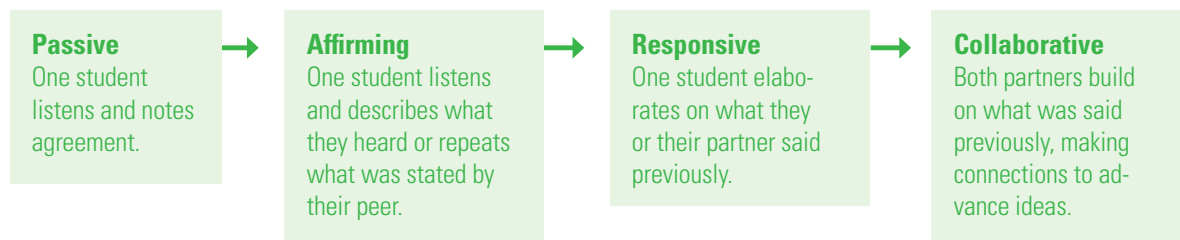


# DISCOURSE FUNDAMENTALS: STUDENT-PAIR AND TEACHER-LED TALK

Productive classroom discourse, whether guided by teachers or by students themselves, promotes learning. This reading highlights key principles of student-pair and teacher-led talk that need to be in place for students to engage in *extending their thinking through discourse*.

## PAIR TALK

The benefits of learning from pair conversation depend a great deal on the type of dialogue students are engaged in. Student participation in dyads can be considered at four levels (Chi & Meneske, 2015). We refer to these as passive, affirming, responsive, and collaborative. Being able to identify student dialogue patterns provides insight into where students are situated along the pathway toward collaborative dialogue.



**Collaborative dialogues** (i.e., each partner builds on previously stated ideas to advance their own and their partner’s thinking) are the most powerful for learning. At this stage, participating students work together to move learning forward through an interwoven pattern of turn-taking that pushes their collective thinking. Chi and Meneske found that though this dialogue pattern is found infrequently in schools, it has the greatest potential to increase learning in that it contributes to students’ developing new knowledge that they could not have created alone.

When teachers provide students with opportunities to work together in pairs, the task should be structured carefully so that both participating students are able to take an idea-building stance. When students are reading, for instance, instead of asking students individually to make sense of a challenging text, teachers can set up the task as a joint activity. Students can take turns reading aloud paragraphs to one another. After each reading, the listener can develop a question to ask their peer, first indicating what type of question it is, then whether the answer is “right there” in the text, a searchable theme, a question for the author, or drawing on background knowledge. This can be the basis for several conversational turns where students add on to the initial answer with comments and questions such as, *That reminds me of another text we read where . . . , I can see why you’d say that, I also wonder . . . , Tell me more about why you think that, and What in the text gave you that idea?*

Pair/share strategies offer another discourse model that supports students to internally process, organize, and retain ideas (Lyman, 1987, p.26). Including opportunities for *think/pair/share* activities encourage students to pro-

cess ideas in a safe space and rehearse or think through responses that can then be shared in various ways to extend classroom discourse. Frequent use of this routine supports students to learn from their peers rather than rely exclusively on the teacher’s authority.

Another way to promote collaborative dialogue is to present students with joint work. This kind of activity needs to be set up in a structured way so that both partners are required to listen attentively, express their own ideas, and develop shared understanding through conversational turn-taking. For example, students could begin a joint project by sharing what they currently know, identifying what more they have to learn to successfully do their work together, and then together review, analyze, and discuss resources that will support their learning, e.g., data, articles, problem sets, images, videos, and stories. When partners begin the joint work, they will share similar knowledge assets as one another and can continue to talk, act, and build knowledge together through the joint activity (e.g., science lab, research paper, or creative writing project).

Students also need to understand norms for working together so that one partner does not dominate the other and both partners benefit from the interaction. This involves carefully listening to peers, a practice which teachers can model when they listen attentively to student responses during group or class discussions. Teachers can also support students to develop this skill by using strategies such as talking tokens, where each student gets a set number that must be used. When students use them, this indicates it’s that student’s time to talk and other’s time to listen.

## TEACHER-GUIDED TALK

### Initiate-respond-evaluate questions

Much teacher-guided talk in the classroom follows the model of initiation, response, and evaluation: teachers initiate through a question (“When does this story take place?”), a student responds (“In the 1800’s”), and the teacher *evaluates* the response (“That’s right”). In this model, the teacher is asking for information they already know and the students’ job is to guess what the teacher is thinking. Students understand that they are being called on to construct a “correct” answer. A predominant focus on this type of discourse pattern can limit students’ opportunities to explore new ideas and concepts, as it puts students in the position of thinking about the next right answer rather than listening carefully to one another to understand how their peers are thinking about new ideas.

### Information-seeking questions

More productive for learning are *information-seeking* questions through which students are asked for their ideas, opinions, reasoning, and justifications. When these kinds of questions are introduced into classroom lessons, much longer or extended sequences of interaction can occur, more complex responses are offered, and students more frequently direct questions to their peers. Not only can this kind of classroom talk support the development of students’ thinking, it also offers teachers opportunities to gain insights into student thinking.

