## Identifying the Gaps between the Kentucky Core Academic Standards (KCAS) for Mathematics and school's current curriculum

This process is designed to guide schools in identifying where gaps in instruction may occur as they begin to transition to the new Kentucky Core Academic Standards (KCAS) for Mathematics. Teachers and administrators will need to plan how to address these gaps for students who will miss exposure to content. The process outlined in this document sets the stage for addressing these gaps and for continued collaboration among colleagues to strengthen understanding of the KCAS. The first step is to identify the gaps.

Teachers will begin by working individually, then in grade level teams. Finally, they will share with teachers from across grade levels. This process works best when there is representation from all grade levels in the room. It is further recommended that teachers have the opportunity to work with teachers from other schools in their district.

<u>A gap occurs</u> when content previously taught at one grade level is now included in the KCAS at an earlier grade level. Thus, as students move to the next grade, they will miss exposure to that content. The gap may occur between one or more grade levels. <u>A gap does not occur</u> if the content is now present in an upper grade level. This simply means that students will be exposed to that content in a later grade.

Note that this process provides one way to identify the instructional gaps that may occur during this transitional period. Some schools have designed other processes which they have found to be useful and reliable.

#### **Materials:**

- A Closer Look at the Progressions of the Kentucky Core Academic Standards, grades K HS
  - o You may choose to only use the standards pages some grades have 2 pages and will need to be copied front/back
  - HS is organized by conceptual categories
  - o HS teachers will also need Common Core State Standards: Appendix A
  - o MS teachers comparing curriculum for HS Algebra I in MS will also need Appendix A
- Highlighters (variety of colors)
- Current curriculum document (you may ask teachers to bring their copies)
- Access to the on-line KCAS crosswalk document:
  - o PDF, Excel or Bookmarked version with guide can be found at:
    - http://www.education.ky.gov/KDE/Instructional+Resources/Curriculum+Documents+and+Resources/Program +of+Studies/Crosswalk+-
      - +Common+Core+State+Standards+(CCSS)+Comparison+to+Kentucky+State+Standards.htm

- Chart paper (tape or sticky chart paper)
- Markers
- Sticky notes
- Identified Gap sheets for grade level groups (preferably on computer)

## Organization:

Teachers sit in grade level groups

#### **Process:**

- 1. Provide each teacher the KCAS grade level standards for the grade they teach. They should have access to standards for a few grades before and the grades that follow for reference. You may also choose to provide the progressions.
- 2. Individually, teachers read carefully through the KCAS for their grade level.

Ask them to:

- a. Highlight what is new to their grade level or course: what is not currently included in their grade level curriculum.
- b. <u>Underline anything that is confusing or that they are unsure how to teach.</u>
- 3. Next, teachers look back at their current curriculum.

Ask them to:

- a. Highlight what they have been teaching that is not in the KCAS for their grade level or course.
- 4. Teachers from the same grade level share and discuss their findings.

Ask them to:

- a. Come to agreement on what they previously taught that is not addressed in the KCAS for their grade.
- b. Chart. Be sure to label the chart with the grade level.
- c. Have participants post charts in grade level order.
- 5. Teachers from across grade levels use a carousel strategy to review posters.

Ask them to:

- a. Look for any content that shows up in the KCAS at their grade level. Use standards as the reference.
- b. Use sticky notes or different color markers to identify the grade level and the standard(s) where it is included in the KCAS and to share other comments regarding what they notice or what they would like to learn more about.
- 6. Teachers return to grade level teams with the chart from their grade level.

Ask them to discuss the chart, beginning with the question below:

a. Has what you highlighted in your curriculum (and charted) been identified in a previous grade in the KCAS?

o If yes, this identifies a gap which needs to be filled.

- Decide the grade or grades where the gap must be addressed. Note that if there is more than one grade between the content covered, each of those grades can share filling the gap. For instance, if content was previously covered in 8<sup>th</sup> grade, but now is part of the 6<sup>th</sup> grade KCAS, 7<sup>th</sup> and 8<sup>th</sup> grade teachers should work together to plan how to best address the gap for those students.
- b. Begin completing the *Identified Gap* sheet.
  - o Fill in gaps identified in step 6a.
  - o List the grade(s) identified in step 6a.
  - o Identify teachers who may be resources because they have taught the content.
- c. Teachers use the crosswalk to check for gaps they may have missed and to look for other connections between the KCAS and the Program of Studies.

### Next steps:

- Continue the *Identified Gap* sheet by brainstorming ideas for filling gaps. Identify the teams who will need to address the gaps and provide time for them to collaborate with each other and leadership. Filling gaps should not be the sole responsibility of any one teacher.
- Collaborate to develop a plan for addressing the gaps. Identify the timeline for when the gap should be filled on the *Identified Gap* sheet. This may be a multi-year plan and schools may have to set priorities if they discover several gaps. Note that creative solutions may be necessary to address gaps. (The crosswalk may be helpful to identify areas for emphasis by looking at strong and weak matches identified in the crosswalk.) Include in the plan how progress will be monitored.
- Facilitate a similar activity to have teachers chart what they marked in the KCAS as confusing, a new concept, or what they
  have not taught before. Use the carousel approach for teachers to review charts and make note of their expertise and
  willingness to share ideas. Add teacher resources to the *Identified Gap* sheet. Make time for teachers to share, discuss and
  collaborate to deepen understanding of the KCAS. Coaches may also use this information to provide small group minisessions on specific content.

# Identified Gaps

Content gap to be filled (identified in step 6a)	Grade(s) where gap is to be filled	Teams responsible	Plan for transition	Teacher resources	Date when gap should be filled

Record of com	pleting	this sheet
---------------	---------	------------

Date	_Sections	_Completed by
Date	_Sections	_Completed by
Date	_Sections	_Completed by
Date	Sections	Completed by