



# 24 Operating Principles

## and the Verbal Behaviors that Go with Them

Cultivating Classroom Discourse to Make Student Thinking Visible

When you lead classroom discussions, follow the principles below to create a talk environment of robust student-to-student discourse. This will shift the dynamic from teacher listening to and interacting with just one student at a time, to everyone listening to each other and contributing to each other's thinking.

<b>Getting the conversation started</b> Open the door for dialogue:	
<b>1</b> <b>ENGAGE STUDENT THINKING</b>	<b>Begin the dialogue with a planned question or statement designed to engage student thinking.</b> <ul style="list-style-type: none"><li>• “Why do you suppose Fitzgerald always has Gatsby comment on the Eckleburg sign between East and West Egg?”</li><li>• “What is the difference between an ionic and molecular compound?”</li><li>• “How can you tell if two fractions are equivalent if their denominators are different?”</li><li>• “What do you think Papa really wants when he says that to the children?”</li></ul>
<b>Laying the Foundations</b> Create a safe and inclusive environment for discourse:	
<b>2</b> <b>CALL ON ALL</b>	<b>Call on all students over time in large groups whether hands are raised or not.</b> <ul style="list-style-type: none"><li>• Engage all students in a small group to set the expectation for everyone to participate in the learning.</li></ul>
<b>3</b> <b>PAUSE/USE WAIT TIME</b>	<b>Allow a brief silence after posing a question or hearing a student's response.</b> <ul style="list-style-type: none"><li>• Give all students time to process a question or a student comment by pausing for a minimum of three to five seconds:<ul style="list-style-type: none"><li>▪ After posing a question.</li><li>▪ Before calling on another to answer.</li></ul></li></ul>
<b>4</b> <b>AVOID JUDGMENT</b>	<b>Respond to students without judgment.</b> <ul style="list-style-type: none"><li>• Replace the language of praise (or blame) with specific feedback, naming what the student did.</li></ul>

	<ul style="list-style-type: none"> <li>• “You expressed an idea and gave an example which helps us understand your thinking.”</li> </ul>
<p style="text-align: center;"><b>5</b> <b>VALIDATE CONFUSION</b></p>	<p><b>Validate students who acknowledge confusion and give encouragement, expressing confidence in their ability.</b></p> <ul style="list-style-type: none"> <li>• “Strong students say when they are confused like you just did, Jasmine.”</li> <li>• “Let’s start by going back over what we know so far. I know you’ll get it.”</li> </ul>
<p><b>Getting Started</b> Use these moves frequently when getting started on your journey with Making Student Thinking Visible:</p>	
<p style="text-align: center;"><b>6</b> <b>EXPLAIN</b></p>	<p><b>Get students to explain or elaborate.</b></p> <ul style="list-style-type: none"> <li>• When a student responds to a question, stay with the student for several exchanges, whether his/her response is right or wrong. This shifts the dynamic from short answers to developing students’ stamina to engage in complex conversations. <ul style="list-style-type: none"> <li>▪ “Tell us why?”</li> <li>▪ “How did you arrive at that; what is your thinking?”</li> <li>▪ (Student responds.)</li> <li>▪ “So then what was different about his wife’s motivation?”</li> </ul> </li> </ul>
<p style="text-align: center;"><b>7</b> <b>RESTATE</b></p>	<p><b>Get another student to paraphrase or restate what has been said to highlight an important idea (or to check listening) in order to send the message that everyone’s voice has weight and set the expectations that students need to listen to one another’s ideas, not just the teacher’s voice.</b></p> <ul style="list-style-type: none"> <li>• “Marie, how would you restate what Josh just said?”</li> </ul>
<p style="text-align: center;"><b>8</b> <b>TURN AND TALK</b></p>	<p><b>Use turn and talk often in large group settings to get more active participation, promote speaking and sharing openly and frequently, and give reticent students the opportunity to rehearse their ideas prior to speaking to the whole group.</b></p> <ul style="list-style-type: none"> <li>• “So what are the five criteria for a good pictograph? Turn and talk to a neighbor and see if you can come up with them all.”</li> <li>• “How was Scout’s opinion of Boo changing? Turn to a partner and talk about what you think the change was and why.”</li> </ul>

**Helping with Struggle**

When students are wrestling with concepts and problems:	
<p style="text-align: center;"><b>9</b> <b>ESTABLISH NORMS</b></p>	<p><b>Make norms of interaction explicit between students in groups.</b></p> <ul style="list-style-type: none"> <li>• "... and today please be sure to say 'because' after you say that you agree or disagree."</li> <li>• "... and in your groups, remember to make sure you check each person's understanding before going on to the next problem."</li> </ul>
<p style="text-align: center;"><b>10</b> <b>ACTIVE LISTEN</b></p>	<p><b>Paraphrase and use careful active listening to unpack student thinking, especially for a wrong or incomplete argument, until there is mutual understanding of what the student actually intended to say.</b></p> <ul style="list-style-type: none"> <li>• "You seem to be saying that Antigone really spurns her sister and has no respect for her at all. Is that right?"</li> <li>• "I think what you are saying is...am I understanding you?"</li> </ul>
<p style="text-align: center;"><b>11</b> <b>REVOICE</b></p>	<p><b>When students are grappling with an idea, or their explanations are vague, occasionally re-voice (paraphrase or extend) an answer, infusing academic language when appropriate.</b></p> <ul style="list-style-type: none"> <li>• "So, Mike, you're saying that the combination of rising prices (inflation) and wages staying the same (wage stagnation) was hurting the middle class."</li> </ul>
<p style="text-align: center;"><b>12</b> <b>SCAFFOLD</b></p>	<p><b>When students experience difficulty explaining their response, scaffold their thinking by asking questions that allow the pieces they <i>do</i> know to surface and then nudge them to build on it.</b></p> <p>S: It's a multiplication AND a division problem!  T: How did you figure that out?  S: Ummm...I just know.  T: Uh huh. So let's see...How many boxes of notebooks did the school buy, Damian?"  S: Eight.  T: How did you know that?  S: Cause the delivery man could only carry two in each the four trips.  T: And how many classes needed notebooks?  S: <i>Silence</i>  T: If it's not in the words, maybe it's somewhere else.  S: Oh, the map of the school!  T: And books in each box?  S: 100.  T: So then what was your reasoning?  S: Oh well first you had to...</p>

