Effective Instructional Practices in Exemplar Units

Mathematics





Mississippi Board of Education

Vision

To create a world-class educational system that gives students the knowledge and skills to be successful in college and the workforce and to flourish as parents and citizens

Mission

To provide leadership through the development of policy and accountability systems so that all students are prepared to compete in the global community



Board Strategic Plan Goals

- 1. All Students Proficient and Showing Growth in All Assessed Areas
- 2. Every Student Graduates From High School and is Ready for College and Career
- Every Child Has Access to a High-Quality Early Childhood Program
- 4. Every School Has Effective Teachers and Leaders
- Every Community Effectively Using a World-Class Data System to Improve Student Outcomes
- 6. Every School and District is Rated "C" or Higher



Getting to Know You

Share a few things about yourself:

- Name
- School/District
- Grade Level
- Reason for coming today







Session Goals

During this training, participants will

- identify and discuss the major elements and qualities of an exemplar unit.
- develop an understanding of effective content-specific instructional practices in exemplar units.
- discuss how to make informed instructional decisions concerning instructional units.



Session Norms

- Silence your cell phones.
- Do not hesitate to ask questions.
- Be willing to share with other participants throughout the day.



Agenda

8:00 a.m. Registration

8:30 a.m. Introductions, Agenda, Overview, Clock Partners

8:40 a.m. Unit Preview

9:00 a.m. Effective Instructional Practices in Exemplar Units:

Alignment to the MS CCRS

9:45 a.m. Break

10:00 a.m. Effective Instructional Practices in Exemplar Units:

Key Shifts

11:00 a.m. Lunch



Agenda

- 12:30 p.m. Effective Instructional Practices in Exemplar Units: Key Shifts (Continued)
- 1:00 p.m. Continue Effective Instructional Practices in Exemplar Units: Instructional Supports
- 2:00 p.m. Break
- 2:15 p.m. Continue Effective Instructional Practices in Exemplar Units: Assessment
- 3:00 p.m. Reflection and Plan of Action
- 3:15 p.m. Closing Remarks
- 3:30 p.m. Dismissal



Clock Partners

- Stand up.
- Grab your clock sheet and a pen.
- Find a partner for the different appointment times:
 - 12 o'clock
 - 3 o'clock
 - 6 o'clock
 - 9 o'clock

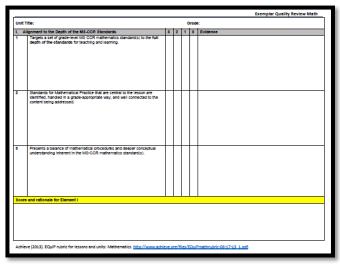


 You and your partner will write each other's names in the appointment slot.



Today's Documents

Exemplar Quality Review Packet



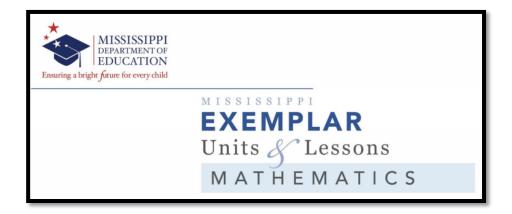
Mississippi Unit

MISSISSIPPI DEPARTMENT OF EDUCATION Ensuring a bright future for every child	
	EXEMPLAR Units & Lessons MATHEMATICS



Mississippi Unit Scan

- Locate the <u>Mississippi Unit</u> for your grade level.
- Focusing only on the Unit Overview and Lesson 1, annotate the unit using the symbols shown on the next slide.
- Be prepared to share your findings.





Annotating the MS Unit

annotating text!

Use the following marks & symbols to show how you are connecting to what you're reading!



This is a key word or idea.



I have a question about this or I don't understand.



This is interesting or surprising



I have a connection to this.



This is my favorite part.

Effective Instructional Practices in Exemplar Units





Four Major Elements of a Unit

- 1. Alignment to the Depth of the MS CCRS
- 2. Key Shifts in the MS CCRS
- 3. Instructional Supports
- 4. Assessment

Alignment to the Depth of the MS CCRS





Clock Partner Sharing

Find your 12 o'clock partner and discuss what each of the traits in the Alignment Element on the **Exemplar Quality Review** packet means to you.

