Texas Education Agency

Research-Based Instructional Strategies

Intro to RBIS

Welcome & Do Now

Add to Padlet:

What was the most helpful educator preparation you received when you started teaching?

Educator Preparation, Certification & Enforcement

Jessica McLoughlin
Associate Commissioner of Educator Preparation, Certification and Enforcement

Melissa Yoder
Educator Quality
Director of Quality Preparation

Marilyn Cook
Educator Preparation and Certification
Director Educator Certification

Alleigh Nicholls
Manager of EPP Instructional Materials Strategy

Beth Burkhart
Director of Educator Standards & Testing

Coming soon..
Director of EPP Continuous Improvement

Jody Moody
Director of Teacher Apprenticeship

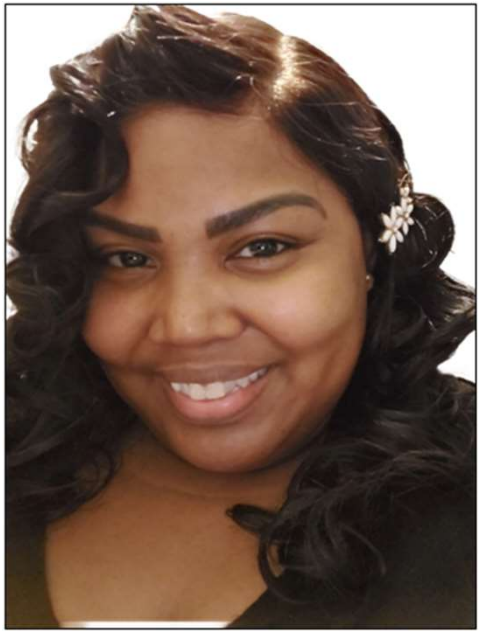
Lorrie Ayers
Director of Educator Preparation Management

Trenton Law
Director of Educator Credentialing

Jennifer Rivera
Director of Customer Support & Service

Meet your RBIS facilitators

Matt Pierson



Crystal A. Graham

Agenda

What: What are the **Research-Based Instructional Strategies**(**RBIS**) in Math and Reading Language Arts (RLA)?

Why: What is the research ensuring the Math and RLA RBIS provide ALL students access to **rigorous, on grade-level instruction?**

How: How do the RBIS and **High-Quality Instructional Materials (HQIM)** work together to prepare teacher candidates to provide grade-level instructions from day 1?

Closing

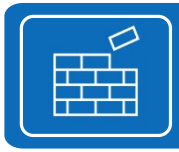
RBIS
What are the Research-Based Instructional Strategies?

The RBIS are…

- ✓ A set of research-based practices that highlight misconceptions that are most common in the field
- ✓ Topics that sometimes require conceptual or philosophical changes to how we approach instruction
- ✓ A set of practices that are supported by research and should be present in classrooms, regardless of instructional materials
- ✓ Based in the science of how students best learn math and reading in K-12 classrooms.

The Research-Based Instructional Strategies

RLA



RBIS 1: Foundational Skills

RBIS 2: Complex Text

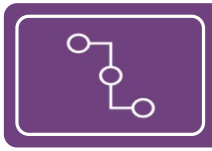
RBIS 3: Knowledge Coherence

RBIS 4: Text Based Responses

Math

RBIS 1: Balance Conceptual and Procedural

RBIS 2: Depth of Key Concepts



RBIS 3: Coherence of Key Concepts

RBIS 4: Productive Struggle

Today's session will focus on…

WHAT

The **RBIS** are--**Research-Based Instructional Strategies.**

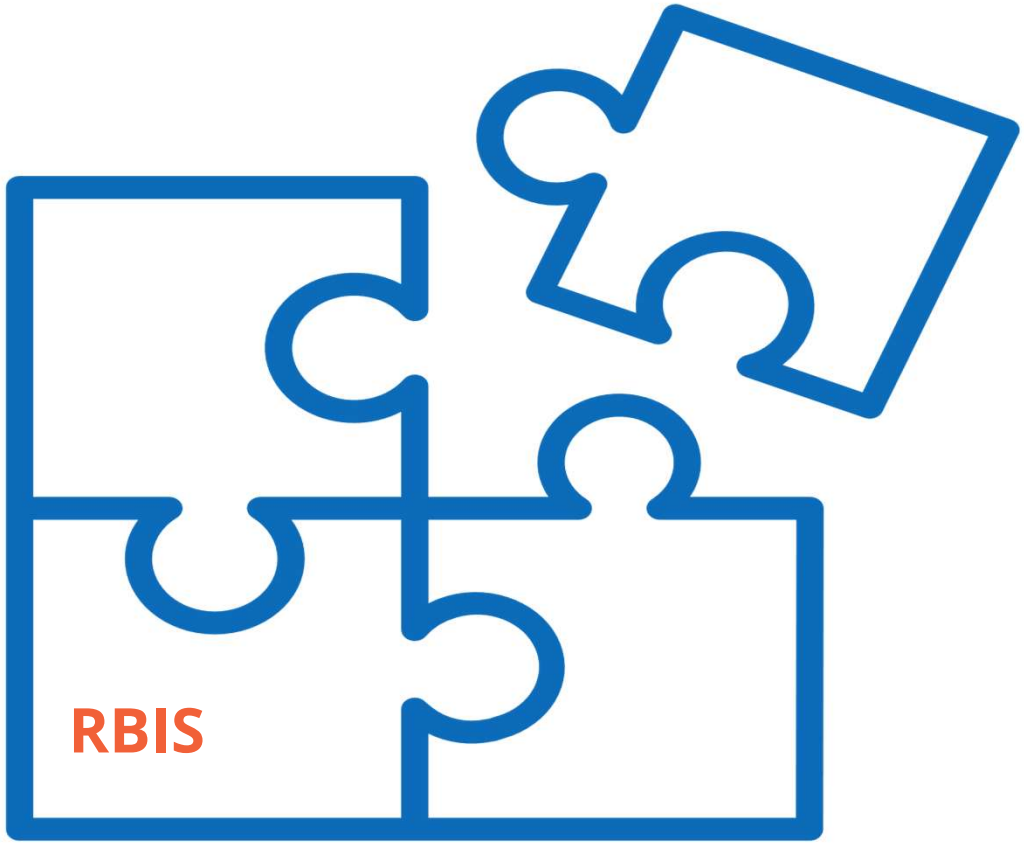
WHY

RBIS provide equitable opportunities for ALL students to have access to **on grade level instruction.**

HOW

The RBIS and **High-Quality Instructional Materials (HQIM)** work together to provide on grade level instruction.

