

## Strategies for Scheduling Conferences

How often you confer with students depends on their needs. As with small-group instruction, teachers will probably want to confer with students who struggle more frequently than with those who have demonstrated their understanding of the mathematics currently being taught. Consider these strategies when developing a schedule for mathematics conferences with students:

- You may choose to **have a regular conference schedule** where you confer with each student at least once a month but meet with others when needed.
- Although it may be tempting to meet with students only when you notice a particular need, it is important to **give all students opportunities for one-on-one “face time” with you**. Many very talented students are reluctant to ask for help and are adept at hiding their need for it. They may understand the “hows” but not the “whys” of the mathematics with which they are working. Taking a few minutes to discuss their work with them may reveal misconceptions or a lack of fundamental conceptual understanding.
- It is helpful to **create a conference schedule for the week**. Identify both the students with whom you will have fairly in-depth conferences and those with whom you wish to briefly check in. Record any particular areas of concern to be addressed during the conference. You may wish to use the *Weekly Math Conference Schedule* (page 281) to plan your conferences each week.
- **Establish a place in the classroom where students may sign up for a conference with you**. Teach students to monitor their own mathematical understanding. When students realize that they are confused or perhaps need a little more instruction, give them the option of asking to meet with you for a conference. At first, students may be reluctant to ask for help, but if you praise them for recognizing their need for help and asking for it, you will find that students are much more willing to sign up for conferences. Teach students that conferring with others about mathematics is evidence of their taking responsibility for their learning as well as an indication of their curiosity about the discipline, both of which are characteristics of good mathematicians.

# Strategies for Scheduling Conferences *(cont.)*

## Weekly Math Conference Schedule

Week of \_\_\_\_\_

Day of the Week	Students for In-Depth Conferences	Students for Check-In Conferences	Areas of Concern
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			

## Strategies for Scheduling Conferences *(cont.)*

### Finding Time for Conferring with Students

The reason most teachers give for not conferring one-on-one with students is a lack of time. When can teachers fit conferences into the jam-packed instruction of a school day?

- **Conduct a student conference each day as students enter the classroom.** If students have been taught clear routines for entering the room and are given a Math Stretch to complete, you can spend a few minutes meeting with at least one student for a conference during that time. You may want to begin by planning to confer with a student just one day a week at first. If you are repeatedly interrupted by other students, reexamine and fine-tune your student procedures so that students settle in and begin working independently. Or, if the routines are adequate, spend time reteaching them to students to allow you to conduct conferences unimpeded by interruptions.
- **As students begin Math Workshop, confer with a student prior to meeting with small groups.** You may choose to confer with a student who is a part of the first group with which you plan to meet to help you tweak the instructional focus of the lesson for that group.
- **At the conclusion of a small-group lesson, ask a student to remain for a follow-up conference.** During the lesson, you may have some questions about an individual student's work. If the questions do not pertain to the overall needs of the group, you can address them with the individual student in a conference. Or you may just wish to check in with a student about his or her progress. Whatever the reasons for the conference, this time of transition provides an opportunity for conferring one-on-one with students.
- **Choose to have a day of conferences while students are engaged in Math Workshop.** At the beginning or end of a unit of study or prior to parent conferences, you may want to spend one or more math periods conferring with students. These conferences may serve as a preassessment to identify what background knowledge students have before you begin a unit. Toward the end of a unit, the one-on-one meetings with students can give you a good sense of students' understanding and skills. Ask students to tell you about what they have learned or about any confusion they may have. Using this information, you can go back and address any gaps in understanding prior to the final summative assessments. When meeting with parents, share the insights gleaned from these conferences to give them a broader perspective on their child's mathematical achievements.
- **Be creative about recognizing and using moments that arise throughout the period or day to confer with students.** For example, if you give your students a few minutes to work on their homework before dismissal or if your class is engaged in playing a math game, take advantage of those times to conduct student conferences.

## Strategies for Planning Math Conferences

Calkins, Hartman, and White (2005) propose an architecture, or structure, for writing conferences that can be readily adapted to mathematics conferences. Following a specific structure gives purpose to what otherwise might be chatting without focus. Although this is the suggested structure for a math conference, student conferences are not scripted. The conversations that arise are shaped by the teacher's observations, the information students share, and the Teaching Points identified and discussed.

The architecture for a math conference includes four parts:

### 1. Research Student Understanding:

- Observe the work of the student. Interview him or her to learn what he or she is trying to do as a mathematician. Probe to glean more about the student's intentions.
- Give an authentic compliment. Name specifically what the student has done well as a mathematician, linking it directly to the language of the standards, and remind him or her to do this in future work.

### 2. Decide What Is Needed:

- Weigh whether the student's current strategies and processes are wellfounded. If so, what is the student's next learning step? If not, what steps can you take to help the student correct errors or develop a better understanding? Decide what you want to teach and how you will teach it.