Ask yourselves: "What would evidence of each trait look like?"



Scaffolding Documents

www.mde.k12.ms.us/ESE/ccr		C Q Search	☆自♥●	
Contemporary Health (K-8) Contemporary Health (9-12) Dyslexia	Mississippi College- and Career-Rea	adiness Standards Scaffoldir	ng Documents	
Early Childhood English/Language Arts English Learners Intervention Services Library Literacy	The primary purpose of the 2016 Mississippi College- and Career-Readiness Standards Scaffolding Documents is to provide teachers with a deeper understanding of the Standards as they plan for classroom instruction. Based on the 2016 Mississippi College- and Career-Readiness Standards, these documents provide a close analysis of the requirements for student mastery. Because of the rigor and depth of the Standards, scaffolding instruction to meet the needs of all learners is essential to individual success. These documents will aid teachers' understanding of how to teach the Standards through a natural progression of student mastery.			
Mathematics Online Course Application Physical Education				
Reading Fair Science Social Studies	English Language Arts Scaffolding Document	Mathematics Scaffolding Document		
Standards for Professional Learning Textbook Adoption and Procurement Visual and Performing Arts	Introduction	Introduction		
World Languages	Kindergarten	Kindergarten		
OTHER LINKS Academic, Career Counseling and Support Services	<u>t</u> First Grade	First Grade		
Approved Courses Manual C&I SharePoint Site MS College- and Career-Ready Standards	Second Grade	Second Grade		
MCCRS SharePoint Site Mississippi Virtual Public School RESA Registration	Third Grade	Third Grade		
Unpacking the CCSS for ELA DWW Box Access Instructions	Fourth Grade	Fourth Grade		
	Fifth Grade	Fifth Grade		
	Sixth Grade	Sixth Grade		



Standards for Mathematical Practice

- 1. Make sense of problems and persevere in solving them.
- 2. Reason abstractly and quantitatively.
- 3. Construct viable arguments and critique the reasoning of others.
- 4. Model with mathematics.
- 5. Use appropriate tools.
- 6. Attend to precision.
- 7. Look for and make use of structure.
- 8. Look for regularity in repeated reasoning.



Finding a Balance

Skills **Exploration** Deeper Mathematical Conceptual Procedures **Understanding**



Finding Evidence: Alignment to the Depth of the MS CCRS



1. Locate the **Mississippi Unit** for your grade level and the **Exemplar Quality Review** packet.



- 2. Focus on the first major element: *Alignment to the Depth of the MS CCRS*.
- 3. Work with others to identify evidence and discuss which parts are of exemplar quality.
- 4. Record your findings on the **Exemplar Quality Review** packet with your table group.



Share Out





Teacher Growth Rubric: Alignment to the Depth of Standards



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1. Lessons are aligned to standards and represent a coherent sequence of learning

Lessons:

4

Include student learning outcomes and instructional activities that

- are fully aligned to current Mississippi College and Career Ready Standards or Framework
- are part of a coherent and focused sequence of learning with meaningful connections made to previous and future learning
- reflect collaboration with other school staff within and across disciplines to enrich learning

Key Shifts in the MS CCRS





Clock Partner Sharing

Find your 3 o'clock partner and discuss what each of the traits in the Key Shifts Element on the **Exemplar Quality Review** packet

means to you.

Ask yourselves: "What would evidence of each trait look like?"



Key Shifts



Focus

- Stays on grade level
- Additional standards support focus
- High expectations



Coherence

- Connections to other clusters, domains, or prior grades
- Clearly fits together
- Skills aren't taught in isolation



Rigor

- Application
- Conceptual Understanding
- Procedural Fluency



Finding Evidence: Key Shifts in the MS CCRS

- 1. Locate the Mississippi Unit for your grade level and the
 - for your grade level and the

 Exemplar Quality Review packet.
- 2. Focus on the second major element: *Key Shifts in the MS CCRS*.
- 3. Work with others to identify evidence and discuss which parts are of exemplar quality.
- 4. Record your findings on the **Exemplar Quality Review** packet with your table group.