## Assessment conversations

In formative assessment, student talk is an important source of evidence of student learning. When teachers and students probe student thinking in the context of discourse, these exchanges can also be considered *assessment conversations*. In this type of interaction pattern, the teacher and students reflect on student comments and responses to questions as evidence of their current understanding of the intended learning (Ruiz-Primo & Furtak, 2006). They also help students articulate their thinking and encourage them to make meaning *from each other's speculations and reasoning*. During assessment conversations, the teacher may launch the questioning process, but then students quickly take over as the teacher may literally step out of the way so that students can question one another. When teachers ask students questions that provoke students to reflect on, clarify, and explain their thinking about actions, they model the type of discourse that students have with one another as they engage in independent conversation, e.g., conducting peer feedback and supporting their peers in a variety of learning contexts.

## Wait-time for think-time

Teacher-student discussions also benefit from *think-time*. When asking questions, waiting for a response for a minimum of three seconds has been shown to benefit student responses, including reducing the number of “I don’t know” answers. Yet teachers on average wait less than two seconds after asking a question (Stahl, 1994). Most students will take anywhere from 1 to 10 seconds to process a question. By waiting longer for a response, a teacher will enable individual processing, involve more class members, and get better quality responses.

## Random selection

One way to ensure the participation of all students is to use a no hands up policy. Instead of asking students to raise their hands, teachers use a randomized method for selecting students to answer a question or share their thoughts with the group. For example, some teachers place popsicle sticks with students’ names written on them in a container and select a student to answer the question or begin the discussion by picking out a stick. This practice can ensure that all students are thinking through the ideas on the table and that the same students who consistently raise their hands are not always called on.

## BUILDING STUDENT CAPACITY FOR DISCOURSE

Below are four foundational principles for classroom discourse based on the work of Michaels and O’Connor (2015). These principles and related strategies apply to classroom discussions guided by teachers and those directed by students.

### Principle 1: Helping Individual Students Share Their Own Thoughts

If students are going to participate in a discussion, they have to be able to share thoughts and responses out loud, in a way that communicates their ideas to others. To support Principle 1, teachers provide students with opportunities to practice, establish classroom norms of respect and careful listening, and utilize safe space configurations (e.g., starting with individual think time, moving into pairs, and then small or whole group discussions).

## **Principle 2: Helping Students Listen Carefully to One Another**

If students are just waiting to speak and are not *listening* to others and *trying to understand them*, they will not be able to build a common understanding of the intended learning or contribute toward extending the thinking of the group. The ultimate goal involves building ideas and reasoning, not simply presenting a series of unconnected thoughts, one by one. To support Principle 2, teachers encourage students to make connections between ideas (“Can anyone make a connection between what Joanna just said and what Aaron said earlier?”) build on each other’s comments (e.g., “Can anyone add to that?”) and consider various viewpoints (“Does everyone agree with Joaquin’s statement?”).

## **Principle 3: Helping Students Deepen Their Thinking**

Most students are not experienced at deepening their thinking, such as working through their reasoning or taking an idea and exploring its application in diverse contexts. A key role of a teacher is to continuously and skillfully press the students for reasoning with evidence and to speculate on possible applications. Asking questions such as, *How are these situations the same or different? Can you say more? Can you give us an example of how that might work? Why do you think that? What is your evidence? and What led you to that application/conclusion?* can help students refine and expand their thinking and clarify their explanations. Teachers can also have students develop questions that promote richer dialogue for peer feedback sessions. For example, when co-constructing Success Criteria, teachers can have students identify the questions they might use during peer review to support one another in meeting the Success Criteria.

## **Principle 4: Helping Students Engage with One Another’s Ideas**

Real discussion to support learning occurs when students take up the ideas and reasoning of other students and respond to them, as in collaborative dialogue. Teachers support students in engaging with one another to explore their ideas through explicit instruction, modeling, and the use of discourse norms. In addition, the classroom learning culture must be in place to support collaborative dialogue, for example, students must value the knowledge and insights of their peers and understand what it means to have a growth mindset.

## REFERENCES

- Lyman, F. T. (1987). Think trix: A classroom tool for thinking in response to reading. *Reading issues and practices*, 4, 15-18.
- Meneske, M., & Chi, M. (2015). Dialogue patterns in peer collaboration that promote learning. In L. B. Resnick, C. Asterhan, & S. N. Clarke (Eds.), *Socializing Intelligence Through Academic Talk and Dialogue* (pp. 263-274). Washington, DC: American Educational Research Association.
- Michaels, S., & O'Connor, C. (2015). Conceptualizing talk moves as tools: Professional development approaches for academically productive discussion. In L. B. Resnick, C. Asterhan, & S. N. Clarke (Eds.), *Socializing Intelligence Through Academic Talk and Dialogue* (pp. 347-362). Washington, DC: American Educational Research Association.
- Ruiz-Primo, M. A., & Furtak, E. M. (2006). Informal formative assessment and scientific inquiry: Exploring teachers' practices and student learning. *Educational Assessment*, 11, 237-263.
- Stahl, R. J. (1994). Using "Think-Time" and "Wait-Time" Skillfully in the Classroom. *ERIC Digest*.