

Supporting the Range of Learners in the *Investigations* Classroom

All teachers are faced with the challenge of meeting the needs of the range of learners in their classrooms. This range can include students who struggle or excel in certain areas of mathematics (but perhaps not in others), students who are learning English, and students who have particular learning needs. Engaging and supporting all learners in making sense of and understanding mathematics are two goals of the *Investigations* curriculum, supported by a guiding principle that all students have mathematical ideas and can be mathematical thinkers.

Creating a classroom culture that allows all students to share their ideas, listen to, and learn from each other takes intentional thought and work. An important component in developing an inclusive classroom community is helping all students learn to participate in mathematics discussions—including those who do not feel confident about their math or communication skills and those who opt to stay on the periphery.

For more information about supporting discourse in the Investigations classroom, see Investigations in the Classroom on pages 29–30.

Creating a positive and supportive learning environment that is responsive to the needs of each learner begins on the first day of school and continues throughout the year. The curriculum units are explicitly designed to support you in this work, helping you to learn what each student knows and understands and to use that information to inform your practice (e.g., by offering appropriate and timely Intervention, Practice, and Extension activities). The **Ongoing Assessment: Observing Students at Work** feature, found in most sessions, includes a bulleted list of questions to consider as students work on specific activities. The formative assessment data gathered during these observations and interactions provide information about which students may need more support with a particular idea, need additional practice with an idea, or need to extend their work with an idea.

In addition, the curriculum supports you in using this knowledge to modify the curriculum and support all students with a feature, found in most sessions, called **Differentiation: Supporting the Range of Learners**. This feature includes activity-specific suggestions for Intervention and Extension (and for supporting English Language Learners; see the essay on pages 56–58). These targeted recommendations involve eight instructional strategies designed to help you scaffold and extend the mathematical ideas of the given activity. These strategies are not mutually exclusive and may be a matter of perspective, with one having elements of another. The strategies are intended to relate to and connect with each other. While they are linked to specific activities, they can also be generalized to use during other activities and instructional situations.

These eight instructional strategies are

1. Adapt the Learning Situation

Sometimes, a new game or activity involves a challenging new idea or a significant number of steps. It is often here that you will find a suggestion to work with a small group after a whole-class introduction so that you can focus on the rules and scaffolding strategies for playing. Such time can also allow you to focus on helping a pair of students or a small group prepare to present work to their classmates. Other times, you may find suggestions for pairing or grouping students in particular ways.



DIFFERENTIATION Supporting the Range of Learners

INTERVENTION Adapt the Learning Situation Identify students who may benefit from working in a small group with you. Have them retell the problem, identify the action, and use cubes or strips and singles to model the problem.

[An example of a Differentiation Note for the instructional strategy *Adapt the Learning Situation* for the activity *More Sticker Problems* in Grade 2]