Share Out





Teacher Growth Rubric: Key Shifts in the MS CCRS



MISSISSIPPI EDUCATOR & ADMINISTRATOR PROFESSIONAL GROWTH SYSTEM

4. Provides multiple ways for students to make meaning of content

Teacher:

- 4
- Moves all students to deeper understanding of content through various techniques including
 - a variety of explanations and multiple representations of concepts
 - · extended productive discussion
 - effective questioning to support students' attainment of the learning goals
 - making connections to other content across disciplines
 - independently connecting lesson content to real-world application

Instructional Supports

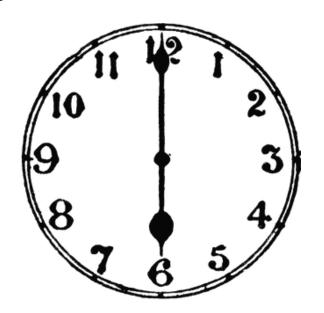




Clock Partner Sharing

Find your 6 o'clock partner and discuss what each of the traits in the Instructional Supports Element on the **Exemplar Quality Review** packet means to you.

Ask yourselves: "What would evidence of each trait look like?"





Instructional Support

Standards for Mathematical Practice

Differentiation

Progression

Questioning

Grouping

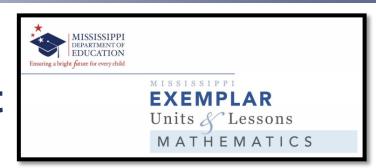
Problem Solving

Removal of Supports



Finding Evidence: Instructional Supports

1. Locate the Mississippi Unit for your grade level and the **Exemplar Quality Review** packet.



- 2. Focus on the third major element: *Instructional Supports*.
- 3. Work with others to identify evidence and discuss which parts are of exemplar quality.
- 4. Record your findings on the **Exemplar Quality Review** packet with your table group.



Share Out





Teacher Growth Rubric: Instructional Supports



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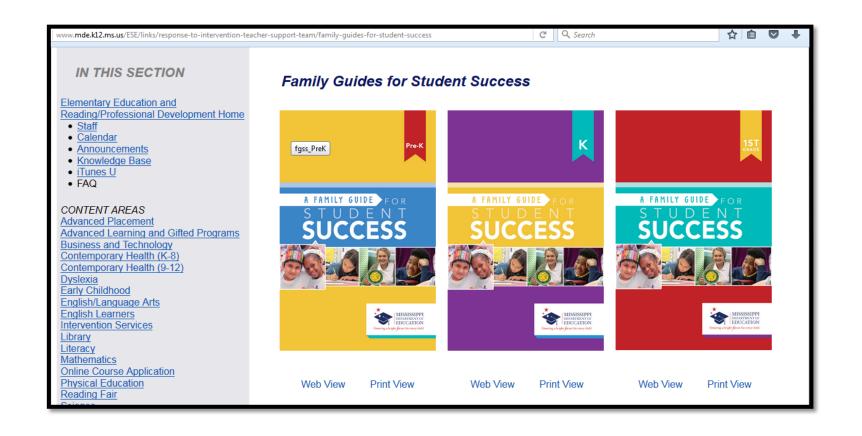
2. Lessons have high levels of learning for all students

Lessons:

- 4
- Provide assignments and activities that contain the following components:
 - appropriate scaffolding that effectively builds student understanding
 - ample evidence that the teacher knows each student's level and tracks each student's progress toward mastery
 - differentiation based on students' abilities and learning styles
 - student-centered learning whenever appropriate
 - relevant connections to students' prior experiences¹ or learning opportunities for students to choose challenging tasks and instructional materials



Family Guides for Student Success



Assessment

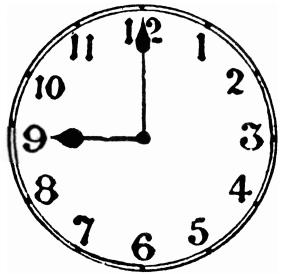




Clock Partner Sharing

Find your 9 o'clock partner and discuss what each of the traits in the Assessment Element on the **Exemplar Quality Review** packet means to you.

