



Topic: Response to Intervention in Elementary-Middle Mathematics Practice: Screening and Monitoring

Highlights

- Janis Logan, first-grade teacher at Cornell Elementary School, demonstrates a
 math lesson focused on whole numbers, specifically teaching fact families and the
 relationship between addition and subtraction.
- She follows whole-group instruction with reteaching in small groups for students who need additional help.
- She uses one-on-one instruction and small groups to intervene and help students strengthen their understanding and develop skills.
- Ms. Logan describes how to use manipulatives to reinforce skill development and make the connection between the concrete and abstract.
- She discusses weekly progress monitoring, using and interpreting data, and applying decision rules to tailor instruction and regroup students for interventions.
- She also stresses the importance of ongoing assessment of teaching strategies as well as student progress to improve instruction for all students.



About the Site

Cornell Elementary School

Des Moines, IA

Demographics

87% White

9% Hispanic

2% Black

2% Other

50% Free or Reduced-Price Lunch

4% English Language Learners

8% Special Education

Response to Intervention (known in Iowa as Instructional Decision Making, or IDM) has been evolving at Cornell Elementary School over the past 15 years under the leadership of Principal Deb Chiodo. The school has developed RtI practices over that time period with the assistance of the Heartland Area Education Agency and a regional technical assistance provider. Features of IDM (RtI) at Cornell include:

- A grade-level teaming structure led by the principal and responsible for regular reviews of data, progress assessment, and planning interventions;
- Universal screening in reading and math followed by schoolwide data days;
- A variety of intervention structures, including differentiated instruction in the core classroom and small-group interventions;
- Implementation of Rtl in reading and math with positive behavior supports.

Full Transcript

Slide 1: Welcome

Welcome to Monitoring Student Progress.

Slide 2: Introducing Janis Logan

I'm Janis Logan, and I teach first grade at Cornell Elementary. The biggest thing with the lesson that I did with the fact families is just making sure that they truly understand when they are adding what that means, that they are taking two parts and putting them together to get a total, and also just to see the relationship between addition and subtraction, that there is a relationship between them.



Slide 3: Checking for understanding

I will give them whole-group instruction, check for understanding as we are working in the whole group, and then they will get the retaught lesson with my associate the following day, five days a week, and it's a small group. The core mathematics curriculum does cover fact families; however, the one-on-one or the small group is where I can help intervene and help them strengthen their understanding of that concept because they did display that they needed some extra help in that area.

Slide 4: Reinforcing math skills

The strategies that I feel work best with those children that need more reinforcement in the foundational skills are definitely the manipulatives, the hands-on, where they can move them and be able to see them. But also I do feel like it is very important to transition it into paper-pencil and make sure they understand the connection between the concrete and the more abstract.

Slide 5: Monitoring weekly progress

I do progress-monitor on a weekly basis, and what I do is pull up each child individually. It's a one-minute probe, and in regards to math we have what we call a mixed numeracy. And one of the things they do is they are shown two numbers and they have to tell me which number is the greatest number. So it might be five and two. Another one is they have to fill in the missing blanks. It might be five, 10, 15; they would have to say 20. That is part of the probe, as well as just being able to name the number: 72, 52.

Slide 6: Making decisions based on data

So all three of those skills are tied into one probe. They are timed for one minute, and then I document it on a graph. And we have a baseline, and then we have a goal for the end of the year and we monitor to see how well the intervention is working. We make sure that there is continued growth, that they are either meeting their goal line or above. And if not, we have what we call a four-point rule: if the child is not making progress in their goal, or their score is below the goal line for four different weeks, then we need to respond with a different intervention or change it, whether it is more time, whether we are using a smaller group, whether we are changing the materials that we are using.

Slide 7: Differentiating instruction

I am constantly evaluating not only the skills of the children, but how I am teaching, making sure that I am not just keeping the same students with that intervention group. That is one thing that we are constantly



doing, is changing and updating everything with our RtI forms or our instruction. We get smarter each year with how we are delivering instruction to students, and to all students, let alone our reinforcement groups.

Slide 8: Learn More

To learn more about Monitoring Student Progress, please explore the additional resources on the Doing What Works website.