RBIS support schools to make on grade level experiences possible for ALL students.



Why the RBIS

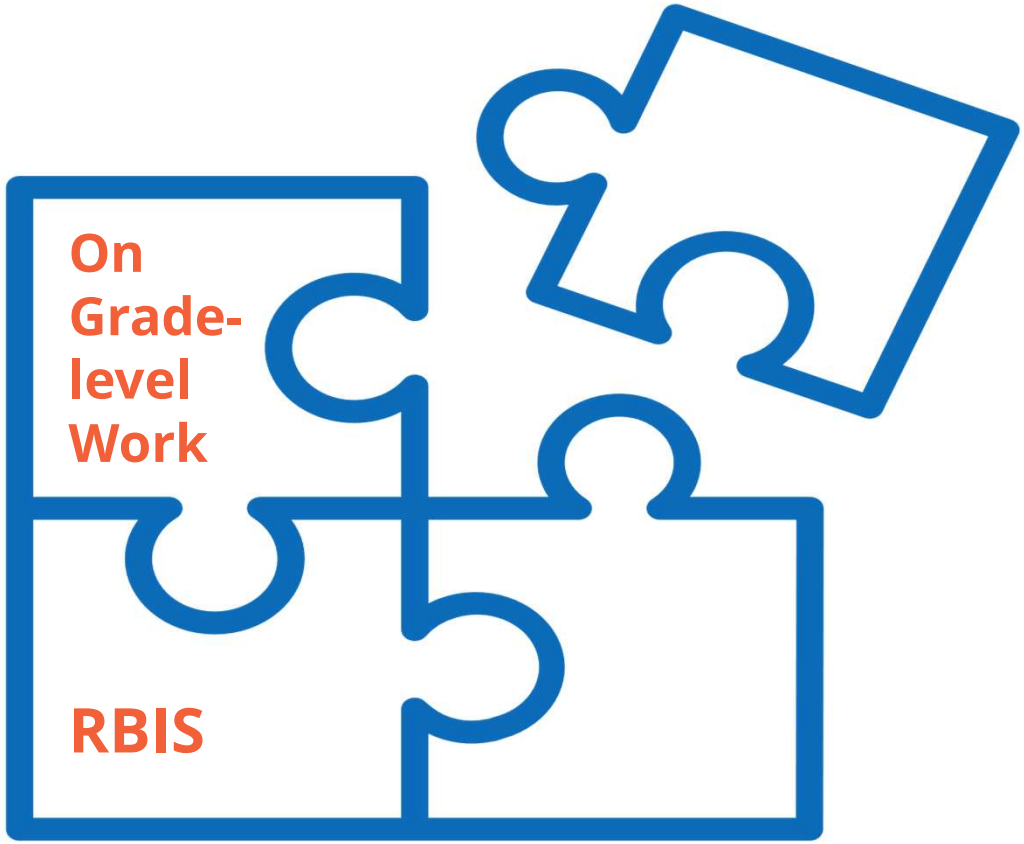

WHY do we need Research-Based Instructional Strategies?
Often, school experiences are not setting up ALL students for success.

RBIS play a critical role in leveling the playing field, recovering lost learning and developing new skills and concepts

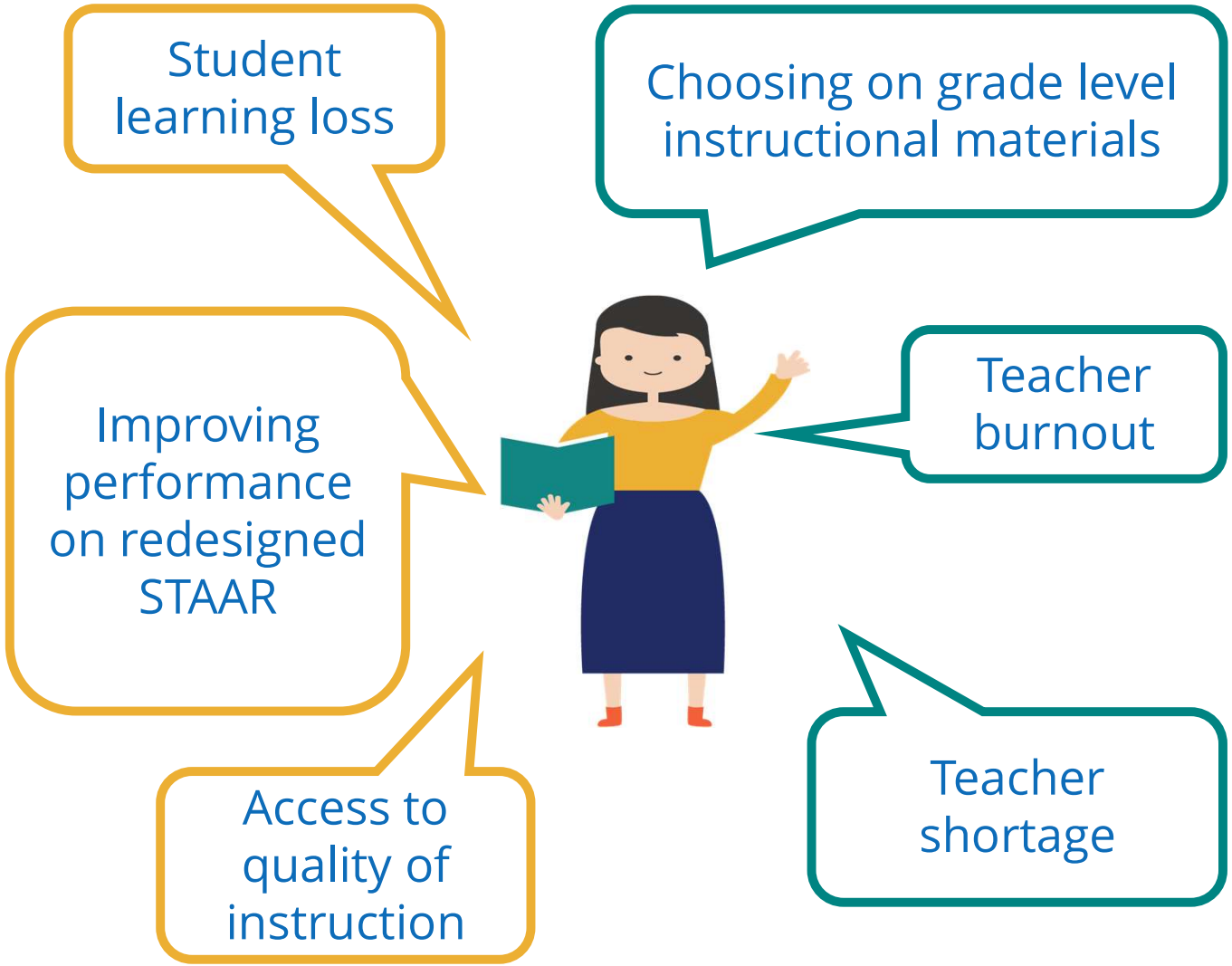
- By the time a student gets to middle school, there's a 50 percent chance that an assignment given is **not on grade level.**

"Assignments That Measure Up." ASCD, October 1, 2016. https://ascd.org/el/articles/assignments-that-measure-up.

