

## Strategies for Supporting English Language Learners

### Model Thinking Aloud

When English Learners use English to articulate their thinking, they get an opportunity to practice using their language while you get an opportunity to identify gaps in their knowledge and provide instructional support. When you model your process and articulate your thinking for students, they learn how to use the language effectively. When modeling thinking aloud, it is important to use visuals and gestures to reinforce understanding.

**Example:** When introducing a math game, play a couple of rounds with students.

Model taking a turn and use gestures to reinforce your words. For example:

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

The game piece is on [32]. I want to capture the chip on [62]. I have [ +20, +10, -2, -10, +30].

Which card or cards can I use? I can use the +30 card because  $32 + 30 = 62$ .

As students take turns, have them reason aloud as they act out each step.

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### Partner Talk

Asking students to talk with a partner provides an audience for students' thinking and an opportunity for you to listen for, and direct students to listen for, particular vocabulary and linguistic structures. Partner Talk also gives students an opportunity to rehearse their explanations of their mathematical thinking and strategies before sharing in a whole-class or small group discussion.

**Example:** To help students prepare for a class discussion about [solutions to a word problem], have them rehearse their solution with a partner. Provide a sequence that students can use. For example:

First I \_\_\_\_\_. Next, I \_\_\_\_\_. Then, I \_\_\_\_\_



"First I added the tens.  $10 + 10 = 20$ . Next I added  $7 + 9$ . That is 16. Then I had to add the 16 onto 20. I know  $20 + 10 = 30$  and 6 more is 36."

Encourage partners to help each other complete their explanation and help students as needed. Then provide time for students to rehearse their explanations with each other. Some students may want to write down their explanation.

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### Provide Vocabulary Support

Support in learning, understanding, and using mathematical vocabulary is particularly important for English Language Learners. Use and encourage students to use models, visuals, gestures, and demonstrations when introducing, discussing and using vocabulary. As students explain their thinking, help them attach mathematical language to the ideas they have. Together with students, develop vocabulary resources to serve as a classroom reference.

**Example:** When measuring lengths in the classroom, some students may need clarification about the words *height* and *width* prior to completing the task. For example:

**The height is how tall something is**

**The width is how wide something is.**

Write each word, demonstrate its meaning using physical objects and provide a sketch for students to refer to as they are finding the actual measurements of items in the classroom.



### Provide Sentence Stems

Sentence stems can help students say and/or write the steps they took to solve a problem or complete an activity. Students can read or restate their completed sentences to communicate their thinking to you and their peers and use gestures to reinforce understanding.

**Example:** To help students describe the data displayed on the line plot, provide the following sentence stems:

**The least number of years on the line plot is \_\_\_\_\_.**

**The greatest number of years on the line plot is \_\_\_\_\_.**

**[More than] half the class has been in the school 1 or 2 years,**



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### Repeat and Clarify

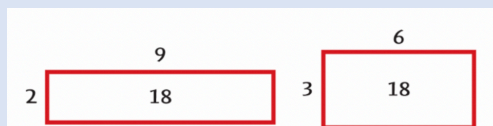
Repeat, elaborate on, paraphrase and clarify instructions and explanations to help English Language Learners fully understand instruction. Students struggling with vocabulary and language acquisition are often confused by extra details in word problems or overly wordy statements. Rephrasing them in a different way—using simpler language, shorter sentences, and/or eliminating unnecessary information—helps students focus on and understand the important information needed to work through an activity.

**Example:** When solving number puzzles with two clues, some students may need additional support understanding the clues and the directions. Reread the information to students and then have them restate the information in their own words. Clarify that they need to find *one* number that fits *both* clues. For students who need additional support, draw an example of an array that fits the clues.

**What number fits both clues?**

**Clue 1:** This number of tiles makes an array that has 2 on one side

**Clue 2:** This number of tiles makes an array that has 3 as one side



### Provide a Sequence

Some English Language Learners have difficulty holding onto directions; others struggle to find words to describe what they have done. A sequence of steps to follow can provide them with a guide for completing a game or activity and/or support them in reporting their findings. (Note that this is not about giving students a sequence of steps for solving a problem.) When suggesting a sequence, use concise language.

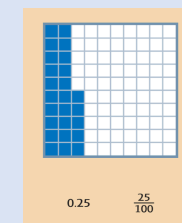
**Example:** Break activity directions into smaller sentences. For example:

**We will make Decimal Cards. Then we will put them in order.**

Hold up a mini 10 x 10 square. Demonstrate each step:

**First, color the square to show the decimal. Next, glue it to the card. Then, write the decimal and the fraction.**

Help students by making a card with them.



**Now put the cards in order on the number line.**

## Strategies for Supporting English Language Learners

### Provide Opportunities for Practice

Sometimes English Language Learners need additional time to practice and use specific language. Strategies for providing such practice include previewing content before it is introduced, meeting with a small group, and encouraging students to engage in partner talk.

**Example:** In preparation for a discussion about YES/NO surveys, preview the survey question and results with students:

**Look at your survey. What question did you ask?**

**How many people said yes?**

**How many people said no?**

**How many people answered your survey?**

Use sentence stems to structure students' responses.

Do you like CARROT?	
YES	NO
AMAR CRISTINA ZUMU DANIEL MARIA EVELI KATIE CARMEN ALEXANDR LINDAY NINA	AMINI MATHIE YUKO ③

### Allow Varied Responses

While students are learning how to speak and write English, it's important for them to share their math thinking in a variety of ways. Strategies include encouraging students to gesture and/or draw a picture; allowing them to write instead of speak (or vice versa); encouraging them to use their native language; and taking dictation.

**Example:** Some students may find it challenging to explain their thinking verbally or in writing. Allow students to draw pictures and/or use their first language, along with gestures, to express their ideas. Provide sentence stems, words, or phrases that students can use in their explanations. Encourage students to use tools (e.g. cubes, sketches, numberlines etc.) to represent their thinking and in order to discern students' mathematical knowledge from their understanding of English.