### 3. Teach to Student Needs:

- Use demonstration, guided practice, or explicit telling and showing to correct or extend a student's understanding and mathematical ability.
- Have the student explain the Teaching Point in his or her own words. If appropriate, ask the student to apply it to the task on which he or she is currently working.

### 4. Link to the Future:

- Name what the student has done as a mathematician. Explicitly remind the student to use what he or she has just learned in future mathematical work.

## Questions for Conferences

Although some conferences will arise from spur-of-the-moment conversations with students about their math work, it is helpful to have in mind some questions that naturally lead students to reflect and share the *whys* of what they are doing as well as the *hows*. The following questions encourage students to share their mathematical thinking during conferences:

### Questions for Beginning Conversations

- How is your math work going?
- Can you tell me about what you are doing?
- Why did you decide to...?
- What are your thoughts about your mathematics work?
- How do you feel about the work you are doing? Why?
- I noticed.... Will you tell me about that?
- If you could use only one word, how would you describe your math work? Why did you choose that word?
- You seem to be (*frustrated, stumped, at a standstill*). Can you tell me why?
- You have represented your work in multiple ways. Will you explain them to me?

### Questions for Prompting the Use of Comprehension Strategies

- How is this math similar to other mathematics you have learned about?
- How does this relate to things in your life or in the world?
- What questions could you ask that would help you understand it better?
- What do you think are the most important aspects of these mathematical concepts or problems?
- Do you notice any patterns? Does it help to be able to notice mathematical patterns? If so, how does it help?
- Can you make a prediction based on your observations?
- How else can you represent your mathematical thinking?
- Can you visualize the concept or problem you are working on?
- As a result of your work, do you have any new mathematical ideas?

## Questions for Conferences *(cont.)*

### Questions for Encouraging Reflection and Self-Assessment

- Does your solution or your work make sense? Tell me why you think so. If not, what will you do?
- How well do you understand what we are working on?
- Do you have any questions about the math you are learning?
- Do you feel that the work you are doing is challenging enough? Why, or why not?
- Is there anything that I can do to help you be a better mathematician?
- What about the mathematics we are studying is exciting to you?
- What do you wonder about regarding the mathematics we are studying?
- What are your math goals?

## Conference Snapshots

### Grades K-2 Snapshot

#### Research Student Understanding

**Teacher:** *Yoshi, can you tell me what you are doing?*

**Yoshi:** *I'm counting these coins. I'm going to find out how much there is.*

**Teacher:** *Great! So, how are you counting them? Can you show me exactly what you are doing?*

**Yoshi:** *Okay. This is a penny. It's just one cent. There are some nickels, too. They're five cents. Let's see. I have a quarter and some dimes, too. A quarter is 25 cents. A dime is...uh...oh, 10 cents. There are a lot of coins here.*

**Teacher:** *You know all of the coins and their values! So, how are you going to find out what their total value is?*

**Yoshi:** *I am going to count them. So, this penny is one cent, and then there's a nickel. One and five more is six cents. Then, uh...here's another penny and a quarter. So, let's see...I had six cents and one more is seven. Then, there's the quarter. Seven and 25 more...*

Yoshi begins to write  $25 + 7 =$

#### Decide What Is Needed

The teacher has discovered that Yoshi can identify the coins and knows the values of each of the coins. Once Yoshi identifies the coins and their values, however, he does not have a strategy to help him organize the coins to make counting the total value easier. Although he demonstrated that he knows the values of the coins that have to be added, the teacher decides to show Yoshi a more efficient method he can use.

#### Teach to Student Needs

**Teacher:** *Yoshi, as you worked, I noticed that you have an excellent knowledge of the coins and their values. You know that you need to add their values together to find the total value of this group of coins. What I also noticed is that when you were adding the values of the coins, you were writing addition number sentences to help you find the sums. That's a great strategy to use if you don't have very many coins to add. Today, I am going to show you another strategy you may want to try. I noticed that Carlita was using this strategy as she was figuring out the value of some coins. Let's look at what she is doing.*

## Strategies for Keeping Records of Conferences

What teachers learn as they confer with students can be as valuable as what students learn. The focused conversational give-and-takes of conferences are opportunities for teachers to gather the missing pieces of the instructional puzzle. Conferencing with students gives you much more comprehensive information about what they already know and what they do not yet sufficiently understand. Within the conferences themselves, some of these needs can be addressed. Even more importantly, teachers can use this data to tailor instruction to other components of the Guided Math framework.

There are several ways to effectively keep records of conferences:

### Math Conference Checklist

One way to be sure you are meeting with students on a regular basis and addressing areas of need is with the *Math Conference Checklist* (page 296). On this checklist are the names of all of your students with the current math-instructional goals for the class. When a student demonstrates mastery during a conference, place the date in the student's column on the row for that goal. Unmarked cells indicate either math areas in which a student has not yet demonstrated mastery and thus needs more instruction and practice or students with whom you have not yet conferred. Use the checklist to determine instructional needs for your students as well as when deciding with whom to confer.

