

DELAWARE FRAMEWORK FOR TEACHING CRITICAL ATTRIBUTES AND POSSIBLE EXAMPLES

3d:

Using Questioning and Discussion Techniques

Questioning and discussion are the only instructional strategies specifically referred to in the Delaware Framework for Teaching, a decision that reflects their central importance to teachers' practice. In the Framework, it is important that questioning and discussion be used as techniques to deepen student understanding rather than serve as recitation, or a verbal "quiz." Good teachers use divergent as well as convergent questions, framed in such a way that they invite students to formulate hypotheses, make connections, or challenge previously held views. Students' responses to questions are valued; effective teachers are especially adept at responding to and building on student responses and making use of their ideas. High-quality questions encourage students to make connections among concepts or events previously believed to be unrelated and to arrive at new understandings of complex material. Effective teachers also pose questions for which they do not know the answers. Even when a question has a limited number of correct responses, the question, being nonformulaic, is likely to promote student thinking.

Class discussions are animated, engaging all students in important issues and promoting the use of precise language to deepen and extend their understanding. These discussions may be based around questions formulated by the students themselves. Furthermore, when a teacher is building on student responses to questions (whether posed by the teacher or by other students), students are challenged to explain their thinking and to cite specific text or other evidence (for example, from a scientific experiment) to back up a position. This focus on argumentation forms the foundation of logical reasoning, a critical skill in all disciplines.

Not all questions must be at a high cognitive level in order for a teacher's performance to be rated at a high level; that is, when exploring a topic, a teacher might begin with a series of questions of low cognitive challenge to provide a review, or to ensure that everyone in the class is "on board." Furthermore, if questions are at a high level but only a few students participate in the discussion, the teacher's performance on the component cannot be judged to be at a high level. In addition, during lessons involving students in small-group work, the quality of the students' questions

and discussion in their small groups may be considered as part of this component. In order for students to formulate high-level questions, they must have learned how to do so. Therefore, high-level questions from students, either in the full class or in small-group discussions, provide evidence that

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	<p>these skills have been taught.</p> <p>Elements:</p> <ul style="list-style-type: none"> • <i>Quality of questions</i> • <i>Discussion techniques</i> • <i>Student participation</i> <p>Indicators include:</p> <ul style="list-style-type: none"> • <i>Questions of high cognitive challenge, formulated by both students and teacher</i> • <i>Questions with multiple correct answers or multiple approaches, even when there is a single correct response</i> • <i>Effective use of student responses and ideas</i> • <i>Teacher ensures all voices are heard in discussion</i> • <i>Discussion, with the teacher stepping out of the central, mediating role</i> • <i>Focus on the reasoning exhibited by students in discussion, both in give-and-take with the teacher and with their classmates</i> • <i>Teacher sets expectations for all students to participate</i> • <i>High levels of student participation in discussion</i>
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	Ineffective	Needs Improvement	Effective	Highly Effective
Delaware Rubrics	Teacher makes poor use of questioning and discussion techniques with low-level questions, limited student participation, and little true discussion.	Teacher's use of questioning and discussion techniques is uneven with some high-level questions, attempts at true discussion, and moderate student participation.	Teacher's use of questioning and discussion techniques reflects high-level questions, true discussion, and full participation by most students.	Students formulate many of the high-level questions and assume responsibility for the participation of all students in the discussion. Teacher employs cognitive coaching in questioning.

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Critical Attributes	<ul style="list-style-type: none"> • Questions are rapid-fire and convergent, with a single correct answer. • Questions do not invite student thinking. • All discussion is between the teacher and students; students are not invited to speak directly to one another. • The teacher does not ask students to explain their thinking. • Only a few students dominate the discussion. 	<ul style="list-style-type: none"> • The teacher frames some questions designed to promote student thinking, but many have a single correct answer, and the teacher calls on students quickly. • The teacher invites students to respond directly to one another's ideas, but few students respond. • The teacher calls on many students, but only a small number actually participate in the discussion. • The teacher asks students to explain their reasoning, but only some students attempt to do so. 	<ul style="list-style-type: none"> • The teacher uses open-ended questions, inviting students to think and/or offer multiple possible answers. • The teacher makes effective use of wait time. • Discussions enable students to talk to one another without ongoing mediation by teacher. • The teacher calls on most students, even those who don't initially volunteer. • Many students actively engage in the discussion. • The teacher asks students to justify their reasoning, and most attempt to do so. 	<ul style="list-style-type: none"> • Students initiate higher-order questions. • The teacher builds on and uses student responses to questions in order to deepen student understanding. • Students extend the discussion, enriching it. • Students invite comments from their classmates during a discussion and challenge one another's thinking. • Virtually all students are engaged in the discussion.
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<p>Possible Examples</p>	<ul style="list-style-type: none"> • All questions are of the “recitation” type, such as “What is 3×4?” • The teacher asks a question for which the answer is on the board; students respond by reading it. • The teacher calls only on students who have their hands up. • A student responds to a question with wrong information, and the teacher doesn’t follow up. • And others... 	<ul style="list-style-type: none"> • Many questions are of the “recitation” type, such as “How many members of the House of Representatives are there?” • The teacher asks, “Who has an idea about this?” The usual three students offer comments. • The teacher asks, “Maria, can you comment on Ian’s idea?” but Maria does not respond or makes a comment directly to the teacher. • The teacher asks a student to explain his reasoning for why 13 is a prime number but does not follow up when the student falters. • And others... 	<ul style="list-style-type: none"> • The teacher asks, “What might have happened if the colonists had not prevailed in the American war for independence?” • The teacher uses the plural form in asking questions, such as “What are some things you think might contribute to _____?” • The teacher asks, “Maria, can you comment on Ian’s idea?” and Maria responds directly to Ian. • The teacher poses a question, asking every student to write a brief response and then share it with a partner, before inviting a few to offer their ideas to the entire class. • The teacher asks students when they have formulated an answer to the question “Why do you think Huck Finn did _____?” to find the reason in the 	<ul style="list-style-type: none"> • A student asks, “How many ways are there to get this answer?” • A student says to a classmate, “I don’t think I agree with you on this, because...” • A student asks of other students, “Does anyone have another idea how we might figure this out?” • A student asks, “What if...?” • And others...
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