Once the maps were complete, Buzanski asked the students to trade with a partner. The partners were to review each other’s maps and develop questions using these sentence frames:

Tell me why __ is categorized as __

Why are ___ and ___ both categorized as ___?

Buzanski provided an example to get the students started. “Tell me why ship is categorized as setting. Tell me why settlement is categorized as setting. Why are ship and settlement both categorized as setting?“ She also gave a response frame and sample sentence for the answer:

___ is/are categorized as ____ because ____

Ship and settlement are categorized as setting because the story takes place in both places.

After allowing time for the students to work in pairs, she asked them to explain their partner’s thinking. She randomly selected students by pulling popsicle sticks with their names and waited for each student to form a response, rather than moving on if a student hesitated or stumbled.

What made this lesson successful? By allocating time for students to work on their own and with a partner, Buzanski gave them the opportunity to explore their own and another person’s point of view. She scaffolded academic vocabulary and discourse structures by providing the question and response frames. Both the students’ verbal responses and the Thinking Maps they completed gave her observable evidence of learning and alerted her to students who needed more time to grasp the lesson.

3. Structured analysis and evaluation

Lynn Fitzpatrick, a language arts specialist, focused on plot development in a ninth-grade lesson on Romeo and Juliet. She asked students to analyze the causes and effects of choices made by the central characters in the play. She used the strategy of Numbered Heads Together to create interdependence and accountability within teams.

Working in small groups, the students used a Multi-Flow Map to plot the causes and effects of one of the play’s major events. They verified their thinking by citing dialogue (act, scene, and line) for the choices they made. To support academic language development, Fitzpatrick provided response frames for the students to use:

Juliet chose __ because __.

As a result, __. This advanced the plot by ___.

Once the maps were complete, Fitzpatrick had the students in each group number off from 1 to 4. Following the Numbered Heads Together protocol, she asked each student who had the number she’d selected to serve as spokesperson for his/her group.

During this lesson, Fitzpatrick was able to help students map the relationships between character actions and outcomes. She structured class participation so that students had to prove their conjectures with evidence. English learners were given time to test their assumptions and refine their use of academic language by listening to classmates and practicing response frames. The random selection strategy for group reporting required all students to prepare responses.

This lesson was extended through use of a strategy that is very effective with older students: asking them to disprove or provide a counter example to a generalization. Fitzpatrick built on what students already knew from the first part of the lesson by asking them to create Multi-Flow Maps showing the opposite of the choice the character had made—for example, Juliet decides not to take the poison. Because students already had experience with the process of mapping out character choices, they were able to apply their ideas in a new situation.

Actively engaging students in thinking requires teachers to approach instruction and structure classroom interactions in new ways, moving away from the old paradigm of posing a question and choosing a single student to answer. When teachers purposely plan instruction to include strategies that scaffold learning, provide time for students to rehearse ideas and language, and hold students accountable for sharing their thoughts and ideas, they create a classroom dynamic that encourages every student to participate and succeed.

Researchers have conjectured that much of the learning process is embedded in the academic conversations that take place in the classroom.

As today’s schools work to raise student achievement, they aren’t looking for just a couple of students sitting in the front of a classroom with hands held high whenever a question is asked. They want every student to be actively thinking and able to demonstrate their learning in observable ways. They want every student to apply the language, skills, and concepts that flow from the content of instruction.

Researchers have conjectured that much of the learning process is embedded in the academic conversations that take place in the classroom and that these conversations are essential to helping students acquire critical language and thinking skills. When students participate in classroom discussions using language that is increasingly precise and relevant to academic topics, they become more engaged in learning and the quality and quantity of their responses grow.

But this goal—producing a classroom of engaged, thinking students—can be challenging when a class includes students who aren’t proficient in English or who otherwise struggle academically. To ensure the active engagement of these students, teachers must scaffold instruction linguistically and academically.

Over the past three years, SCOE has been working with local teachers to develop effective classroom strategies that increase the academic engagement of all learners. A team of school improvement, language arts, and mathematics specialists have developed a framework—Building Options for Discourse: Students and Teachers Responding (BODSTR)—and are helping teachers
implement it by providing demonstration lessons and on-site support in selected classrooms across the county. Using this framework, teachers plan lessons that include three key strategies:

- **Scaffolding thinking and language**
- **Providing rehearsal time**
- **Holding students accountable for listening and responding**

**SCAFFOLDING THINKING & LANGUAGE**

Many Sonoma County teachers are using graphic organizers like *Thinking Maps*® to give students a standardized way of organizing information around academic skills and concepts. Students use *Thinking Maps*® to process learning across the curriculum—to define, describe, sort and classify, look for causes and effects, compare and contrast, make analogies, and relate, among other activities. *Thinking Maps*® are visual tools to help students visualize the knowledge they are acquiring. This is a key scaffolding tool, which is especially effective when used in conjunction with the strategies described below.

- **Talking Off the Map**: When students "talk off the map," they take the time to reflect on what they’ve organized on a *Thinking Map* and form statements and questions that can be shared with their peers. For example, when using a Tree Map to describe an apple, a student can use the structure of the map to develop sentences (see figure A below).

To further scaffold student responses, the teacher might add conjunctions between the branches of the map (figure B), allowing students to visualize how the words fit together to build compound sentences.

- **Response Frames**: Response frames teach word order and correct vocabulary usage while giving students a context for expressing themselves. By providing the framework of a sentence, response frames allow students to insert language that describes their thinking without having to worry about sentence construction. Response frames can also prod students to think at a deeper level as they justify or explain their thoughts.

