



Math in Focus™

Singapore Math

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Math in Focus™: Theory and Practice

Volume 1

Welcome to the Math in Focus monthly newsletter, ***Math in Focus: In Theory and In Practice***. And congratulations on your decision to implement Math in Focus: Singapore Math!

This world-renowned mathematics curriculum that has helped Singapore students score at the top of international assessments, such as the TIMSS (Trends in International Math and Science Study) and the PISA (Program for International Student Assessment), will be an integral part of your students' success as well.

We know that implementing a new program is no small task and would like to offer some help during what we hope will be a long and successful partnership.

Each newsletter will lend some support to help you move forward successfully. These tips may be information that we share during professional development, may be something that has worked for us on a personal level and/or may be suggestions from another customer like you!

Our intent is not to overload teachers and administrators, but rather offer guidance to make Math in Focus more meaningful for your teachers and students.

Transition: In Theory

Implementing a new program like Math in Focus, whether your first year or beyond, involves transition. Making these changes is an important part of future success for your students, teachers, school and district.

Transition comes in many forms. You may be experiencing:

1. Transitioning into new standards; more focus, more coherence
2. Transitioning into a curriculum that uses a different approach
3. Transitioning to a higher level of rigor in problem solving opportunities
4. Transitioning parents into a new way of learning and a new way for them to be helpful

There is support to help teachers, students and parents through this, at times, difficult time.





Transition: In Practice

Making sure that you understand how the resources can help will make this transition much easier. We have a bunch, so hold on tight!

1. Transitioning into new standards: More Focus, More Coherence:

Have you read through your current mathematics standards? Whether your state has adopted the new Common Core State Standards or not, getting to know what mathematics you are responsible for in growing your students is the best place to start. Because the new research says that we should teach a curriculum with fewer topics, but at a deeper level of understanding (focus), and one that logically unfolds with a layering of mathematics (coherence), you may notice some different content at your grade level.

Log onto <http://www.corestandards.org/> to find the mathematics content and practice standards for your grade level. Then, before teaching each chapter, read over your Chapter Overview, which is full of mathematical insight, a trajectory for your students and a skills trace to keep you on track. Also, log on to Think Central and watch the Math Background Videos: Introduction, Learning Objectives, Topic Overview, and Top Tips given for each chapter.

2. Transitioning into a curriculum that uses a different approach:

Singapore curriculum uses an instructional approach based on the findings of Jerome Bruner, Zoltan Dienes and others that include experiences with concrete materials as mathematical representations, moving into a pictorial representation of the concrete materials and finally arriving at the abstract representation with understanding. Each time new content is introduced, you will see which concrete materials are suggested to help build understanding. Remember, if you see a picture of it in the student book, it is meant to be a concrete material in students' hands.

3. Transitioning to a higher level of rigor in problem solving opportunities:

I'm sure you've noticed the level of rigor in some of the problems that are offered for students to solve. Singapore's importance on "math is thinking" is never more evident than in the problems of their curriculum. You will even see problem solving opportunities in the assessments! To help your students solve these type of problems with success, it is important to scaffold with materials (concrete or pictorial), scaffold through the lesson (initially being directly involved in their learning and gradually stepping back to allow them to take ownership) and to scaffold your questioning throughout the lesson and chapter. Support with materials, peers and your guidance will encourage your students to apply the mathematics in new situations instead of just repeating a procedure they learned in class.





4. Transitioning parents into a new way of learning . . . and a new way to be helpful:

Getting parents onboard is key. Start by letting your parents know that the curriculum is changing and why. Once they understand that the standards have changed and what the expectations are, they are more likely to understand and support the change. Encourage them to visit their child's classroom and learn the concrete-pictorial-abstract approach to mathematics so that they don't feel the need to impose "their" way too early. Many times they learned the abstract representation first and want to teach it to their child to be helpful. We know that this can get in the way of understanding. Send home the School to Home Connection for each chapter that has suggestions for parents to help with their child's understanding of the content. Or, even better, conduct a parent night where they can learn about the new standards, new curriculum and maybe even try out some problem solving!

We hope some of these reminder/suggestions were helpful and have sparked some conversations among you and other users on the distribution list that you received previously.

Our intent is to continue this newsletter throughout the 2012-2013 school year. We'd like your feedback and will add your suggestions to a future newsletter if you'd like!

Have a great school year!
The Math in Focus Specialist Team

If you would like to contribute or unsubscribe to this email, please respond to susan.copeland@hmhpub.com