RBIS are grounded in research and provide ways to ensure on grade level experiences for ALL students.



HOW do the RBIS support schools to face current challenges?



Research points to best practices and is always evolving. When we know better, we do better.

Math

"Effective teaching not only acknowledges the importance of both conceptual understanding and procedural fluency but also ensures that the learning of procedures is developed over time, on a **strong foundation of understanding** and the use of student-generated strategies in solving problems."

National Council of Teachers of Mathematics. *Principles to Actions:* **Ensuring Mathematics Success for All.** NCTM Inc, 2014.

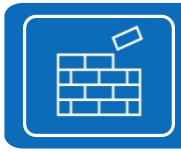
RLA

Complex texts provide students with broader learning opportunities than simple texts by exposing to higher academic vocabulary, language and richer content. Put simply, **students learn more from complex texts** than from simple ones.

Shanahan, Timothy. **"Limiting Children to Books They Can Already Read: Why It Reduces Their Opportunity to Learn."** *American Educator* 44, no. 2 (2020).

RBIS

RLA


RBIS 1: Foundational Skills


RBIS 2: Complex Text

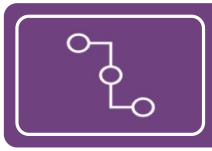

RBIS 3: Knowledge Coherence


RBIS 4: Text Based Responses

Math


RBIS 1: Balance Conceptual and Procedural


RBIS 2: Depth of Key Concepts


RBIS 3: Coherence of Key Concepts


RBIS 4: Productive Struggle

RLA RBIS

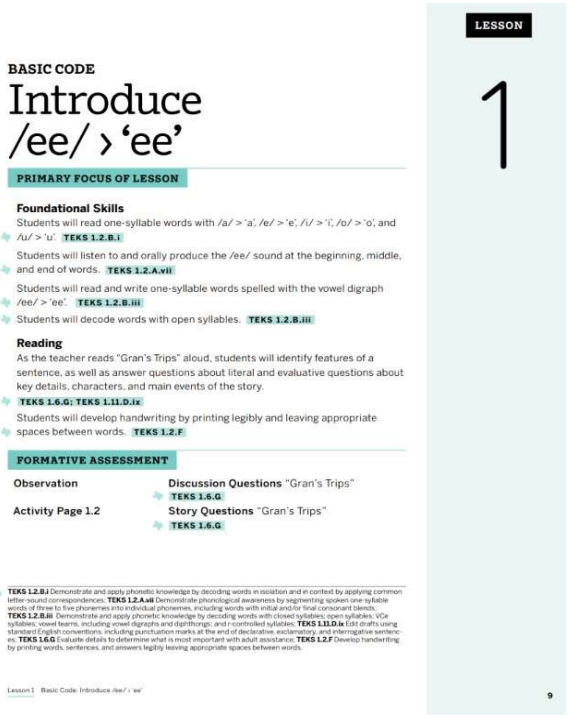
The RLA RBIS

1 Foundational Skills	2 Text Complexity	3 Knowledge Coherence	4 Text-based Responses
Explicit, systematic practice with Literacy Foundational Skills.	**Regular practice with grade-level, complex text** and its academic language.	**Building knowledge and vocabulary** through text in all content areas.	**Reading, writing, and speaking grounded in evidence from text**, both literary and informational.

RLA RBIS 1 Example

Foundational Skills calls for teachers to provide explicit and intentionally sequenced practice with sounds and materials like **decodable readers** that allow students to practice specific skills in the context of reading.

*New **sounds in each unit are introduced** in bold. Students are also introduced to "tricky" spelling concepts where some letters in the word do not follow the regular code rules. An underline in a word indicates a tricky spelling.*



BASIC CODE

Introduce /ee/ › 'ee'

LESSON 1

PRIMARY FOCUS OF LESSON

Foundational Skills

Students will read one-syllable words with /a/ > 'a', /e/ > 'e', /i/ > 'i', /o/ > 'o', and /u/ > 'u'. TEKS 1.2.B.i

Students will listen to and orally produce the /ee/ sound at the beginning, middle, and end of words. TEKS 1.2.A.vii

Students will read and write one-syllable words spelled with the vowel digraph /ee/ > 'ee'. TEKS 1.2.B.iii

Students will decode words with open syllables. TEKS 1.2.B.iii

Reading

As the teacher reads "Gran's Trips" aloud, students will identify features of a sentence, as well as answer questions about literal and evaluative questions about key details, characters, and main events of the story. TEKS 1.6.G; TEKS 1.11.D.ix

Students will develop handwriting by printing legibly and leaving appropriate spaces between words. TEKS 1.2.F

FORMATIVE ASSESSMENT

Observation

Activity Page 1.2

Discussion Questions "Gran's Trips" TEKS 1.6.G

Story Questions "Gran's Trips" TEKS 1.6.G

TEKS 1.2.B.i Demonstrate and apply phonetic knowledge by decoding words in isolation and in context by applying common letter-sound correspondences; TEKS 1.2.A.vii Demonstrate phonological awareness by segmenting spoken one-syllable words of three to five phonemes into individual phonemes, including words with initial and/or final consonant blends; TEKS 1.2.B.iii Demonstrate and apply phonetic knowledge by decoding words with closed syllables; open syllables; VCe syllables; vowel teams, including vowel digraphs and diphthongs; and r-controlled syllables; TEKS 1.11.D.ix Edit drafts using standard English conventions, including punctuation marks at the end of declarative, exclamatory, and interrogative sentences; TEKS 1.6.G Evaluate details to determine what is most important with adult assistance; TEKS 1.2.F Develop handwriting by printing words, sentences, and answers legibly leaving appropriate spaces between words.

