sciences International has revealed that less than 6% of observed classroom lessons are devoted to higher-order thinking skills and cognitively complex learning.

What this indicates is that while teachers and students may be *visiting* the land of cognitive complexity, they are certainly not *living* there. Curriculum specialists hoping to help teachers move toward complex thinking skills with *all* students will want to identify and implement a model of instruction that supports them in making these critical instructional shifts.

Additionally, schools and districts will benefit from an instructional model that not only meets the need for rigor, but also aligns and supports a shared vision of effective instruction for all educators in the system. Such a model will fully support teachers to make these necessary pedagogical shifts, give them the tools and resources to monitor student progress during lessons and units, and help them become proficient at reaching students at all levels to meet the demands of rigorous assessments.

Based on our conversations in many districts, this brief paper offers potential solutions for the challenges curriculum specialists may face in implementing CCRS standards.

LearningSciences
MARZANO
C E N T E R

Challenge #1: RTI interventions are not sufficient to prepare struggling students for college and career.

One of the most pressing challenges for curriculum specialists is implementation of a model of instruction, along with professional development, that directly supports and aligns with the rich college and career readiness curriculum that schools have adopted with new standards. To be successful, teachers need focused training in developing units of instruction that are highly aligned to new standards, along with effective classroom strategies for teaching those units to the level of required rigor. Until recently, professional development focused on these necessary critical instructional shifts has not been readily available.

As teacher Emily Workman summarized the problem in her 2012 blog for Core Commons:

A number of initiatives have popped up, offering teachers opportunities for training and professional development, but feedback from teachers and policy experts indicates that these resources are either not reaching enough teachers, are a one-size-fits-all approach, or are of questionable quality.

Learning Sciences International developed the Marzano Center Essentials for Achieving Rigor instructional model specifically to address this gap. This research-based, non-evaluative model provides a clear, well-articulated pathway for teachers to achieve rigor for all students. The model focuses on 13 essential classroom strategies with tools and resources for planning, data to monitor student progress, and multiple measures of self-assessment to facilitate growth in targeted skills, including:

- Training in specific, research-based classroom strategies to move *all* students toward attainment of higher-order thinking skills that address the requirement for both student autonomy and complex thinking

- Training in standards-based planning on measurement topics to show progression of knowledge across units and grade levels

- Reflection on lesson outcomes, with action plans for intervention and enrichment

- Integrated monitoring and feedback tools to help teachers transition their instructional practice toward cognitively complex tasks and the student-centered classroom

- Professional development "embedded in daily work" (Coggshall, 2012)[1] and collaborative learning in a supportive, non-evaluative, growth-focused environment

- Parallel training for teacher coaches, who will continue to provide support and feedback long after formal training has been completed

[1]Coggshall, J. (2012). *Toward the effective teaching of new college- and career-ready standards: Making professional learning systemic* (Research-to-Practice Brief). Washington, DC: National Comprehensive Center for Teacher Quality. Retrieved from www.tqsource.org/publications/TowardEffectiveTeaching.pdf

Challenge #2: New standards require whole-school alignment.

Many curriculum specialists may feel unprepared to support teachers in making these pedagogical shifts, but the transition is vital in order to create an aligned system that pulls all school curricula into a shared focus on rigorous instruction.

Successful schools will ensure that *all* teachers and instructors throughout the school have access to the critical training around a model of instruction that will support all students to meet expectations around new standards.

For this reason, the Essentials for Achieving Rigor model helps foster a collective sense that the school as a whole is moving together toward increased instructional rigor. A model of instruction aligned to rigor serves the following purposes:

- Provides a common language of instruction across both grade levels and departments or disciplines

- Unifies pedagogy across a wide range of instructional approaches for diverse learning populations

- Provides parents and the community a clear understanding of the purpose and methods of the school's instructional goals

Learning Sciences
MARZANO
C E N T E R

Challenge #3: Lagging indicators of student achievement are too little, too late.

As noted, preliminary assessments in New York, Kentucky, and Maryland, among other states, are showing sharp drops in student achievement with new assessments aligned to CCRS. An unpublished Annenberg analysis of 2013 New York state test scores, reported in *The New York Daily News*, was even more troubling, as it pointed to achievement gaps widening for special education, ELL, Black, and Latino students.

Schools and districts will want to meet this challenge head-on. Teachers will need tools to allow them to identify struggling students and student subgroups early on in units so as to adjust instructional strategies. The Essentials for Achieving Rigor model gives teachers access to leading indicators of student achievement, through daily monitoring tools, to meet the needs of all the learners in the classroom. The model provides:

- Multiple measures of student growth to inform teachers of instructional gaps

- Formative feedback during units and the necessary monitoring data to facilitate instructional decision-making in lesson and unit planning

- A variety of specific research-based instructional strategies to help move struggling students toward attainment of cognitively complex skills

A New Standard of Professional Development

Teachers need instructional models and training to help them step into the role of skilled facilitators, to guide students to take ownership of their own learning. The Essentials for Achieving Rigor model has been designed specifically to assist teachers to develop a new pedagogy, the crucial missing component that educators, analysts, and above all, teachers, have been calling for. Integrating 13 essential strategies into a comprehensive program of professional development, the model has received high praise from educators in schools and districts who are already beginning to meet these challenges.

....

Download a **FREE MONOGRAPH** by Robert J. Marzano and Michael D. Toth for the research and data foundations of the Essentials for Achieving Rigor model.

Contact us for more information at 1.877.411.7114, or visit our website at MarzanoCenter.com.

....

What teachers are saying about Essentials professional development:

"[After this training] I will make adaptations when the desired result is not evident. I will go back and re-teach or allow the students to teach each other as a way to deepen their own knowledge. I will continue to be more aware of where every student is and what needs to be done to teach them all effectively."

"The training provided good examples and deepened my understanding of creating complex tasks."

"I am now ensuring that I am making changes to my lesson plans based on the monitored results I am seeing."

Learning Sciences
MARZANO
C E N T E R

LearningSciencesInternational
LEARNING AND PERFORMANCE MANAGEMENT