

TEACHING & LEARNING SUPPORTS

Inquiry Strategies

*“Ask a man a question and he inquires for a day;
teach a man to question and he inquires for life.”*

Ancient Chinese proverb

Moments of inquiry and reflection in the classroom are valuable opportunities for students to take ownership over their learning. When students are challenged to formulate their own questions, they become more motivated to seek compelling answers. To quote educational philosopher Maxine Greene, as curiosity spreads throughout all aspects of their lives, students can begin to question the status quo and to imagine the world not as it is, but as it could be otherwise. This attitude is a fundamental part of the musician's experience when imagining, creating, and performing.

Students evaluate and make meaning from their experiences by reflecting—thinking back on what they've learned. By combining the results of a new experience with past knowledge, students can move toward a more complete understanding. Moreover, reflecting on personal experiences can allow learners to perceive the ways in which their thoughts, feelings, and interpretations are unique, often leading to highly pleasurable moments of self-discovery.

Juilliard Creative Classroom activities are filled with moments of inquiry and reflection. It is up to each teacher to select the most meaningful, time-appropriate questions to challenge each class. The “just right” question should be meaningful and, whenever possible, create moments of discovery for each student. A few guiding principles:

- What questions have the most potential?
- Which ones might produce powerful “a-ha” moments?
- Which will encourage long-term exploration and plant seeds for further personal discoveries?

Whenever possible, **involve all students in discussions**, mirroring back or clarifying responses and inviting other students to build upon one another's observations. **Challenge students to clarify their claims** by suggesting alternative viewpoints and asking students to refine their thinking. Oftentimes, **excellent questions are open ended**, yielding few definitive answers and even more questions. Successful **modeling of the process for students** includes expressing genuine interest, displaying persistence in pursuing satisfying answers, and acknowledging that ideas can be fluid.

Despite the numerous benefits of reflection, it is often shortened or eliminated entirely from lessons when time is limited. Each activity on Juilliard Creative Classroom is accompanied by a **Listening Reflection, which should be included in all lessons**. Again, **important reflection steps are embedded throughout each activity**. As with questioning, modeling the reflective process helps students understand that there are multiple ways of knowing and experiencing the world. They learn to value their own discoveries while simultaneously acknowledging and respecting those of others—skills that are uniquely developed in arts-learning—as students prepare to become world citizens.

Inquiry

Questions are an invitation to think. Guiding learners through questioning dates back to at least the time of Socrates. Despite the ancient nature of this practice, mastery in questioning is still a hot topic within current educational reform efforts. Asking great questions is an art—a balance between careful planning and spontaneity, along with

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a genuine interest in what students have to say about a given topic. As we consider the ways students can become strong and creative thinkers, Juilliard Creative Classroom activities promote the following values:

- Questions can help uncover what motivates learners.
- Questions about process are as important as questions about product.
- Open-ended questions make space for more perspectives.
- Follow-up questions help the learner clarify his/her thoughts.

Common Challenges

Asking good questions in the performing arts classroom opens up many possibilities for deep learning, but using inquiry also presents many challenges. At times the issues may relate to the students themselves; other times the school or social cultures can present constraints; and sometimes there are areas of teachers' practice that could benefit from instructional improvement.

Student challenges

- They worry about the right answer

- They can't think abstractly
- They have language and comprehension struggles

Classroom issues

- Not enough time
- Fear of silence in the room
- Fear of boring the students
- Some students are influenced by peer pressure

Teacher tendencies

- Asking too many questions
- Asking confusing questions
- Asking questions with a hidden best answer
- Dependent on the fastest or "smartest" students to respond
- Rushing through the process
- Over-structuring a questioning process and not allowing a discussion to unfold organically
- Privileging certain ideas over others, based upon own interpretations or biases

Most of the student and classroom challenges can be addressed through modeling, overtly promoting a culture of curiosity and respect for diverse opinions, and through valuing and embracing student efforts to participate even when they are not giving a correct answer.

To develop teacher practice, below are some suggestions for improving questioning skills:

- **Plan ahead:** Write specific questions into your lesson plans. Considering multiple moments for engaging students through inquiry. Write multiple question options to give yourself a surplus to draw from as you teach. Though the planning may seem confining, the preparedness can actually help you be more spontaneous as you read the room and respond to the needs of each class.
- **Wordsmith:** Take time to write your questions with specificity about wording. Be creative and try multiple ways of phrasing each question. Though you ultimately may not ask them exactly as written, the writing practice sharpens the question-generation skill, and clarifies in your mind what you're trying to accomplish.
- **Pacing:** Sometimes it may be necessary to start with an easy question to build student confidence, and then progress to more thought-provoking questions that require students to grapple with complex ideas.
- **Engage colleagues:** Find a "question buddy" who shares your interest in inquiry. Spend some time during lunch challenging each other with classroom scenarios, or something more informal such as texting each other the day's most difficult question to wordsmith.