Lesson 1 Basic Code: Introduce /ee/ › 'ee'

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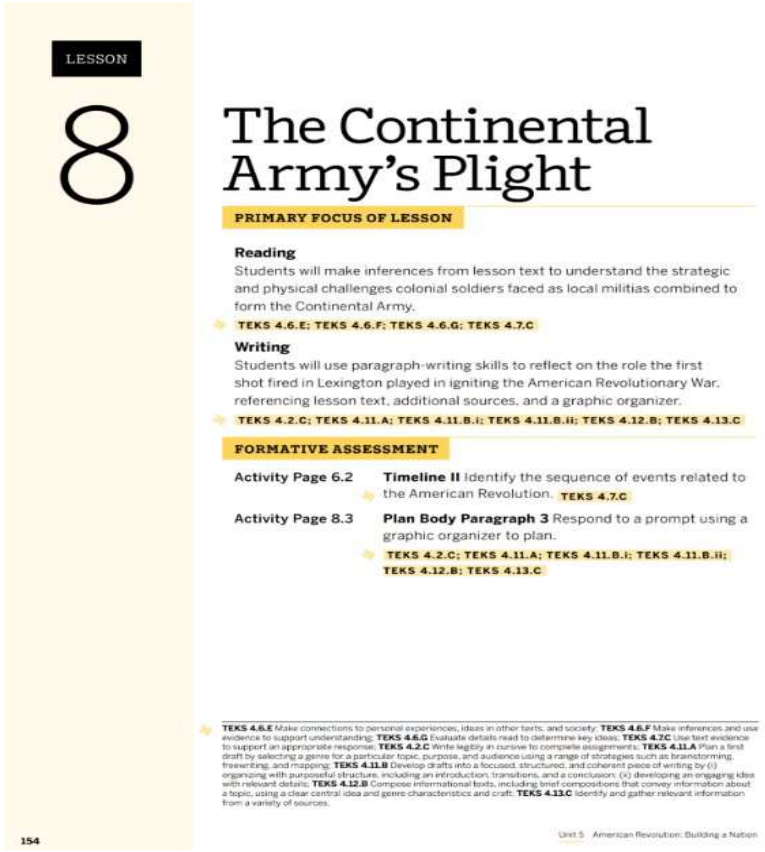
RLA RBIS 2 Example



LESSON

8

The Continental Army's Plight

PRIMARY FOCUS OF LESSON

Reading
Students will make inferences from lesson text to understand the strategic and physical challenges colonial soldiers faced as local militias combined to form the Continental Army.
TEKS 4.6.E; TEKS 4.6.F; TEKS 4.6.G; TEKS 4.7.C

Writing
Students will use paragraph-writing skills to reflect on the role the first shot fired in Lexington played in igniting the American Revolutionary War, referencing lesson text, additional sources, and a graphic organizer.
TEKS 4.2.C; TEKS 4.11.A; TEKS 4.11.B.i; TEKS 4.11.B.ii; TEKS 4.12.B; TEKS 4.13.C

FORMATIVE ASSESSMENT

Activity Page 6.2	**Timeline II** Identify the sequence of events related to the American Revolution. TEKS 4.7.C
Activity Page 8.3	**Plan Body Paragraph 3** Respond to a prompt using a graphic organizer to plan. TEKS 4.2.C; TEKS 4.11.A; TEKS 4.11.B.i; TEKS 4.11.B.ii; TEKS 4.12.B; TEKS 4.13.C

TEKS 4.6.E Make connections to personal experiences, ideas in other texts, and society; **TEKS 4.6.F** Make inferences and use evidence to support understanding; **TEKS 4.6.G** Evaluate details read to determine key ideas; **TEKS 4.7.C** Use text evidence to support an appropriate response; **TEKS 4.2.C** Write legibly in cursive to complete assignments; **TEKS 4.11.A** Plan a first draft by selecting a genre for a particular topic, purpose, and audience using a range of strategies such as brainstorming, freewriting, and mapping; **TEKS 4.11.B** Develop drafts into a focused, structured, and coherent piece of writing by (i) organizing with purposeful structure, including an introduction, transitions, and a conclusion; (ii) developing an engaging idea with relevant details; **TEKS 4.12.B** Compose informational texts, including brief compositions that convey information about a topic, using a clear central idea and genre characteristics and craft; **TEKS 4.13.C** Identify and gather relevant information from a variety of sources.

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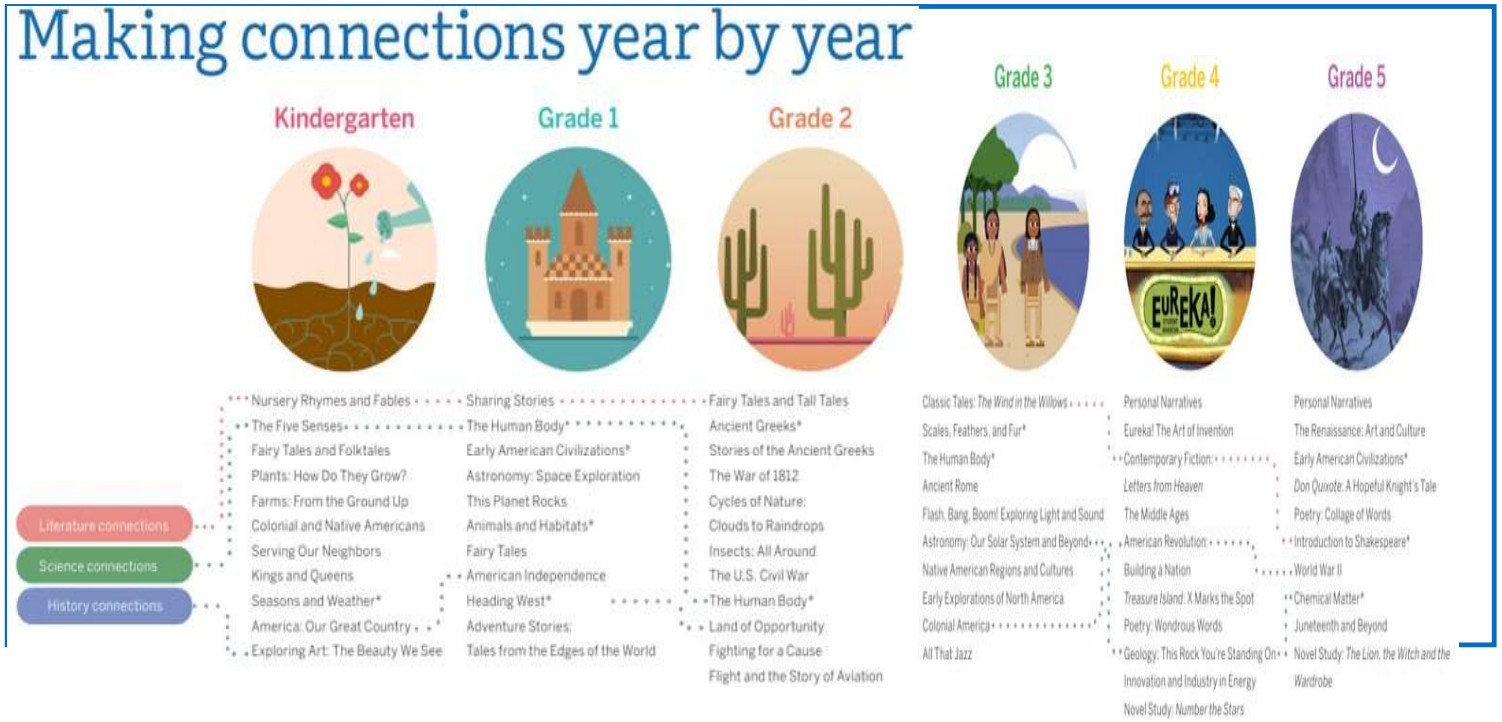
Unit 5 American Revolution: Building a Nation