### Math Conference Notes

The *Math Conference Notes* (page 297) aligns to the structure of a math conference. Record the student's name and date of the conference. There is a column for briefly describing the information gained during the research portion of the conference, a column for the authentic compliment given (one of the student's observed strengths), and the teaching point (one of the student's needs). Keep these notes in a binder for future reference.



## Strategies for Keeping Records of Conferences *(cont.)*

### Sticky-Note Organizer

An alternative way to keep conference notes is with the use of sticky notes. Fill a sheet of paper with six 3" × 3" sticky notes evenly spread over the page (see *Sticky-Note Organizer*, page 298). Place these on a clipboard for jotting down your notes during conferences. Later, these notes may be placed with the students' anecdotal notes from small-group lessons to provide a more comprehensive overview of their mathematical achievement.

### Mailing Labels

Similar to the *Sticky Note Organizer*, sheets of mailing labels may be attached to a clipboard for use in recording notes from math conferences. If mailing labels are used, you may choose to preprint them to make the recording of conference notes easier. A printed label should include the same information as the *Math Conference Notes* (page 297).

# Math Conference Checklist

Students																					
<b>Math Goals</b>																					

# Math Conference Notes

Student	Date	Research	Compliment	Teaching Point

## Sticky-Note Organizer


## Strategies for Planning Conference Follow-Up

Whatever method teachers use for recording conference notes, what is most important is that they are not filed and forgotten. When used to guide instruction, teachers maximize student learning.

### Follow-Up Strategies for the Whole Class

Based on the information gleaned from one-on-one math conferences, follow up with the whole class in any of these ways:

- If you discover that several students are struggling with the same concept or skill, plan conferences with more students to determine if they are having the same problem. If you find the struggle is widespread, plan to provide additional support or reteaching for the whole class.
- If many of your students seem to be well beyond where you thought they were, it may be worthwhile to confer with additional students to see if perhaps instruction could move ahead a little more quickly than originally planned or could be made more challenging. Make flexible use of textbook resources. If your students demonstrate their understanding of a concept but the text calls for additional lessons, do not hesitate to use your professional judgment and eliminate those lessons. Adjust your lessons to meet your students' needs.
- You may discover future teaching options that would benefit the whole class. Conference conversations may suggest lessons that approach a mathematical concept from a different angle or address "I wonder..." questions. When you come across a teachable moment during conferences, use it to shape whole-class lessons to make them more relevant and motivating.

### Follow-Up Strategies for Small Groups

One-on-one math conferences with students are a valuable source of data to use when planning small-group instruction. Here are some ways in which you can use the data to enhance small-group lessons:

- Confer with students after you receive data from benchmark testing that show the numbers of students who missed specific questions but not why these students had difficulty with these questions. Ask those students to explain why they chose the answers they did. Armed with this information, you can pinpoint the misconceptions that led to the incorrect answers. Then, meet with small groups of students who missed the same problems. Because you have already identified the misconceptions leading to the incorrect answers, you can efficiently target them rather than use the valuable time with your small group to probe for underlying causes of errors.

## Strategies for Planning Conference Follow-Up *(cont.)*

- If you find a group of students that has quickly understood the content and is ready for greater challenge, meet with them to accelerate their instruction.
- If you discover a few students who lack the foundational knowledge needed to understand a new concept, group them together for a lesson to fill in the gaps.
- If during your conferences you discover clusters of related student interests or specific learning styles, group these students together and plan lessons to take advantage of the shared areas of interest or learning styles.

### Follow-Up Strategies for Individual Students

Teachers are responsible for the education of each of their students. Each student is unique, bringing diverse background knowledge, interests, and attitudes to the class. It is only when teachers really know their students that they can best meet their learning needs. Math conferences are one of the ways teachers can get to know their students. Use the information from math conferences to meet individual student needs in these ways:

- Check back with students after conferences to see if the Teaching Point of the conference was understood and is being used. If not, provide additional support.
- If a conference with a student revealed several Teaching Points but you were only able to tackle one of them during the conference, be sure to confer again with the student to focus on any other needed Teaching Points.
- If you discover that a student needs scaffolding to access the math content, provide it. As you decide what scaffolding will best support his or her learning, also plan how it will be withdrawn. Scaffolding should be only a temporary support.
- If during a conference you noted several areas of concern, be attentive to that student's work during all of the components of the Guided Math framework. Make an effort to involve the student in tasks that will reinforce his or her ability in areas of concern you identified.
- If students have set math goals for themselves during their conferences, check on their progress toward meeting those goals. Celebrate with them when they achieve their goals and offer continued support and encouragement to those who are struggling to meet their goals.
- If you discover a student has a burning interest in a math-related area, feed the fire. Make every effort to connect the grade-level math topics to the area of interest. Encourage independent exploration. Allow the student to share his or her interest with the class. Strong interest by one student often stokes the interest of others.