

Activity: Student Participation and Teaching / Teaching While Leading A Whole Class Discussion

	A thoughtful experienced teacher will	A competent beginner will	Beginner that needs work will
In preparation for student participation	<ul style="list-style-type: none"> ○ Assign a problem/a question that affords multiple answers and allows students to employ different reasoning strategies. ○ Anticipate students' responses to the task and the difficulties that they may have. Plans appropriate strategies to support students' reasoning through the task accordingly. ○ Know what some students have done in their notebooks, while working individually or in groups and use this knowledge to call on students in a certain order. Aligns different contributions with each other so as to serve a planned mathematical agenda. 	<ul style="list-style-type: none"> ○ Assign a problem/question that requires following a general procedure, but that allows the students to engage in the conceptual ideas that underlie the procedure. ○ Anticipate responses to the task and the difficulty students may face and supports students' reasoning through the task when those difficulties or responses surface. ○ Call on students to share their responses without any particular order, but makes sure that the responses with relevant mathematical ideas get on the table. 	<ul style="list-style-type: none"> ○ Assign a problem that requires a particular procedure. Simply asks students who got the correct answer. ○ Make no anticipations of different responses to the task or students' difficulties. ○ Not know what students have done individually or in-groups but takes some responses from different students in class without any strategy that targets a planned mathematical agenda.
Teacher's discursive moves	<ul style="list-style-type: none"> ○ Allow for a student's response to be repeated or reformulated, hence providing an additional opportunity for it to be heard and reflected on when needed. ○ Ask clarifying questions without evaluating and solicits further explanations. Invites other students to explicate or evaluate each other response. 	<ul style="list-style-type: none"> ○ Repeat all students' comments to make sure they are heard. ○ Ask clarifying questions without evaluating and solicits further explanations. 	<ul style="list-style-type: none"> ○ Move from one student response to another without providing opportunities for them to be reflected upon or for other students to comment on them. ○ Evaluate student's response without asking clarifying questions.

	<ul style="list-style-type: none"> ○ Draw attention to the mathematically significant aspects in the student's solution and further explicates its relation to other contributions. ○ Clearly display students contributions on the board and helps students see the relationship between them. Also questions the students in a way that challenges them to interpret what is on the board in relation to what has is being discussed. 	<ul style="list-style-type: none"> ○ Draw attention to the mathematical significance of the student's solution. ○ Clearly display students' contributions on the board and helps students see the relationship between them. 	<ul style="list-style-type: none"> ○ Fails to draw attention to the mathematical significance of the student's solution and simply accepts a solution as right or wrong. ○ May use the board to write notes but without helping students make relationships between different students' ideas.
Student accountability	<ul style="list-style-type: none"> ○ Make students accountable for learning from other class members by allowing for particular contributions to be collective objects of reflection. ○ Allow enough wait time for students who do not respond to a prompt, and tries to support their participation by helping them use what they know to verbalize their answer. May also encourage the students that are not vocal in class by alerting them that she will ask them to participate and making sure they have something worth sharing with the class. ○ Respond to a student's inadequate contribution by asking him questions that help him revisit his response. 	<ul style="list-style-type: none"> ○ Makes students accountable for learning from other class members and uses strategies to orient students to each other. ○ Allow enough wait time for students who do not respond to a prompt, and tries to support their participation by helping them use what they know to verbalize their answer. The teacher may not worry much about how to involve the students that are not vocal in class. ○ Responds to a student's inadequate contribution by asking him whether he is sure about his answer. 	<ul style="list-style-type: none"> ○ Not make students accountable for learning from each other. The lines of communication are essentially between individual students and the teacher. ○ Short wait time. Solicit randomly another student's response since time is limited and the lesson needs to be completed. ○ Comment about the inadequacy of the contribution then solicits other students' responses.