

# CCRS FEEDBACK

## EDUCATOR LEADERSHIP COUNCIL

### Position of the Mississippi Educator Leadership Council

Adopting the Mississippi College- and Career-Readiness Standards (CCRS) has been a step in the right direction for our state. Since implementing the standards, we've seen tremendous growth in our students' abilities to problem solve and think critically. As educators, we have invested tremendous time and energy into translating the standards into meaningful lessons for our kids, and we stand in full support of our state keeping the standards.

In a spirit of continuous improvement, we think that there are some revisions that can make the student expectations in the standards clearer to teachers. We are especially interested in making improvements to the standards since the Mississippi Department of Education is currently accepting public feedback about the CCRS and providing an opportunity for educators to have a voice in the standards revision process. It is important that we leverage our voices as educators to ensure that we have the best standards possible to equip our students with the tools needed to be successful in the 21st century.

### Use Your Voice – You're the Expert!

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Go to <http://mississippi.statestandards.com/> to give your feedback on the standards. You are allowed to give constructive feedback on each of the standards. Give your feedback even if you only have positive things to say. The deadline for submitting feedback is September 15<sup>th</sup>.

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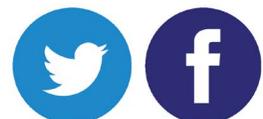
Spread the word to other educators to submit feedback on the standards as well!

### Suggested Revisions

The Mississippi Educator Leadership Council has thoroughly reviewed the standards. While we believe nearly all of them are strong, we have compiled a list of revisions that we would like to see made to the standards and/or how Mississippi sequences the standards into high school math courses. They can be found on the reverse side of this document. If you agree with these revisions, please include them in your feedback.

### About the Mississippi Educator Leadership Council

The Mississippi Educator Leadership Council is made up of expert Mississippi educators that have significant experience implementing the Mississippi College- and Career-Readiness Standards. To learn more about the Council, visit [mississippifirst.org](http://mississippifirst.org).



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## ELA – We recommend giving all standards a “thumbs up” with the exception of the following:

Grade	Domain	Sub-Domain	Standard	Feedback
K	W.K	Texts Types and Purposes	1. Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (e.g., My favorite book is...).	<b>THUMBS DOWN</b> <b>Standard Should be Rewritten</b> Change the example in the standard to (e.g., [Character] is the best character because... ” <b>Rationale:</b> The example in parentheses limits this standard. This standard is intended to lead to argument writing in 6th grade, which a teacher may not realize without studying the standards across the grade levels. An example should be used that gives students a chance to use text-based evidence to support an opinion or preference.

## Math – We recommend giving all standards a “thumbs up” with the exception of the following:

Grade	Domain	Sub-Domain	Standard	Feedback
2	MD	C	8. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and c symbols appropriately.	<b>THUMBS DOWN</b> <b>Standard Should be in Different Grade</b> <b>Rationale:</b> This is the first mention of money in the standards. Precursor standards are needed to help students understand this standard in 2nd grade. In K and 1st, students should identify the coins and then use them to skip count (ex: using nickels to count by 5’s, dimes to count by 10’s, using mixed change to switch up the pattern while counting together whole group). This would provide enough prior knowledge of the denominations of money to successfully complete word problems.
HS	Algebra	REI	4b. Solve quadratic equations by inspection (e.g., for $x^2 = 49$ ), taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions and write them as $a \pm bi$ for real numbers $a$ and $b$ .	<b>THUMBS DOWN</b> <b>Standard Should Be Rewritten as:</b> Solve quadratic equations by inspection (e.g., for $x^2 = 49$ ), taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions. <b>Rationale:</b> Imaginary numbers should be saved for Algebra 2. It is fine for students to recognize when a quadratic equation has complex solutions, but they should not have to do any operations or calculations with imaginary numbers in Algebra 1 without developing a definition for $i$ (which happens in Algebra 2 standards, N-CN.1 & N-CN.2).
HS	Functions	TF	1. Understand radian measure of an angle as the length of the arc on the unit circle subtended by the angle.	<b>THUMBS DOWN</b> <b>Standard Should Be in Different Grade</b> <b>Rationale:</b> Move to Advanced Math Plus and Algebra 3 from Algebra 2. These standards get into the development of trigonometry, connecting the unit circle and graphs of trigonometric functions, which we want done well instead of quickly. Moving to the course after Algebra 2 will ensure that there is time for conceptual development instead of rushing through the content.
HS	Functions	TF	2. Extend the domain of trigonometric functions using the unit circle. Explain how the unit circle in the coordinate plane enables the extension of trigonometric functions to all real numbers, interpreted as radian measures of angles traversed counterclockwise around the unit circle.	<b>THUMBS DOWN</b> <b>Standard Should Be in Different Grade</b> <b>Rationale:</b> Move to Advanced Math Plus and Algebra 3 from Algebra 2. These standards get into the development of trigonometry, connecting the unit circle and graphs of trigonometric functions, which we want done well instead of quickly. Moving to the course after Algebra 2 will ensure that there is time for conceptual development instead of rushing through the content.
HS	Functions	TF	5. Model periodic phenomena with trigonometric functions. Choose trigonometric functions to model periodic phenomena with specified amplitude, frequency, and midline.	<b>THUMBS DOWN</b> <b>Standard Should Be in Different Grade</b> <b>Rationale:</b> Move to Advanced Math Plus and Algebra 3 but not in Algebra 2. These standards get into the development of trigonometry, connecting the unit circle and graphs of trigonometric functions, which we want done well instead of quickly. Moving to the course after Algebra 2 will ensure that there is time for conceptual development instead of rushing through the content.
HS	Functions	TF	8. Prove and apply trigonometric identities. Prove the Pythagorean identity $(\sin A)^2 + (\cos A)^2 = 1$ and use it to find $\sin A$ , $\cos A$ , or $\tan A$ , given $\sin A$ , $\cos A$ , or $\tan A$ , and the quadrant of the angle.	<b>Thumbs Down</b> <b>Standard Should Be in Different Grade</b> <b>Rationale:</b> Move to Advanced Math Plus and Algebra 3 but not in Algebra 2. These standards get into the development of trigonometry, connecting the unit circle and graphs of trigonometric functions, which we want done well instead of quickly. Moving to the course after Algebra 2 will ensure that there is time for conceptual development instead of rushing through the content.
6	NS	C	Standards 5-8 Apply and extend previous understandings of numbers to the system of rational numbers.	<b>THUMBS DOWN</b> <b>Standards Should Be in Different Grade</b> <b>Rationale:</b> The foundation for integer understanding should be laid in 5th grade, operations on integers taught in 6th grade, and ALL rationals moved to 7th grade. The jump from NO knowledge of operations on integers to mastery of ALL rational numbers in the 7th is too large a step conceptually. There is no foundation on which to build.