- **Record yourself:** Make a video or audio recording of yourself teaching, with the specific goal of researching your questioning habits. Try writing out a short transcript of what you said including your students' responses.
- **Interview students:** Find some time outside class to talk with a focus group of students. Try out some question variations and ask them what they think each one means.

Open Questions

When asking artistic questions or helping students to reflect on their experiences, the goal is rarely to arrive at one correct answer. The skillful use of questioning can support a classroom culture that celebrates a variety of responses and values the *processes* of thinking rather than just the answer.

Take a look at the below closed questions which point towards a specific response.

Closed questions

- *What's the musical word for speeding up?*
- *How many dancers were there at the ending of the piece?*
- *Did you try new ideas in your script?*
- *What's the rhythm of the accompaniment?*

Read through the below open questions and consider the range of responses for each.

Open questions

- *Why do you think the choreographer used those groupings to start the piece?*
- *What are some ways to describe the timbre of the singer's voice?*
- *How might you interpret the scenario based on the action of the performers?*
- *What was it like to make your own ostinato?*
- *How were silences, pauses, and halting text used in our piece?*
- *What are some ways to describe the balances you see in this piece?*
- *What did you hear happening after the saxophone solo?*
- *What do you notice about the set designs that have been created?*

Both types of questions can be helpful in a classroom. Closed questions are useful during moments of assessment, clarification, or to drive home a very specific idea. There are also times when open questions are too overwhelming and unproductive to start a discussion, especially if students are unaccustomed to this way of thinking and engaging. However, when used effectively, open questions provoke higher-order thinking.

One of the powerful abilities which can be developed through open-ended inquiry is the capacity to **embrace ambiguity**. When

Embrace ambiguity.

students are able to do this, they can begin to understand how:

- A problem can have more than one solution.
- A question can have multiple answers.
- Performing artists are open to creative possibilities and diverse interpretations.

Developing effective open question takes time—even very experienced teachers must attend to the wording of each and every question. One way to revise a closed question is to try changing it in the following ways:

- Change it to a "why" question.
- Change it to a "how does" question.
- Change it to a "what are some ways to describe" question.
- Change it to an "in your opinion" question.

Some of these revisions will work well and some will not. Analyze each type of change and consider how it engages students from a slightly different angle. Envision the potential range of student responses as you decide which revision will be most suitable for the learning occasion.

Nurturing Responses

Starting with a good question is just the beginning of a quality exchange with a student. When students respond, we must pay close attention not only to their words, but also to **what's not being said** in order to infer students' meaning. Learning to truly listen to a student is just as important as the questioning skill. In some instances, we may ask a question and the room is silent, which can be very unnerving! It requires in-the-moment teacher reflection to figure out if it's the difficulty of the question or the way the question was asked. In many cases, the students just need some time to process the question and think of a good response.

Pay attention to
**what's not
being said.**

Students are not responding

- **Wait time:** Silence in the room can mean that the students are thinking. Develop a tolerance for silence, and give your students a moment to consider how they would like to answer before you jump in with another question. This use of "wait time" or "think time" provides an essential introspective step for many students to process concepts. If you ask a challenging question and you expect thoughtful answers, students shouldn't immediately spout off the first thing that comes to mind! Some questions may need to be repeated for comprehension, but be mindful of speaking during students' think time.

- **Tell them:** When offering a challenging question, preface it by letting the students know it's going to require a moment to think before raising their hands. Resist the temptation to go with an early responder, and show the students how you value "think time."
- **Check in:** Ask the students to raise their hands if they're confused by the question. Ask your original question again, but with a slight rephrasing.
- **A quick scan:** Ask the students for a thumbs up, a head nod, a wink, etc., to indicate that they are ready to respond. Wait until they are all ready and then ask for hands, or just call on any student since they all showed you they have something to share.
- **Culture forming:** Students often get the message that they must always be right if they're going to participate. Display your values in risking failure and grappling with challenging ideas. It takes time, overt explanations, and your own embodiment of risk-taking and resilience for students to embrace these attributes.
- **Vocabulary:** Sometimes students fear that they don't have the technical language to describe artistic experiences. Let them know they can use all types of descriptions and you will help them along if the vocabulary is necessary.