Complex Text calls for instruction to center **meaning-making** of on grade level complex text. It calls on teachers to **prioritize time spent reading, thinking, and responding to grade level text.**

It also calls on us to move away from a leveled reading approach.

RLA RBIS 3 Example



Knowledge Coherence

calls for instruction that **builds knowledge of real-world topics over time** (within and across grade levels).

RLA RBIS 4 Example

Consider this text-based question:
When George Washington wrote to the Continental Congress in December 1777 describing the state of the army, what was morale like?

Text-Based Responses calls for opportunities to respond to questions that are grounded in text. It provides **rationale for why time spent discussing and writing have an impact on student reading comprehension**. It also emphasizes the reciprocal relationship between reading and writing.

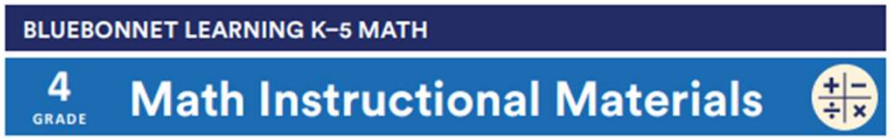
Math RBIS

The Math RBIS

1	2	3	4
Balance Conceptual & Procedural	Depth of key concepts	Coherence of Key Concepts	Productive Struggle
Pursue **rigor by balancing conceptual understanding, procedural skill** and **fluency.** Apply this balanced understanding to mathematical **applications** as required by the standards in the TEKS.	Focus on math content that **aligns to and meets the rigor of the TEKS** for each grade level, **while concentrating time and effort** on going deep on the **most important topics** for the grade level.	**Connect concepts within and across grades** along a strategic progression of learning so that new understandings are built on previous foundations. Mathematics tells a **continuous, connected story**.	Students engage in productive problem solving, engaging in **multiple opportunities for practice, discussion, representations, and writing** that requires them to explain and revise their thinking.

Math RBIS 1 Example

Grade 4,
Module 3: **Multi-Digit Multiplication and Division,**
Topic C
TEKS: 4.4C, 4.4D



Balance Conceptual and Procedural calls on math instruction to include opportunities to represent, discuss, and make connections among mathematical ideas in multiple forms.

Conceptual

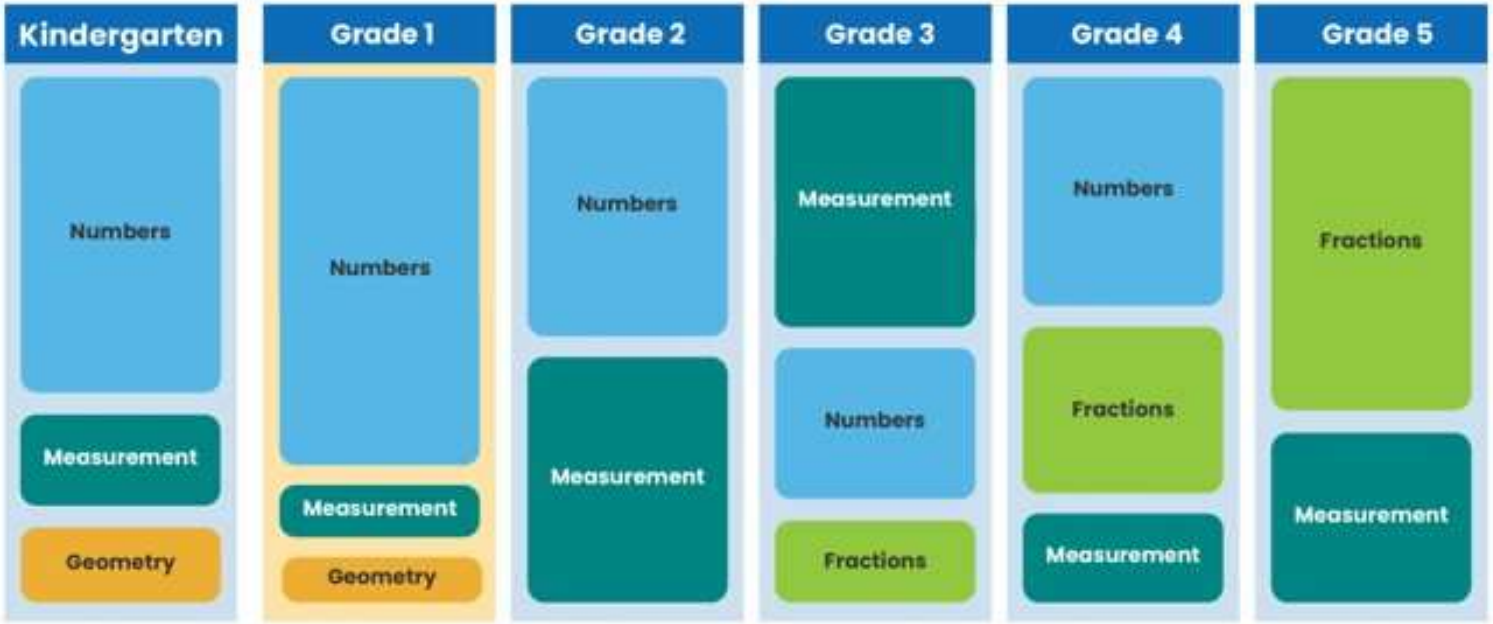
Procedural

Topic Overview:

In Lessons 7 and 8, students use place value disks to represent the multiplication of two-, three-, and four-digit numbers by a one-digit whole number. Lessons 9 and 10 move students to the abstract level as they multiply three- and four-digit numbers by one-digit numbers using the standard algorithm.

