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Common Core Mathematics in a PLC at Work™, Grades K–2

By Matthew R. Larson, Francis (Skip Fennell), Thomasenia Lott Adams, Juli K. Dixon, Beth McCord Kobett, and Jonathan A. Wray

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Study Guide

This study guide is a companion to the book *Common Core Mathematics in a PLC at Work™, Grades K–2* by Matthew R. Larson, Francis (Skip Fennell), Thomasenia Lott Adams, Juli K. Dixon, Beth McCord Kobett, Jonathan A. Wray (authors), and Timothy D. Kanold (series editor). *Common Core Mathematics in a PLC at Work™, Grades K–2* gives teachers the tools to effectively offer mathematics instruction and address the Common Core State Standards (CCSS) for mathematics challenge: *All students successfully learning rigorous standards for college or career-preparatory mathematics.*

This guide is arranged by chapter, enabling readers to either work their way through the entire book or to focus on the specific topics addressed in a particular chapter. It is best used in collaborative teams, but can also be used by individuals and small groups, to identify key points, raise questions for consideration, assess conditions in a particular school or district, and suggest steps that might be taken to implement the CCSS in a PLC culture.

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We thank you for your interest in this book, and we hope this guide is a useful tool in your efforts to create a healthy culture in your school or district.

Chapter 1

Using High-Performing Collaborative Teams for Mathematics

1. To what extent do you believe your instructional and assessment practices are consistent?
What steps can you take to further develop consistency?
2. How can you ensure that you have the collaborative time necessary to work on both literacy and mathematics instruction? Work with your collaborative team to develop a systemic schedule for balancing this time. Discuss any obstacles that present themselves with your administrator.
3. Examine the high-leverage mathematics instructional practices shown in figure 1.2 (page 15; visit go.solution-tree.com/commoncore for a reproducible version of this figure). Select two practices that you don't believe are currently consistently present in your instruction. What actions can you take to focus on implementation of these practices?
4. What are three characteristics of cognitively demanding tasks? For one lesson, collaboratively design a student task that would meet these criteria.
5. Consider your daily instructional time allotments. Do you have time built into your schedule to support students who require additional mathematics instruction? How might you reallocate your time to address these students' needs?

Chapter 2

Implementing the Common Core Standards for Mathematical Practice

1. Select one of the eight Standards for Mathematical Practice. What are three student behaviors that you believe illustrate student engagement in this practice? What teacher actions are necessary to foster these behaviors?
2. How are cognitively demanding tasks and the Standards for Mathematical Practice linked to one another? Begin by focusing on the task you designed in question four from chapter 1 of the study guide.
3. To what extent do you believe your classroom demonstrates the social norms required to effectively engage students in Standard for Mathematical Practice 3? Provide examples and nonexamples. What action steps will you take to create the necessary environment?
4. Examine the perseverance aspect of Standard for Mathematical Practice 1. How do you respond when students struggle? Does your response support continued student engagement with mathematical tasks? What specific action steps can you take to develop student perseverance?

5. Use the tool in figure 2.11 (page 57) to collaboratively design a lesson focused on engaging students in one of the Standards for Mathematical Practice. What criteria will you look for when you observe other members of your team implementing the lesson? After observing one another, reflect with your team on the lesson's effectiveness. How can you revise the lesson to make it more effective?

Chapter 3

Implementing the Common Core Mathematics Content in Your Curriculum

1. Which do you believe will be the bigger instructional challenge for you as a result of the Common Core content standards: leaving out content you traditionally taught in your grade level or teaching the new content to your grade level? Why?
2. Select a content standard cluster at your grade level. How can you engage students in particular Standards for Mathematical Practice as they learn the standards in this content cluster?
3. Examine the Progressions for the Common Core State Standards in Mathematics (<http://math.arizona.edu/~ime/progressions>). Select a domain for your grade level. How do the concepts build over the grades contiguous to the grade you teach? How might your findings affect your instructional practices?
4. As collaborative team, select one of the critical areas for focus at your grade (refer to pages 71–72 for kindergarten, page 82 for grade 1, and page 92 for grade 2). Do your district curriculum and pacing documents ensure this critical area receives the required instructional emphasis? If not, what necessary adjustments should be made?

5. Examine the Collaborative Team Task on pages 71–72. Apply the questions in the table to a content standard cluster in your grade level to guide the development of your unit lesson plans. Complete the following table in your collaborative team. (Visit go.solution-tree.com/commoncore for a reproducible version of this feature box.)

Content standard cluster:

Reason for selecting the content standard cluster:

What Content Needs to Be Unpacked for Lesson Design Around This Cluster?	Which Topics Need to Be Emphasized?	How Will Students Be Engaged in the Mathematical Practices as They Learn This Content?	What Resources Will Be Needed?	How Will Students Demonstrate Learning of This Content Standard Cluster?

Chapter 4

Implementing the Teaching-Assessing-Learning Cycle

1. Why is it critical that you collaboratively design and score assessments? Is this your current practice? If not, what action steps will you take to collaboratively develop this critical practice?
2. Discuss as a collaborative team your current assessment practices. Do all of your current assessments serve a formative function? If not, what action steps will you take as a team to change your current practice?
3. As a collaborative team, discuss the feedback you provide students after they complete an assessment. Does each member of the team provide all students accurate, fair, specific, and timely feedback? If not, what action steps will you take to change this practice?
4. Do all members of your team provide students multiple opportunities to demonstrate their knowledge? That is, do students have the opportunity to be reassessed and improve their grade? If not, what actions steps will you take to implement this practice?
5. What do your current grading practices look like? For example, do you use mean scores or rubric marks? Within your collaborative team, discuss the advantages and

disadvantages of each approach. Do you all use the same approach to determine students' grades? If not, what action steps will you take to develop consistency?

Chapter 5

Implementing Required Response to Intervention

1. Is your grade level focused on teaching or student learning? What behaviors characterize each orientation? If necessary, how can you make the shift to emphasize student learning?
2. Does your team have dedicated time allocated to provide tiered intervention support for students who require it? If not, how can you find the time in your schedule?
3. How do the authors define *explicit instruction*? Does everyone have a shared understanding?
4. If your grade level currently offers tiered intervention support for students who require it, what is the instructional focus of the intervention? Specifically, does the intervention seek to teach for depth of understanding for all students, or is it narrowly focused on computational skills? If the intervention is not balanced in its approach, what action steps can you take to broaden its instructional goals?

5. As a collaborative team, discuss the attitudes and dispositions that students bring to the classroom. How can you work as a team to enhance these behaviors so that they become a positive force in the students' learning?