**PROVIDING REHEARSAL TIME**

Rehearsal strategies allow students to practice their responses before reporting out in whole-class settings. During rehearsal, students work in pairs or small groups, using interactive structures that require all partners and group members to speak and listen. Because all students participate in rehearsal, they all benefit from the academic interaction these strategies provide—but the strategies are especially beneficial for English learners. Rehearsal techniques give students needed opportunities to hear language models, practice language skills, and speak about academic content in safe, small-group settings. There are a variety of ways that teachers can organize rehearsal time for students. Here are three common strategies.

- **Buddy Buzz** (also known as elbow or row partners): Teachers ask students to turn to a partner and discuss a topic, practice a skill, or give an opinion. As the partners talk, the teacher circulates and listens in. After the partners share for a few moments, several students are selected to report out to the entire class.

- **Think-Pair-Share**: This is a more structured pair activity where each student is assigned a letter, A or B. The teacher asks a question or poses a problem. Partner A speaks for a specified time (say, two minutes) while partner B listens. The roles are then reversed, with partner B speaking and A listening. At the conclusion of partner B’s time, responses are shared with the whole class. Teachers often post response frames as a scaffold for partner discussions and whole-class sharing.

- **Numbered Heads Together**: Students form small groups and each member of the group is assigned a number: 1, 2, 3, or 4. The teacher poses a problem and students “put their heads together” to reach a conclusion. The teacher ends the discussion time by selecting one number to act as spokesperson—for example, the number 3 student from each group would report. Because no one knows what number will be called, all team members must prepare to present their group's findings.

**HOLDING STUDENTS ACCOUNTABLE FOR LISTENING & RESPONDING**

Randomly calling on students can foster the expectation that all students must be accountable for their learning and take responsibility for listening and responding. This can create a dynamic learning environment, as described in this passage from *Classroom Discussions*.

*When a teacher succeeds in setting up a classroom in which students feel obligated to listen to one another, to make their own contributions clear and comprehensible, and to provide evidence for their claims, that teacher has set in place a powerful context for student learning.*

Using response strategies that hold students accountable motivates students to be prepared to answer questions, summarize findings, and report opinions accurately to the whole class. This not only increases student attentiveness to learning, but also provides an opportunity for teachers to check student understanding throughout a lesson.

Teachers can implement simple strategies to engage all students in listening and participating.

- **Whip Around**: Here, the teacher asks all students with a specific number or letter in *Think-Pair-Share* or Numbered Heads Together groupings to present for their partner or group. For example, all B partners would stand and share, whisking around the room from one student to the next until all groups have reported out.

- **Popsicle Sticks or Name Cards**: Student names are written on popsicle sticks or index cards. The teacher randomly selects one stick or card and calls on that student to share.

**STRATEGIES IN ACTION: THREE EXAMPLES**

The engagement strategies described above are highlighted in three demonstration lessons developed by educational specialists serving on the Sonoma County Achievement Team (SoCAT), an initiative designed to assist schools and districts in their improvement efforts. SoCAT team members Josh Deis, Peggy Buzzanski, and Lynn Fitzpatrick take their expertise to local schools to help teachers implement new, more effective instructional practices. In these modeled student engagement strategies, supported teachers incorporated the strategies into their lessons.

**1. Rehearsal using partner talk**

Math specialist Josh Deis used a *Think-Pair-Share* routine to help fifth-grade students gain a better understanding of addition using negative numbers. Deis grouped students in pairs and designated them partner A or B. He asked:

> **When a negative number is added to a negative number, why is the answer always a negative number?**

Then gave the students two minutes to think about the answer. They were pondered why this is true and how they would explain their understanding.

Every student—first As, then Bs—had two minutes to present their ideas to a partner. Deis roamed the room and listened to the pair discussions, which gave him valuable feedback about what the students understood and what still needed to be clarified.

**2. Explain someone else’s thinking**

Language arts specialist Peggy Buzzanski presented a third-grade lesson designed to help students understand character, setting, and plot. She had the students use a Tree Map to classify story elements from the *Houghton Mifflin* story, *Across the*
implement it by providing demonstration lessons and onsite support in selected classrooms across the county. Using this framework, teachers plan lessons that include three key strategies:

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- Talking Off the Map: When students "talk off the map," they take the information they’ve organized on a Thinking Map and form statements and questions that can be shared with their peers. For example, when using a Tree Map to describe an apple, a student can use the structure of the map to develop sentences (see figure A below).

  To further scaffold student responses, the teacher might add conjunctions between the branches of the map (figure B), allowing students to visualize how the words fit together to build compound sentences.

  **Figure A**

  - **An apple**
    - **An apple**
      - red
      - tastes sweet
      - feels smooth
      - **An apple is red.**
      - **An apple is red and tastes sweet.**
      - **An apple is red and feels smooth.**

- Response Frames: Response frames teach word order and correct vocabulary usage while giving students a context for expressing themselves. By providing the base structure of a sentence, response frames allow students to insert language that describes their thinking without having to worry about sentence construction. Response frames can also prod students to think at a deeper level as they justify or explain their thoughts.

  **Frame:** I believe that if __________, then ______ because ______.
  **Response:** I believe that if all students are required to wear school uniforms, then academic achievement will increase because students will focus on their studies rather than trying to impress their friends.

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   Every student—first As, then Bs—had two minutes to present their ideas to a partner. Deis roamed the room and listened to the pair discussions, which gave him valuable feedback about what the students understood and what still needed to be clarified.
   At the end of the pair time, Deis asked all A students to stand and share their thinking using this response frame: I think that a negative plus a negative is always a negative because...
   Through this activity, all students were able to rehearse their answer with a partner before they were expected to share with the whole class. This gave the students an opportunity to hear other responses and compare them to their own, while increasing the academic talk time for all students.

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