Students give weak, unrelated, or incorrect responses

There are times when an environment has been established for active student participation, but certain students make tangential comments, ramble with unfocused detail, offer confusing responses, or offer up plainly incorrect answers. Try some of the following prompts to help clarify what a student is trying to express and articulate:

- *I want to make sure I understand what you're sharing...*
- *I hear you saying _____. Am I getting that right?*
- *It sounds like you're trying to say something about _____. Let's explore that.*
- *Do you need some more time to think about it? I can come back to you in a minute.*
- *Could you walk us through how you came up with that?*
- *You're bringing up a lot of ideas. Let's focus on _____.*
- *Let's slow this down for a minute...*
- *Let's take it one step at a time...*
- *Before digging into the details, let's make sure we understand the basic idea.*
- *How does that relate to what [previous student] was saying?*
- *We'll get to that a little later in the discussion. Let's stay with [previous student]'s question.*
- *That's a good idea, but hold on to that while we continue talking about _____.*
- *Let's park that on the board, and I'll come back to you when we get to that topic later in the discussion.*
- *That's something you and I can discuss later.*

Follow-up questions

Even when students give immediate and strong responses, a careful use of follow-up questions can be very helpful for deepening students' experiences. Validating their initial responses and posing a direct follow-up can help students understand why they have answered a question a certain way.

For example,

Teacher: How would you describe the kinds of movements the dancers are doing?

Student: Some of their arm movements are strong and some are more gentle.

Teacher follow-up: Great, and which details gave their arm movements a more gentle feel?

Student: They were slower than other movements and their arms seemed light as they floated upward.

Teacher follow-up: Can you show us with your arms what you mean?

Teacher: What are you hearing in this section of the music?

Student: It sounds like a ball, with a princess, and the king and queen, and everyone is very fancy and royal.

Teacher follow-up: That's a very clear image... what in the music made you think that?

Student: Because it reminds me of a movie that had the same music for that part.

Teacher follow-up: And what sounds were you hearing?

Student: I was hearing light and soft sounds coming from the violins.

Teacher: How did your classmates' vocal delivery allow you to understand what was going on?

Student: By having one character nervous to say that to the other character, I saw how the first line of text caused the second line.

Teacher follow-up: And how did they show that connection?

Student: The way the first line was spoken, really made the giant "O" of the second line sound like a real response.

Teacher follow-up: And how would you describe the response?

As shown above, digging deeper with follow-up questions is an important step for **rigor and mastery** in students' thinking and artistic work. Helping students process their thoughts and articulate their ideas in multiple ways can crystalize the learning for them—as well as for the rest of the students who are listening. In time, students will anticipate the need to provide clarity and detail as they express themselves, and they can eventually take part in the process by prompting each other with follow-up questions in their own conversations.

Follow-up questions for rigor and mastery

The abilities to translate, rephrase, and prompt students to elaborate are essential. In order to guide the discussion, check in with the student to make sure you are understanding him/her correctly. Encourage students to demonstrate, sing, tap, or embody their responses if they cannot find the right words. Within reason, find a way to validate most (if not all) responses so students do not feel as if they are trying to guess a correct answer. While there's no formula for an appropriate question, below are some generalized follow-up prompts that can be useful.

Clarifying a response

- *What did you see or hear that makes you say that?*
- *Could you show me with your body what you saw? Can you tap or hum what you heard?*
- *That's a nice interpretation... what did you see or hear that gave you that idea?*
- *That's an interesting assumption...what makes you think that?*
- *What—in the play, dance, or music—makes you say that?*
- *What was it about your classmates' piece that makes you think that?*
- *Why do you think you imagined that?*

- *Which part of the text led you to that conclusion?*
- *What evidence would help to support that idea?*

Elaborating or extending

- *Can you tell us more?*
- *Could you say a little more about that?*
- *That's a great start... keep going!*
- *Can you explain a bit more about what you mean?*
- *Could you elaborate on that point?*
- *Good work... add some details about this idea.*
- *Tell us how you came up with that idea.*
- *How else could you think about that?*
- *Could the opposite also be true?*
- *Could you look at that with a different opinion?*

Group Conversations

Having a great group conversation is a complex and beautiful thing, yet often difficult to make happen in a classroom. Of course, students are often having meaningful and free-flowing conversations outside formal school environments and studies have found that students are more likely to engage in open, extended discussions and arguments when outside a teacher's visible control.[i]

In effort to support classroom discussions that mirror those outside conversations, teachers can try a variety of approaches.

