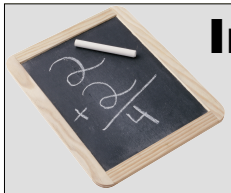

Implementing a Math Intervention Program: A proposal to add Mathematics to our school RTI plan

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Introduction

The goal of this proposal is to provide students in grades 1-5 with an intervention program in the area of math. Presently, our school has in place a school wide Response to Intervention program that provides intervention in the area of reading only. This plan will add the area of math into that program using primarily the same criteria as well as format.

Over the last 8-10 years our school has shown a drop in our state assessment scores. The school year 2003-04 showed that greater than 95% of 3rd and 5th grade students passed the benchmark in math. During the 2007-08 school year 87% of students passed the benchmark in math, but the trend shows a decline in the number of students that are exceeding the benchmark, as well as a decline in the number of students meeting the benchmark.

Currently, our district measures students growth in the area of reading in grades K-5 during the fall, winter and spring terms. That data is used to inform instruction for students using our RTI program. In the area of math students are assessed district wide in grades 1-5 during the fall, winter and spring terms as well. Unfortunately, there has not previously been a plan in place to address the needs of the students that are testing below benchmark. This project proposal will target those students in the area of math that are not already receiving additional special education services.

School Profile

K-5 Elementary School
Enrollment: 502

Ethnicity

White	78%
Black	2%
Hispanic	6%
Am. Indian	2%
Asian	10%
Unknown	2%

ELL 3%

Free/Reduced 22%

Proposal Staffing and Budget

One Instruction (IA)	6 hours/day	Approx.	$36, 000
Math Whizz Software	site license 100 students		*$2000
Student Achievement Coordinator	.4 fte		Currently in budget
	Total		*$38,000

* Application of Oct. 2009- $2000 EEA Grant for possible funding

Data Analysis/Collection

During the 2000-2001 school year our state report card showed that greater than 95% of our students reached the math benchmark in grades 3 and 5. The 2006-2007 school year showed a low of 78% reaching the math benchmark. During the next school year 2007-2008 a district math assessment was implemented for grades 1-5. This benchmark assessment is done fall, winter and spring terms. Results are distributed to each teacher at each grade level following the testing each term. No formal intervention plans are currently in place to address the needs of those students that fall below benchmark.

2008-2009 District Easy CBM Math Assessment Results (Winter Term)

Grade	Students Below Benchmark	
Grade 1	24/87	28%
Grade 2	22/84	26%
Grade 3	20/82	24%
Grade 4	20/94	21%
Grade 5	13/98	13%

Grouping/Scheduling

The building schedule is set up in a way that each grade level has a one-hour block of time during the day for specialist programs. Those blocks of time off set each other to maximize the time of each specialist teacher throughout the day. The specialist block includes PE, Music, Computer Lab, Library, and Japanese. Each block is then divided into two ½ hour time slots.

Specialist Time	8:00-9:00am	5th Grade
	9:00-10:00am	4th Grade
	10:00-11:00am	3rd Grade
	11:20-12:20pm	1st Grade
	1:10-2:10pm	2nd Grade

Example Specialist Block Schedule for a 5th Grade Teacher

	Mon	Tues.	Wed.	Thurs	Fri.
8:00	Open	PE	Open	Computers	PE
8:30	Library	Japanese	Music	Computers	Music

The proposal for math intervention is to create groups of approximately 5 students. Those groups will be held during the specialist time block. The goal is to create a schedule in which a student would not miss more than one specialist area per week.

Example Student Math Intervention Schedule

	Mon	Tues.	Wed.	Thurs	Fri.
8:00	MI*	PE	Open	Computers	PE
8:30	Library	Japanese	MI*	Computers	Music

MI* Math Intervention

Intervention Curriculum Options

Our school is currently using the Investigations math curriculum edition one. The district has decided to postpone the new math adoption for the school year 2009-2010 due to budgetary concerns, so we will continue with our current adoption. Our school has obtained the intervention program for grades K-3 and 4-6 that was created for the second edition of the Investigations curriculum. The program is Scott Foresman-Addison Wesley Math Diagnosis and Intervention System. It is divided into four areas:

1. Assessment
2. Diagnosis
3. Intervention
4. Monitoring

The program is divided into booklets that address specific needs for students.
Example: Booklet A-Numbers, Place Value, Money, and Patterns

Another program that is being considered at the district level for possible math intervention use is called "Do The Math" created by Marilyn Burns. This program is designed for grades 2-6 and includes twelve intervention modules. It would work very well with the math intervention proposal for this school.

The third curriculum option for consideration is an on-line math tutor. Math-Whizz by Whizz Education uses interactive math animations and mirrors a program called Cognitive Tutor currently being used successfully at the feeder middle school. Students can utilize Math-Whizz during the regular school day, after school, or at home if they have Internet access. Using a sample group, I found that students really enjoyed the program. It did a nice job of identifying the individual areas of need and addressed those needs without taking the fun out of the "game".

(http://www.whizz.us/)

Progress Monitoring/Benchmark Assessments

The same decision rules that guide our building RTI reading program will be duplicated for our math intervention program. We will continue to use the EasyCBM for regularly administered math and reading assessments. The system also provides a means to regularly progress monitor and track students receiving interventions.

Benchmark testing will take place fall, winter, and spring.

Progress monitoring will take place for all students below the 20th percentile. Those students that fall between the 11th-20th percentile will be monitored every two weeks. Students falling at the 10th percentile and below will be monitored weekly.

Grade level meetings that occur monthly to discuss instructional strategies for students will also include math.

Program Evaluation

- The goal of this math intervention proposal is to increase student math benchmark scores for grades 1-5 in our school.
- By the end of the first year of full implementation the goal is to see the percentage of students currently below benchmark decreased by at least 30%.
- As the intervention process becomes more effective we would hope to see continuous improvement of between 3-5% yearly.

Areas To Be Considered

- Will the budget allow for funds in the area of math intervention under the current financial crisis?
- Will trained staff be available to manage the intervention schedule?
- Availability of trained staff to facilitate the intervention groups
- Will the easy CBM math progress monitoring program be available for full use during the 2009-2010 year?

Sources

EasyCBM Benchmark and Progress Monitoring –Behavioral Research and Teaching, 2008. University of Oregon.

Math-Whizz-Whizz Education. Copyright 2009. (http://www.whizz.us/

Scott Foresman-Addison Wesley Math Diagnosis and Intervention System developed by Pearson Scott Foresman, www.scottforesman.com

Do The Math, by Marilyn Burns. 2009-1996 Scholastic Inc.