Teacher Reflection Tool for the *Developing Effective Fractions Instruction for Kindergarten Through 8th Grade* practice guide

Who? This tool is designed for use by grade 6 math teachers as part of the professional development for the *Developing Effective Fractions Instruction for Kindergarten Through 8th Grade Toolkit* (Teaching Fractions Toolkit). It also may be used by grade 5 teachers, math specialists and coaches, special educators, multilingual learner specialists, and any other upper elementary and middle grades teachers planning to implement the practice guide recommendations with students.

This reflection tool is based on implementation steps identified for Recommendations 2, 3, and 4 of the What Works Clearinghouse practice guide *Developing Effective Fractions Instruction for Kindergarten Through 8th Grade Toolkit*. These recommendations focus on middle grades fractions instruction, which is the focus of this tool. Recommendation 1 focuses on elementary grades instruction, and Recommendation 5 focuses on teacher professional development. For more detailed information, see the practice guide.

What? Self-assess and reflect on your current understanding and application of implementation steps associated with Recommendations 2–4. For each recommendation, the tool includes a self-assessment checklist. Each checklist lists the recommendation and includes a row for self-assessing your understanding and use of each implementation step for that recommendation. After each checklist are reflection prompts.

When? Use the checklists as stand-alone tools or during engagement with the Teaching Fractions Toolkit professional development modules. The checklists are incorporated into activities at multiple points during the professional development modules to support your reflection on your developing understanding and use of the recommendations.

How? Check the column that most closely matches your current understanding and application of each implementation step for each recommendation. After reading the questions below the table, write notes and reflections for yourself. Use your self-assessment and reflections to support discussion with colleagues and to identify next steps for your learning.

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Recommendation 2 checklist

"Help students recognize that fractions are numbers and that they expand the number system beyond whole numbers. Use number lines as a central representational tool in teaching this and other fraction concepts from the early grades onward."

Implementation steps for Recommendation 2	Do not yet understand and not yet applying this step	Understand but not yet applying this step	Understand and beginning to apply this step	Understand and sometimes apply this step	Understand and routinely apply this step
2.1 "Use measurement activities and number lines to help students understand that fractions are numbers, with the properties that numbers share" (p. 21).	☐	☐	☐	☐	☐
2.2 "Provide opportunities for students to locate and compare fractions on number lines" (p. 22).	☐	☐	☐	☐	☐
2.3 "Use number lines to improve students' understanding of fraction equivalence, fraction density (the concept that there are an infinite number of fractions between any two fractions), and negative fractions" (p. 23).	☐	☐	☐	☐	☐
2.4 "Help students understand that fractions can be represented as common fractions, decimals, and percentages, and develop students' ability to translate among these forms" (p. 24).	☐	☐	☐	☐	☐

Recommendation 2 notes and reflections

2a. What questions do you have about these implementation steps?

2b. In what ways are you integrating—or will you integrate—these implementation steps in your instruction?

2c. Write any additional notes about your implementation for this recommendation, including how to address any challenges you anticipate with implementation.

Recommendation 3 checklist

"Help students understand why procedures for computations with fractions make sense."

Implementation steps for Recommendation 3	Do not yet understand and not yet applying this step	Understand but not yet applying this step	Understand and beginning to apply this step	Understand and sometimes apply this step	Understand and routinely apply this step
3.1 "Use area models, number lines, and other visual representations to improve students' understanding of formal computational procedures" (p. 28).	☐	☐	☐	☐	☐
3.2 "Provide opportunities for students to use estimation to predict or judge the reasonableness of answers to problems involving computation with fractions" (p. 30).	☐	☐	☐	☐	☐
3.3 "Address common [mistakes and misunderstandings] regarding computational procedures with fractions" (p. 31).	☐	☐	☐	☐	☐
3.4 "Present real-world contexts with plausible numbers for problems that involve computing with fractions" (p. 33).	☐	☐	☐	☐	☐

Recommendation 3 notes and reflections

3a. What questions do you have about these implementation steps?

3b. In what ways are you integrating—or will you integrate—these implementation steps in your instruction?

3c. Write any additional notes about your implementation for this recommendation, including how to address any challenges you anticipate with implementation.

Recommendation 4 checklist

"Develop students' conceptual understanding of strategies for solving ratio, rate, and proportion problems before exposing them to cross-multiplication as a procedure to use to solve such problems."

Implementation steps for Recommendation 4	Do not yet understand and not yet applying this step	Understand but not yet applying this step	Understand and beginning to apply this step	Understand and sometimes apply this step	Understand and routinely apply this step
4.1 "Develop students' understanding of proportional relations before teaching computational procedures that are conceptually difficult to understand (e.g. cross multiplication). Build on students' developing strategies for solving ratio, rate, and proportion problems" (p. 37).	☐	☐	☐	☐	☐
4.2 "Encourage students to use visual representations to solve ratio, rate, and proportion problems" (p. 39).	☐	☐	☐	☐	☐
4.3 "Provide opportunities for students to use and discuss alternative strategies for solving ratio, rate, and proportion problems" (p. 40).	☐	☐	☐	☐	☐

Recommendation 4 notes and reflections

4a. What questions do you have about these implementation steps?

4b. In what ways are you integrating—or will you integrate—these implementation steps in your instruction?

4c. Write any additional notes about your implementation for this recommendation, including how to address any challenges you anticipate with implementation.