Math RBIS 2 Example

Time and effort are concentrated to go deep on key concepts for each grade level, aligning to the rigor of the TEKS.



Depth of Key Concepts calls for concentrated time and effort on the most important topics.

Image based on Bluebonnet Learning K-5 Math K-5 Overview

Math RBIS 3 Example

Module 6 in kindergarten connects to module 2 in 1st grade, then it expands from grades 2-5.

Coherence of Key Concepts calls for math learning to build and spiral concepts within and throughout the year, telling a continuous connected story.

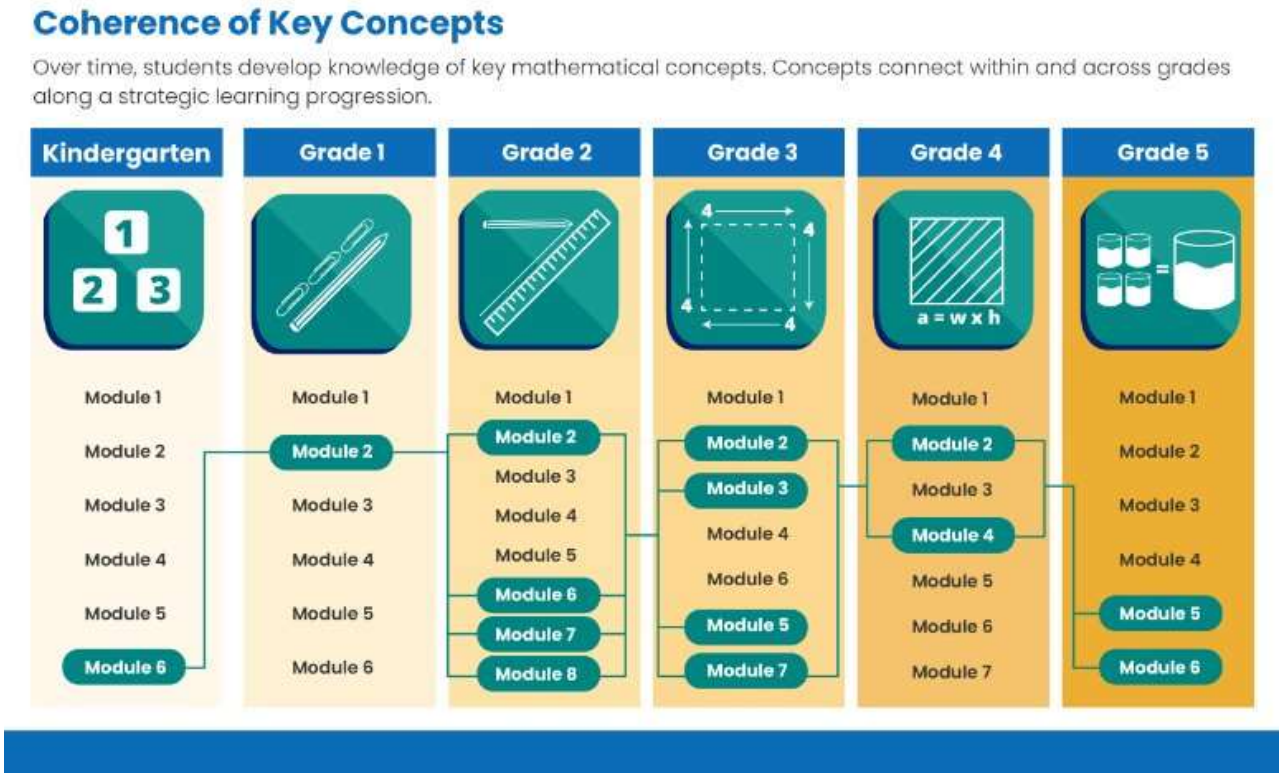


Image based on Bluebonnet Learning K-5 Math K-5 Overview

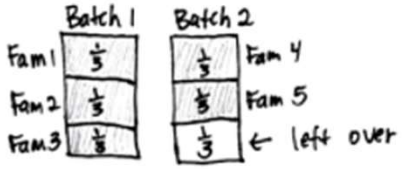
Math RBIS 4 Example

*This Grade 3 application problem is supported with scaffolds that guide instructors to **engage in multiple ways for solving the problem.***

Productive Struggle calls for us to provide students **time to collaboratively pro blem solve** using different representations and then asking them to **explain their thinking.**

Application Problem (6 minutes)

Sarah makes soup. She divides each batch equally into thirds to give away. Each family that she makes soup for gets 1 third of a batch. Sarah needs to make enough soup for 5 families. How much soup does Sarah give away? Write your answer in terms of batches.



Sarah will give away $\frac{5}{3}$ batches of soup.

Extension: $\frac{1}{3}$ batches will be left over.

Extension: What fraction will be left over for Sarah?

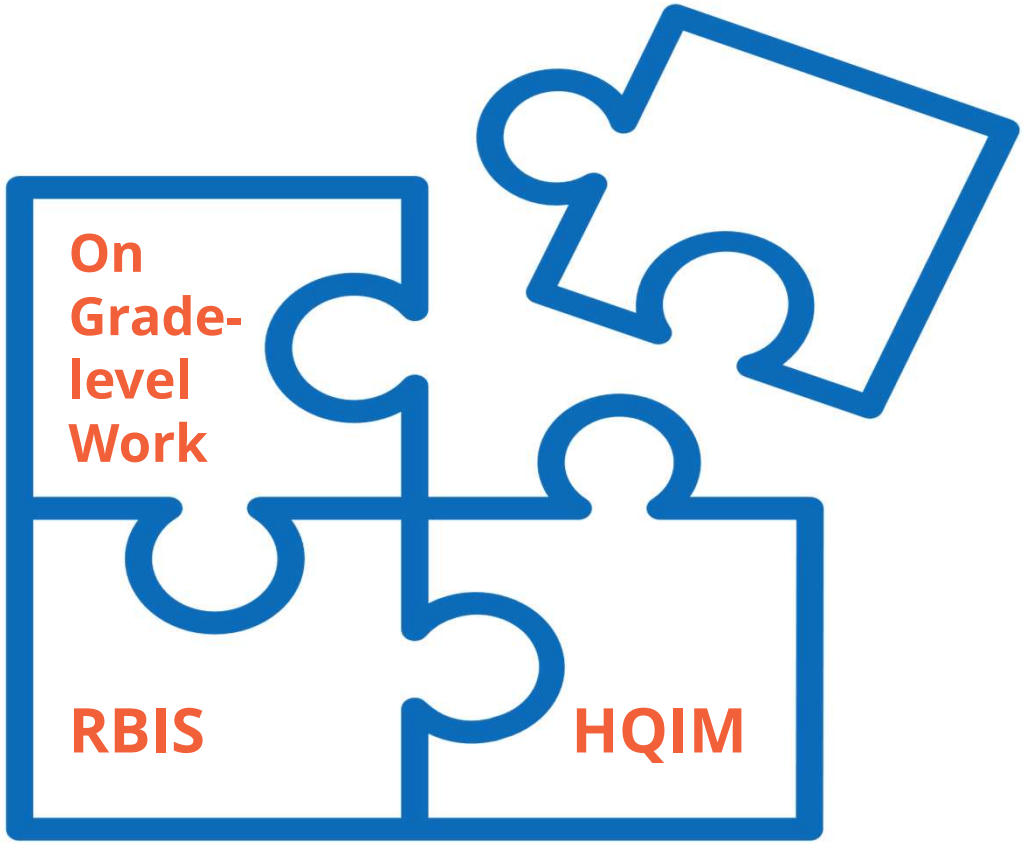
Note: This problem reviews writing fractions greater than 1 whole.

