

## Intervention Position Statement for Elementary Mathematics

### Position

Students who do not demonstrate concept mastery of enrolled grade level expectations require intervention. Intervention should occur over time in order to achieve consistent and long lasting results. Effective intervention should actively involve students in the development of their own mathematical understanding.<sup>1</sup> Successful intervention increases student confidence and independence. The relationship between student achievement and quality instructional materials requires schools to consider the specific needs of their student population, school resources and FCPS Essential Curriculum standards when designing an intervention program.

### Clarification

All students benefit from intervention. Most students receive intervention within the general education classroom by their classroom teacher. It occurs over time to accelerate student learning to meet grade-level expectations. Intervention is usually delivered in small groups with a focused content. It varies in length of duration and in student/teacher ratio. Additional instruction provided beyond the classroom teacher would be more intensive.

Level of Intensity	Classroom Intervention	Intervention with Additional Support/Resources
Description	<ul style="list-style-type: none"> <li>▪ Differentiated Mathematics instruction based on FCPS Essential Curriculum &amp; Planning Tools</li> <li>▪ Use of data to guide instruction and be responsive to students' needs</li> <li>▪ Whole class, small groups, pairs, and individual</li> </ul>	<ul style="list-style-type: none"> <li>▪ More intensive &amp; specific instruction for students not meeting enrolled grade-level standards</li> <li>▪ Additional attention, focus, support, and monitoring.</li> </ul>
Personnel	Classroom Teacher	FCPS staff Examples: Targeted Teachers, Targeted Instructional Assistants, etc.
Setting	General education classroom	General education classroom or intervention classroom
Grouping	Flexible grouping within the classroom	Small group instruction (1:1 to 1:5) based on student needs
Time	<ul style="list-style-type: none"> <li>▪ During daily math instruction</li> <li>▪ Short sessions</li> </ul>	<ul style="list-style-type: none"> <li>▪ Various times of the day</li> <li>▪ Sessions vary in duration</li> </ul>
Assessment	Formal & Informal Assessments Ex. Quarterly Assessments Teacher made assessments Another Look Assessments	Formal & Informal Assessments Ex. Quarterly Assessments Intervention program pre- & post-assessments
Resources	<ul style="list-style-type: none"> <li>▪ FCPS Essential Math Curriculum</li> <li>▪ Quarterly Planning Tools</li> <li>▪ ExamView math item banks</li> <li>▪ Quarterly Assessment Grids</li> </ul>	<ul style="list-style-type: none"> <li>▪ FCPS Essential Math Curriculum</li> <li>▪ Quarterly Planning Tools</li> <li>▪ ExamView math item banks</li> <li>▪ FCPS Recommended Research-Based Intervention Programs: <u>Number Worlds</u> or <u>Exploring Math</u></li> </ul>

<sup>1</sup> Frederick County Public Schools. *Elementary Math Vision*, 2004.

## Rationale

- **Classroom Intervention** is the level of support provided within the regular education classroom setting by the general educator. It is based on the FCPS essential curriculum in mathematics with classroom interventions including heterogeneous groupings and instructional decisions linked to differentiated instruction. All students receive instruction at their enrolled grade level. Academic progress is monitored with the grade-level quarterly assessments, and other formal and informal assessments that may include interviews and observations.
- **Intervention with Additional Support/Resources** is the level of more intensive and specific instruction for those students who do not meet enrolled grade level expectations. Typically, students receive additional instruction beyond the regular mathematics program. The interventions are delivered in small groups, and assessment data are monitored more frequently with pre- & post-assessments. Student progress is monitored toward grade level standards. There is “no formula of time for how long any intervention should last, especially if the student is making progress”.<sup>2</sup> Intervention should continue until the student can be successful in the regular math classroom.

FCPS math intervention programs are selected based on the belief that intervention materials should...

“Enhance student understanding; promote students’ active involvement; hold high expectations for all students, with guidance for teaching diverse learners; incorporate problem-solving skills; use an appropriate learning sequence; include assessment instruments and methods; and reflect current research in mathematics education”<sup>3</sup>.

## Recommendations

Teachers and schools should:

- Provide interventions for all students who are not achieving grade level standards.
- Assess students using enrolled-grade level expectations and enrolled grade-level quarterly assessments to determine the specific support needed.
- Provide time for collaboration between the classroom teacher and the intervention teacher. This is essential in order to address and plan for individual student needs.
- Utilize formal/ informal assessments and focused instruction as components of intervention.
- Focus on the essential math curriculum with mastery of enrolled grade level expectations using the FCPS planning tools and differentiated instruction.
- Provide on-going staff development on selected intervention programs.
- Update parents on the interventions provided to support their child’s progress toward achieving grade level expectations.

## Program Recommendations

Program	Ordering Information
Exploring Math	Teacher Created Materials <a href="http://www.tcmpub.com">www.tcmpub.com</a> 1-888-333-4551
Number Worlds	SRA McGraw Hill <a href="http://www.SRAonline.com">www.SRAonline.com</a> 1-800-201-7103

<sup>2</sup> National Association of State Directors of Special Education (NASDSE). *Myths About Response to Intervention (RtI) Implementation*. May 2006.

<sup>3</sup> Eisenhower Regional Consortium for Math & Science, *EDThoughts: What We Know About Mathematics Teaching and Learning*, 2002. p. 52-53.