<b>13</b> <b>PERSEVERE AND RETURN</b>	<p>Return to a student whose answer was initially incomplete or incorrect. Ask him/her to put together the points that were produced in subsequent class discussion by others.</p> <ul style="list-style-type: none"> <li>• “So now, Ricardo, put it all together for us. What are natural resources?”</li> </ul>
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<b>Give-Ups</b> Old habits we have to relinquish:	
<b>14</b> <b>SLOW DOWN</b>	<p>Slow down the conversation to get repetitions and restatements of answers in order to hear things more than once and have the opportunity to put ideas into their own words in order to understand them.</p>
<b>15</b> <b>ALLOW STRUGGLE</b>	<p>Allow students to struggle and stick with them, dwelling on their thinking.</p> <ul style="list-style-type: none"> <li>• Attend and listen without commenting as they talk through their ideas.</li> </ul>
<b>16</b> <b>DON'T ANSWER YOURSELF</b>	<p>When a student asks you a question, see if another student can answer it, rather than answering it yourself.</p> <ul style="list-style-type: none"> <li>• “Who would like to try answering Jason’s question?”</li> <li>• “Elaine, how would you answer that?”</li> <li>• “Jamil, what do you think would be the next step?” when Jason has asked for the next step.</li> </ul>
<b>17</b> <b>LEAVE WITH CUES TO PUZZLE OVER</b>	<p>Leave a student with a puzzle to ponder and come back later to see what he came up with.</p> <ul style="list-style-type: none"> <li>• “Keep thinking about it. I think you are on to something we will be talking about later. So see if you can make a connection.”</li> </ul>

<b>Getting Students to Interact with One Another</b>	
<b>18</b> <b>AGREE DISAGREE</b>	<p>Invite students to agree or disagree with an idea someone shares and require them to explain their thinking or reason why.</p> <ul style="list-style-type: none"> <li>• “What do you think, Jane? Agree? Disagree? Why?”</li> <li>• “Who agrees...who disagrees? Tell us why.”</li> <li>• “Show me a sign. Agree? Disagree? Why?”</li> </ul>
<b>19</b> <b>ADD ON</b>	<p>Ask a student to comment on or add to another’s thinking.</p> <ul style="list-style-type: none"> <li>• “Let’s comment on what Mike said. Leo, what do you think about Mike’s interpretation?”</li> </ul>

	<ul style="list-style-type: none"> <li>• “Who has something to add on to what Tiffany is saying?”</li> </ul>
<p><b>20</b> COMPARE THINKING</p>	<p><b>Have students comment on the similarity or difference between two students’ ways of thinking or approach.</b></p> <ul style="list-style-type: none"> <li>• “You seem to be thinking about this with economic motives, whereas Wanda was thinking more about people’s emotions driving them. Which helps us more at this point?”</li> <li>• “So Anthony made his rectangle three across and four down. Erika made hers four across and three down. Is one more correct than the other? Would either work? Why?”</li> </ul>
<p><b>21</b> SURFACE DISCREPANCIES</p>	<p><b>Ask questions to surface discrepancies.</b></p> <ul style="list-style-type: none"> <li>• “How can that be if...what do you think is going on there?”</li> </ul>
<p><b>22</b> REVISIT PREVIOUS THINKING</p>	<p><b>When, after reflection or struggle, students change their opinion or answer, ask them to compare the two lines of thought that led to a different answer.</b></p> <ul style="list-style-type: none"> <li>• “So what was different on this second try from the first way you did it?”</li> </ul>

Teaching and Reinforcing Academic Vocabulary	
<p><b>23</b> INFUSE ACADEMIC VOCABULARY</p>	<p><b>Seize opportunities to infuse academic vocabulary and the language of thinking into dialogue and ultimately, into the culture of the classroom.</b></p> <ul style="list-style-type: none"> <li>• “Yes, and what you just did, Brendan, is an example of <i>analysis</i>.”</li> <li>• “I see your point. That’s a generalization, and we’ll be looking for more of them later in the period.”</li> </ul>
<p><b>24</b> RECORD ACADEMIC VOCABULARY</p>	<p><b>Record and keep the emerging academic vocabulary visible so students have access to it when writing and speaking.</b></p> <ul style="list-style-type: none"> <li>• On the board in the corner is this vertical list: <i>proposition, thesis, antithesis, argument, evidence, contrary evidence</i>.</li> </ul>

## Observable Student Behaviors when MSTV Is Working

Students:

1. Do the majority of the talking.
2. Elaborate their answers with explanations.
3. Show they are listening to one another.
4. Are willing to openly admit confusion or not knowing.
5. Challenge each other's thinking non-judgmentally.
6. Take initiative to explain another student's thinking, including how they might have made an error.