NOTES ON MULTIPLE MEANS OF ENGAGEMENT:

Scaffold solving the Application Problem for students needing more proficiency practice with step-by-step questioning. For example, ask the following:

- "How much soup does 1 family receive?" (1 third of the batch of soup.)
- "2 families?" (2 thirds.)
- "3 families?" (3 thirds or 1 whole batch of soup.)
- "Does Sarah have to make more than 1 batch?" (Yes.)
- "How much of the second batch will she give away?" (2 thirds.)
- "How much will remain?" (1 third.)

How do the RBIS work with High-Quality Instructional Materials (HQIM)?



What do we mean when we say HQIM?

High-Quality Instructional Materials are core materials are designed to cover **100% of the TEKS standards** in a particular grade and subject for the full year and include:

Course-level materials	Teacher facing unit materials	Teacher facing lesson materials	Student facing materials
Scope and sequence covering 100% of TEKS Pacing guides Family supports	Unit plans Unit summative embedded assessments	Lesson plans to support a 180-day school year (at minimum) Lesson materials	Student workbooks aligned to teacher lesson plans

RBIS and **High-Quality Instructional Materials (HQIM)** work together to provide on grade level instruction

HB 1605 EPP requirement implementation will prioritize EPP training and support

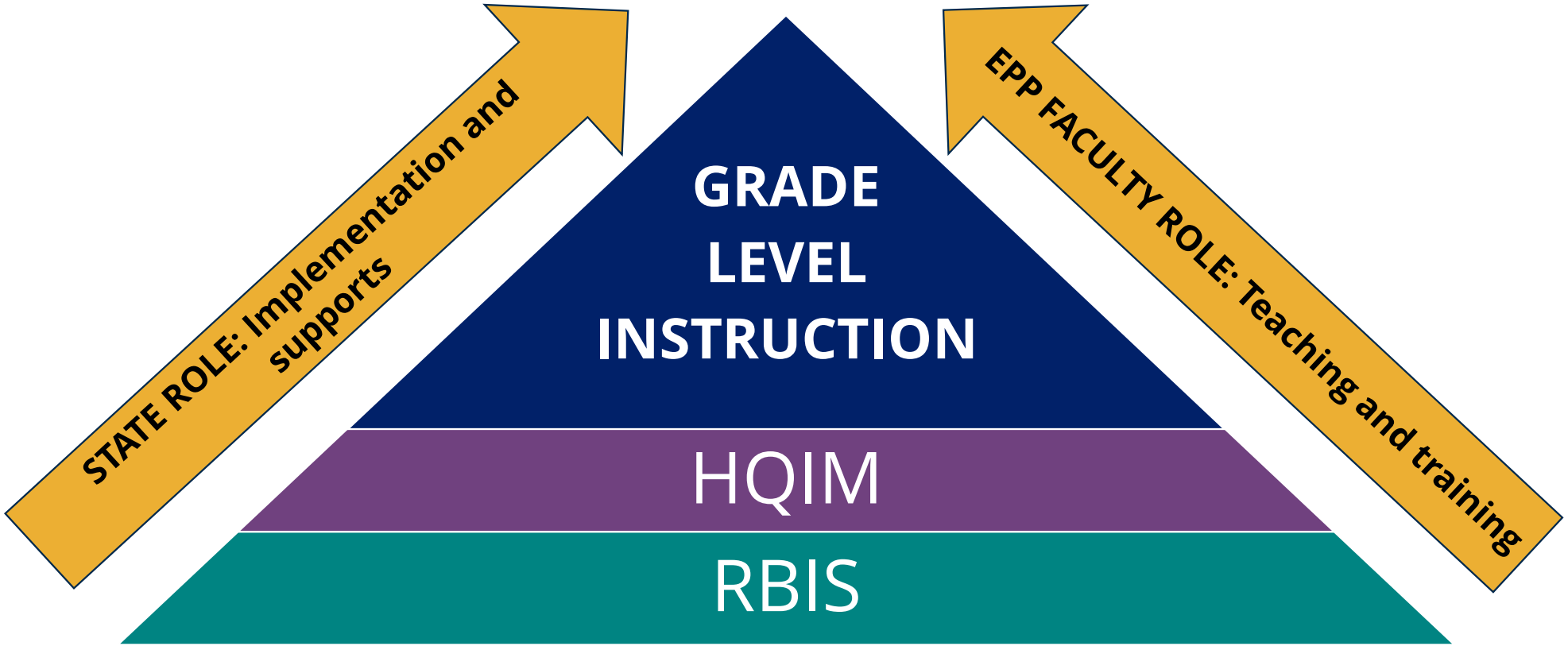
HB 1605, 88th Legislative Session, Regular Session, 2023 Requirements

- Requires the SBEC to develop training requirements for certification that include demonstration of thorough **understanding of and competence in use of open education resource instructional materials**
- Requires the SBEC to **prohibit EPPs from providing instruction on the use of instructional materials that incorporate the method of three-cueing** into foundational skills reading instruction.
- Requires the agency to **develop training to assist EPPs** to implement the above requirements.