Ask yourselves: "What would evidence of each trait look like?"





Assessment Evidence

provide observable evidence of the degree a student can **independently** demonstrate mastery.

are **accessible** and **unbiased**.

Assessments

include rubrics, answer keys, and scoring guidelines.

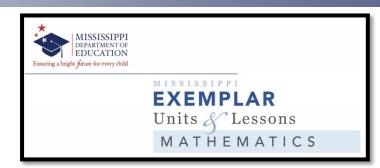
varied modes of:

- pre-assessment,
- formative assessment,
- summative assessment, and
- self-assessment.



Finding Evidence: Assessments

1. Locate the **Mississippi Unit** for your grade level and the



- Exemplar Quality Review packet.
- 2. Focus on the fourth major element: *Assessment*.
- 3. Work with others to identify evidence and discuss which parts are of exemplar quality.
- 4. Record your findings on the **Exemplar Quality Review** packet with your table group.



Share Out





Teacher Growth Rubric: Assessments



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3. Assists students in taking responsibility for learning and monitors student learning

Teacher:

4

- Communicates the lesson goals and the content in a way that is accessible for every student at his/her level
- · Uses formative assessments to effectively monitor student progress
- Provides ample and effective opportunities for students to self-assess and correct their own errors
- Provides students with clear, specific, actionable and timely feedback
- Creates opportunities for students to apply teacher and peer feedback to improve performance and accelerate learning
- Provides opportunities for students to demonstrate connections between what they
 are learning and how it advances their personal and professional goals/interests

Feedback on Mississippi Units





Provide Feedback

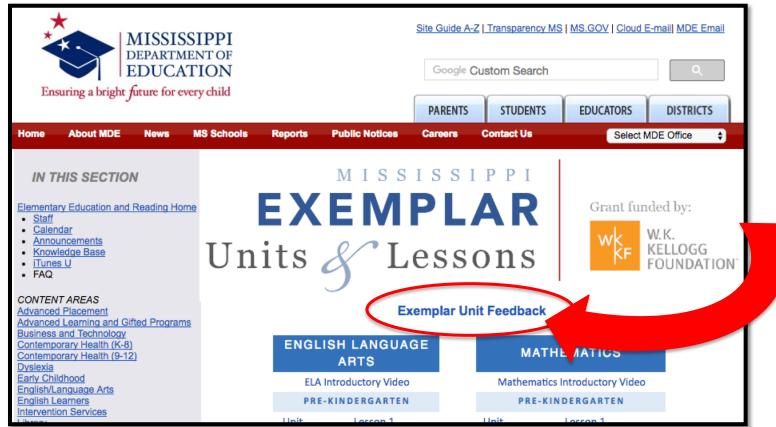
Go to www.mdek12.org.





Provide Feedback

Once you have reviewed and/or used the unit, provide <u>feedback</u>.



Reflection and Plan of Action





3-2-1 Strategy



Jot down:

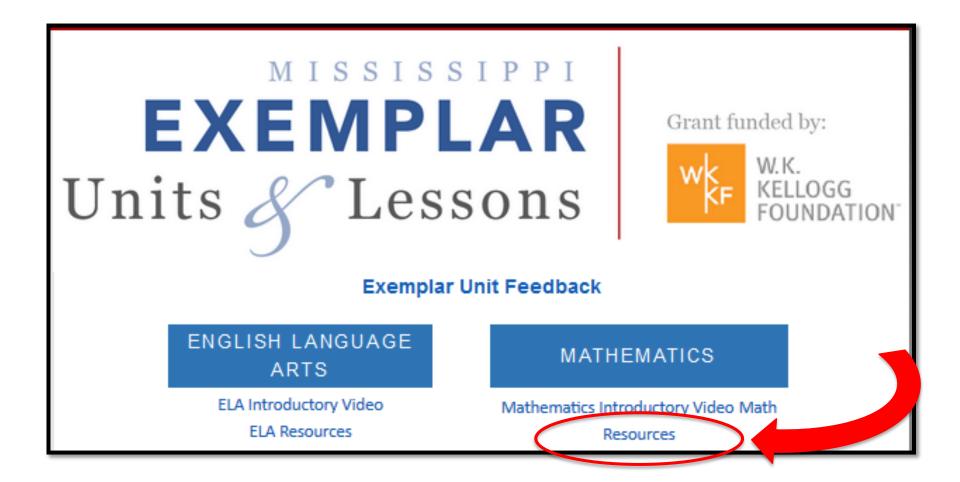
- 3 things you learned today,
- 2 components of exemplar quality you will look for when selecting units, and
- 1 idea we discussed that you want to know more about.

Resources





Exemplar Resources





Exemplar Resources

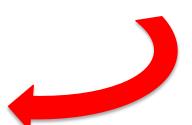
EXEMPLAR Units & Lessons

Grant funded by:



Math Resources

- Effective Instruction in Math Power Point
- · Exemplar Units Math Template
- Math Quality Review Rubric





EQuIP Rubric

Ensuring a bright future for every child

Grade:

Literacy Lesson/Unit Title:



EQuIP Rubric for Lessons & Units: ELA/Literacy (Grades 3-5) and ELA (Grades 6-12)

Overall Rating:



I. Alignment to the Depth of the CCSS	II. Key Shifts in the CCSS	III. Instructional Supports	IV. Assessment
I. Alignment to the Depth of the CCSS The lesson/unit aligns with the letter and spirit of the CCSS: Targets a set of grade-level CCSS ELA/Literacy standards. Includes a clear and explicit purpose for instruction. Selects text(s) that measure within the grade-level text complexity band and are of sufficient quality and scope for the stated purpose (e.g., presents vocabulary, syntax, text structures, levels of meaning/purpose, and other qualitative characteristics similar to CCSS grade-level exemplars in Appendices A & B). A unit or longer lesson should: Integrate reading, writing, speaking and listening so that students apply and synthesize advancing literacy skills. (Grades 3-5) Build students' content knowledge and their understanding of reading and writing in social studies, the arts, science or technical subjects through the coherent selection of texts.	II. Key Shifts in the CCSS The lesson/unit addresses key shifts in the CCSS: Reading Text Closely: Makes reading text(s) closely, examining textual evidence, and discerning deep meaning a central focus of instruction. Text-Based Evidence: Facilitates rich and rigorous evidence-based discussions and writing about common texts through a sequence of specific, thought-provoking, and text-dependent questions (including, when applicable, questions about illustrations, charts, diagrams, audio/video, and media). Writing from Sources: Routinely expects that students draw evidence from texts to produce clear and coherent writing that informs, explains, or makes an argument in various written forms (e.g., notes, summaries, short responses, or formal essays). Academic Vocabulary: Focuses on building students' academic vocabulary in context throughout instruction. A unit or longer lesson should: Increasing Text Complexity: Focus students on reading a progression of complex texts drawn from the grade-level band. Provide text-centered learning that is sequenced, scaffolded and supported to advance students toward independent reading of complex texts at the CCR level. Building Disciplinary Knowledge: Provide opportunities for students to build knowledge about a topic or subject through analysis of a coherent selection of strategically sequenced, discipline-specific texts. Balance of Texts: Within a collection of grade-level units a balance of informational and literary texts is included according to guidelines in the CCSS (p. 5). Balance of Writing: Include a balance of on-demand and process writing (e.g., multiple drafts and revisions over time) and short, focused research projects, incorporating digital texts where appropriate.	III. Instructional Supports The lesson/unit is responsive to varied student learning needs: Cultivates student interest and engagement in reading, writing and speaking about texts. Addresses instructional expectations and is easy to understand and use. Provides all students with multiple opportunities to engage with text of appropriate complexity for the grade level; includes appropriate scaffolding so that students directly experience the complexity of the text. Focuses on challenging sections of text(s) and engages students in a productive struggle through discussion questions and other supports that build toward independence. Integrates appropriate supports in reading, writing, listening and speaking for students who are ELL, have disabilities, or read well below the grade level text band. Provides extensions and/or more advanced text for students who read well above the grade level text band. A unit or longer lesson should: Include a progression of learning where concepts and skills advance and deepen over time (may be more applicable across the year or several units). Gradually remove supports, requiring students to demonstrate their independent capacities (may be more applicable across the year or several units). Provide for authentic learning, application of literacy skills, student-directed inquiry, analysis, evaluation and/or reflection. Integrate targeted instruction in such areas as grammar and conventions, writing strategies, discussion rules and all aspects of foundational reading for grades 3-5. Indicate how students are accountable for independent reading based on student choice and interest to build stamina, confidence and motivation (may be more applicable across the year or several units).	The lesson/unit regularly assesses whether students are mastering standards-based content and skills: o Elicits direct, observable evidence of the degree to which a student can independently demonstrate the major targeted grade-level CCSS standards with appropriately complex text(s). o Assesses student
Rating: 3 2 1 0	Rating: 3 2 1 0	evidence and texts as appropriate. Rating: 3 2 1 0	Rating: 3 2 1 0



