of a bike ride traveled at this constant rate. Here, “one-half” represents the distance traveled for each hour, rather than the equivalent ratio of one mile traveled for every two hours. The same symbols that students encountered in early elementary grade levels to represent parts of a whole—for example, partitioning in grade two, formalized unit fractions in grade three—are now attached to new language and concepts in upper elementary grade levels and middle school.

**Mathematical Discourse**

According to the New Zealand Council for Educational Research (2014), “Mathematical classroom discourse is about whole-class discussions in which students talk about mathematics in such a way that they reveal their understanding of concepts. Students also learn to engage in mathematical reasoning and debate.” Teachers ask “strategic questions that elicit from students both how a problem was solved and why a particular method was chosen” (New Zealand Council for Educational Research 2014). Students learn to critique ideas (their own and those of other students), and they look for efficient mathematical solutions.

Researchers caution that focusing on academic language alone may promote teaching vocabulary without a context or lead to the misconception that students are lacking because of their inability to use academic language (Edelsky 2006; MacSwan and Rolstad 2003). It is essential for instruction to include teaching vocabulary in context so that the mathematical meaning can be emphasized. Classroom discourse is one instructional strategy that promotes the use of academic and mathematical language within a meaningful context. *Mathematics discourse* is defined as communication that centers on making meaning of mathematical concepts; it is more than just knowing vocabulary. It involves negotiating meanings by listening and responding, describing understanding, making conjectures, presenting solutions, challenging the thinking of others, and connecting mathematical notations and representations (Celedón-Pattichis and Ramirez 2012, 20).

Lesson plans that include objectives for language, mathematical content standards, and mathematical practice standards need to identify where these three objectives intersect and what specific scaffolds are necessary for English learners’ mathematical discourse. As one example, a high school teacher of long-term English learners has planned a lesson that requires students to identify whether four points on a coordinate graph belong to a quadratic or an exponential function. Classroom routines for partner and group work have been established, and students know what “good listening” and “good speaking” look like and sound like. However, the teacher has also created bookmarks for students to use, with sentence starters and sentence frames to share their conjectures and rationales and to question the thinking of other students. The teacher is employing an instructional strategy called “Think-Write-Pair-Share” with scaffolds in the form of sentence frames. After a specified time for individual thinking and writing, students share their initial reasoning with a partner. A whole-class discussion ensues, with the teacher intentionally re-voicing student language and asking students to use their own words to share what they heard another student say. While the teacher informally assesses how students employ academic language in their oral statements, she also presses for “another way to say” or represent that thinking to amplify academic language.