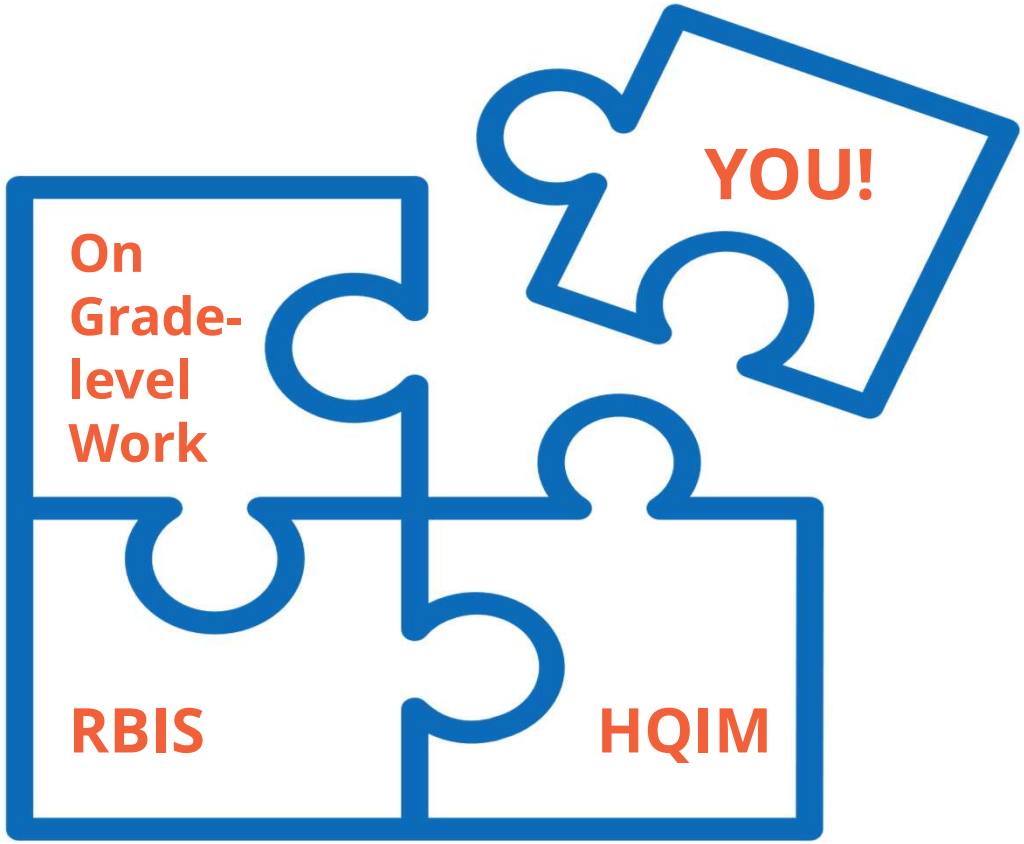
Development and delivery of State RBIS and OER specific training for EPP Faculty.

Training will include comprehensive implementation support.

RBIS responds to current challenges in schools by building a strong foundation



How can we prepare teacher candidates to recognize HQIM and advocate for its usage?



An example from the field

- Educator Prep Program commended for seeking innovative ways to prepare candidates for the classroom by TEA.
- Paid Teacher Residency Model for students to earn their B.A. and teacher certification.
- Focused on developing a greater understanding of HQIM and research-based instructional strategies to support residents placed in districts using HQIM.

How Dallas College Approached The Work

Engage Faculty in The Why	Why start with this?	Applying in your context

▪ Faculty were trained in “The Opportunity Myth” to understand the urgency behind key shifts for student success such as:
  ▪ Strong instruction
  ▪ Deep engagement
  ▪ High expectations for students
▪ Faculty were taught the research-based instructional strategies(RBIS) and the data behind HQIM.
	▪ Dallas College said this was a turning point.
	▪ Faculty could then fully grasp why the shifts were being made
	▪ Led to buy-in to set the stage for the next phases of the work.
		▪ How could you leverage training stakeholders in The Why behind these shifts to build buy-in?
		▪ Where does it make sense to start to engage your faculty along the way?
		▪ Capture your thoughts on the Padlet

How Dallas College Approached The Work – Updated Coursework

Updated Coursework	Why This Mattered	Applying in your Context

▪ Faculty were provided new curricular materials("HQIM for teacher educators") and supported in implementing the new materials in their coursework.
▪ RBIS & HQIM were embedded and explicitly taught so teacher candidates could be prepared to implement Tier 1 instruction based on deep understanding through:
  ▪ Internalization
  ▪ Analysis of focus, coherence, and rigor
	▪ By supporting faculty to do this step, multiple stakeholders were set up for success.
	▪ Teacher candidates analyzed, internalized, and prepared to implement HQIM lessons with support and coaching from faculty.
	▪ Teacher candidates were then ahead of the game navigating their first-year teacher experience with deep understanding of RBIS and HQIM.
		▪ What would be the impact of updating your coursework with this level of alignment?
		▪ Capture your thoughts on the Padlet

How Dallas College Approached The Work – Observations and Alignment

Aligned Observation Tool

- Redesigned observation tool to center the RBIS as Look Fors.
- Included a component around preparing for instruction through lesson internalization.
- Feedback candidates receive during their yearlong residences are now grounded in the RBIS and reinforce the importance of planning for instruction with HQIM.
- Continuous improvement: residents now plan/internalize HQIM lessons with mentors for pre-observation planning.

Impact of Alignment

- Faculty are coaching, supporting their candidates with field-based observation tools aligned to the coursework and practice.
- This creates a cohesive experience for all stakeholders as teacher candidates know what's expected, their observation tool reflects their training and practice, and the feedback is aligned to set them up for success in the field.
- Faculty observing and coaching in the field accelerated understanding and buy-in. Firsthand knowledge of how materials were used.

Aligned Tools

- What tools are used to support teacher candidates in your context during residency?
- How would aligning them with the shifts in the coursework impact the experience of teacher candidates?
- Please capture your thoughts in the Padlet

Knowing More About The RBIS

- Training faculty in the research and the why behind the shifts towards HQIM.
- Aligning coursework to reflect the RBIS.
- Embedding HQIM and explicitly teaching lesson internalization to prepare.
- Redesigning the walkthrough tool to provide residents aligned feedback in both the RBIS and HQIM.
- Now that you know more about the RBIS, what things did we see Dallas College do:
  - That you would want to try for your context?

Our goal for today's session was…

WHAT	The **RBIS** are--**Research-Based Instructional Strategies.**
WHY	RBIS provide opportunities for ALL students to have access to **on grade level instruction.**
HOW	The RBIS and **High-Quality Instructional Materials (HQIM)** work together to provide on grade level instruction.

Feedback is a Gift

Thanks for your time today.
Before you leave, please complete a short survey.

https://bit.ly/Intro2RBIS