U.S. Department of Education

Office of Career, Technical, and Adult Education

Sustainability Planning Guidance for Mathematics Curriculum Reviews

This resource is designed for program leaders looking to sustain the effective implementation of their state content standards in mathematics. Reviews of existing curricula will ensure educators have the standards-aligned tools they need to strengthen student learning and program outcomes. There are two parts to this guidance:

* First, as you determine how to support and maintain curriculum reviews in your state, think about the considerations listed in **Part A**. Then map out your sustainability plans by considering the seven action steps below. Decide who will do what and when. Begin by establishing a team to lead, guide, and support your immediate and long-term vision of standards-aligned curriculum in literacy.
* Second, once you review a curriculum, use the guidance in **Part B** for the actions to take in response to ratings.

Part A. Key Considerations to Support Team Planning

Key Considerations:

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|  | Identify team lead(s) and related responsibilities. |

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|  | Inventory available curriculum/instructional materials to review. |

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|  | Identify curriculum/instructional materials to review. |

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|  | Estimate costs and secure resources to conduct the review. |

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|  | Select review teams to conduct the review. |

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|  | Schedule and conduct the reviews. |

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|  | Share review results. |

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**Part B. Actions to Take in Response to an Overall Rating of a Mathematics Curriculum**

This part of the guidance is designed to support educators with actions to take because of overall curriculum scores. Many states that participated in the SIA 2.0 trainings scored curricula as “Not Aligned” to the dimensions of quality curriculum as defined by the review tool. Given teachers’ reliance on curriculum to produce strong student outcomes, your sustainability planning should identify how to respond to a less-than-well-aligned overall rating. That way, weak teaching resources can be improved or retired.

**Sample of State Actions**

Following are some actions states took in response to curricula they found to be “Not Aligned” or “Somewhat Aligned.” They:

1. Adapted a highly rated K-12 OER curriculum to serve their adult learners better. In some cases, they reduced the total number of units/lessons or dropped units that seemed too immature for adult learners.
2. Connected (as critical thought partners) with the resource publisher to address the identified weaknesses.
3. Made the less-than-great resource supplemental rather than a core or central instructional resource due to a particular dimension’s strength.
4. Took steps to fill the gaps in a “Somewhat Aligned” curriculum by revising, enhancing, or supplementing the curriculum.

**Key Questions to Ask Yourself as a Team**

Some of the questions below may be more pertinent than others, depending on your ratings and findings for a curriculum:

1. Given your ratings, which of the options for action identified above best fits your state’s circumstances?
2. When you look dimension-by-dimension, did your curriculum score well enough overall for the resource to continue to be used as a core or central curriculum with revisions?
3. If it didn’t score well enough, did at least one dimension rate highly? If so, could the resource be used as a supplement to another core curriculum for that dimension?
4. Can you contact the publisher to share your ratings? Can you see if they are willing to hear the feedback?
5. Revising a curriculum is hard work. Is it feasible for a team of adult educators in your state to revise/enhance/supplement your curriculum? How hard would it be to do so? Would this be a good use of professional learning time and resources?
6. Is a team of adult educators in your state able to adapt one of the highly rated K-12 OER curriculum resources? To what extent do you want to involve others in the state (beyond your team) in this effort?
7. How will you share your curriculum ratings with other programs in the state so all educators understand the strengths and weaknesses of the curriculum you evaluated? How would you share with the program(s) using the curriculum? How would you share beyond the program(s) using the curriculum?

**Valuable Ways to Shore Up Identified Weaknesses in a Mathematics Curriculum**

* Math Dimension 1:
  + Identify the critical concepts for the level that are addressed in the curriculum.
  + Identify the critical concepts for the level that are *not* covered in the curriculum and will require supplemental resources.
  + Identify the Standards for Mathematical Practice that are addressed and central to a lesson and include a description of how they relate to the lesson(s) content.
  + If Standards for Mathematical Practice are already identified, ensure there are not so many in any one lesson or unit. The “practice” experience for students might become overwhelming or the opportunity to “practice” the habits of mind becomes lost.
  + Provide additional practice opportunities for students to attain the computational and procedural fluencies for the level.
* Math Dimension 2:
  + Identify in the lesson introductions to knowledge and skills from prior levels that will be needed for students to understand the new content.
  + Identify as “review” the student tasks, activities, and assessment items in the lessons that address concepts learned at previous levels.
  + Remove student activities or assessment items that address learning at subsequent levels from a lesson or identify them as extension activities.
  + Rearrange lessons so the sequence of knowledge and skills learned in the resource has a natural and logical flow to support student learning.
  + Math Dimension 3:
* Add instructions for the teacher about providing opportunities for students to communicate their mathematical understanding.
* Ask students to explain, show, or defend their reasoning and findings.
* Add high-level discussion questions and instructions targeted toward building conceptual understanding.
* Add opportunities for students to independently solve problems that are not overly scaffolded.
* Math Dimension 4:
* Add problems or tasks that address the standards targeted in a lesson and that focus on the following areas:
  + Conceptual understanding of the most critical concepts of the level
  + Challenging problems that are appropriate for the level, at least some of which are unscaffolded
  + Procedural and computational practice
  + Add high-level discussion questions and task instructions targeted toward building conceptual understanding.
  + Add guidance for teachers on how to provide constructive feedback on student work.