The EQuIP rubric is derived from the Tri-State Rubric and the collaborative development process led by Massachusetts, New York, and Rhade Island and facilitated by Achieve. This version of the EQuIP rubric is current as of 06-24-13.

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Resources & Publications for Math Teachers



Multi-Tiered System of Supports
PK-12

Assessment Blueprints and Guides 3-HS

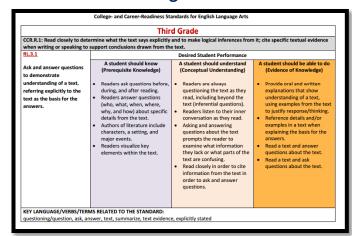
Mississippi Assessment Program (MAP)

Mathematics, Grades 3-8

Blueprint Interpretive Guide

September 2016

Instructional Scaffolding Document PK-Algebra II





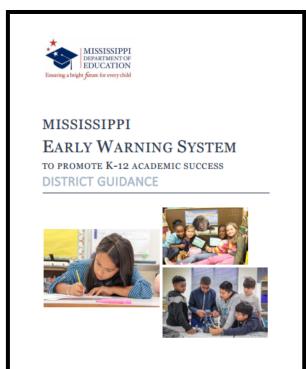
2016 MS CCRS for Mathematics *K*-12

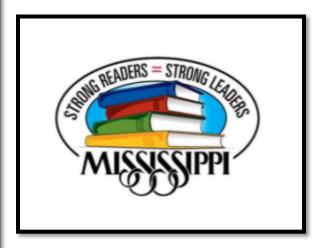


Resources & Publications for Administrators



On Demand PD & Technical Assistance





Strong Readers = Strong Leaders

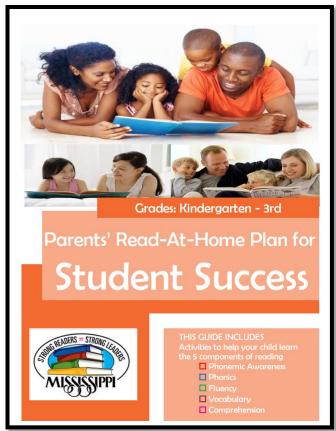
Early Warning System
College and Career Readiness Data
Guidance Document



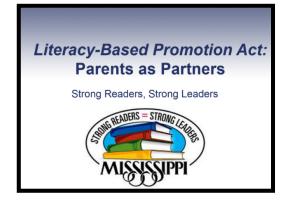
Resources & Publications for Parents



Family Guides for Student Success PK-8



Parents' Read-At-Home Plan LBPA Parent Document



Parents As Partners
LBPA
Parent Presentation



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