One of the most impactful ways to develop better discussions is **handing it over to the students**. The typical model of interaction is like a game of ping-pong. Just image the model—teacher question, Student

Handing it over to the students

1 response, teacher question, Student 2 response, teacher question, etc. To give students more ownership of the process, consider a game of basketball—a teacher offers a question and the students pass off responses, one to another, as a team of thinkers and talkers. After giving an initial prompt or question, try using some of the below strategies to increase student involvement.

Use prompts for drawing in more voices

- *Who can add to that?*
- *Who would like to build on [previous student]'s point?*
- *Who can react to that response?*

- *Who agrees or disagrees?*
- *Does anyone see things differently?*
- *What do other people think?*
- *Did anyone come up with a different answer?*
- *Who can pull some of these responses together?*
- *Who's making a connection between ideas?*
- *Can someone help us work through this thinking?*
- *Can someone help resolve this confusion?*
- *Who has a question about that response?*

Try “barn raising”

Coined by researchers McCormick and Kahn,[ii] the discussion term “barn raising” refers to an old-time collaborative experience when all members of a community would help build a neighbor’s barn since there weren’t enough laborers or resources available. The family would describe the barn they wanted, but then would rely on the knowledge and skills of the entire group to figure out how the building challenge should be solved.

This process of barn raising can apply to classroom discussions when a student first offers up a problem or question and then the group puts the pieces together.

- Try asking students to put questions on cards or post-its and then selecting one for the whole group to discuss.
- Alternatively, distribute a few questions to small groups and let each group choose one.

Imagine what the discussion would be like if time was spent letting the students grapple with, “How can you tell when your script is finished if you keep thinking of more good ideas?” or, “How can you concentrate on your own part when you’re supposed to watch and respond to the other dancers across the stage?” or, “Why is this piece called ‘Military March’? I honestly don’t think of armies or war when I hear this piece.”

Discussion Formats

Leading a conversation as a large group is a comfortable setup for most teachers. While this framework allows for a focus on a single shared idea and provides opportunity for full-class assessment, it is often beneficial to also try alternatives to the strictly teacher-led discussion.

Try some of the below strategies to distribute ownership and change the format of discussion.

Discussion scaffolding

- **Turn and talk:** Have students answer a question, discuss a topic, or share their responses to an experience with a student next to them.
- **Accountable listening:** After a turn and talk, make students accountable for their listening by having them share what their partner said.

- **Think-Pair-Share:** Use this common routine to allow students some individual thinking time before they exchange ideas with a partner. These two steps can help prepare for a whole-group sharing.
- **Connect and thread:** Use student answers to inform your subsequent questions. Threading the conversation like this will show that you are valuing and responding to the contributions of your students. This can prove especially beneficial when trying to motivate and draw in students who are lower performing or less engaged.
- **Summarize or accumulate:** Build on the big ideas of the conversation. Ramp up the challenge of the questioning based on the responses that have been given. Accumulate the concepts, using them to construct large takeaways about the discussion.

Discussion modalities

- **Differentiate the questions:** Hand out a slip of paper with a different question to each group of students. Have the students discuss the question within their group. Alternatively, distribute a question to each student (unique questions for each, or one of 4–5 different questions). Give the students a minute to process the question on their own, then pair up with another student and discuss their questions with each other.
- **Student choice:** Show students multiple questions from a Juilliard Creative Classroom activity step and have them choose which one they want to answer. Discussion groups could be made based on whichever question they choose.
- **Think and envision:** Before a whole-group conversation, give students time to think about what they will say. Instead of “free writing,” ask students to “free think”—replay one minute of something just seen or experienced and see what appears on the “screens” of their minds. Replay it again, and ask them to describe to a partner what is happening on their “film.”
- **Silent conversation:** Post pieces of chart paper with prompts (e.g., an image, a question, a statement) and assign student groups to each. Have students respond to the prompts only by writing, including their ideas on the shared chart paper. Follow this with a second round, where the students read what has been written and respond to it with a note or question.
- **Walk and talk:** Physical movement can help activate the brain’s language networks. Have students walk through the space and then freeze and switch partners. You can also try outlining a circle or alternative pathway for students to “stroll” during a specified amount of time.
- **Pass the baton:** Have one student respond to your question, then ask that student to call on another student to speak next. Continue this “response—call on the next speaker” pattern. This can be done verbally, through gesture, or by actually passing an object.

- **Make a recording:** Invite students to pretend they are recording a podcast and talk to themselves (out loud) what they just saw or heard, or speak their response to a question. Have all the students do this at the same time so it feels safe to talk aloud. Alternatively, have students actually record on their phones a one-minute response to a prompt, then share their recording with another student.
- **Dry erase boards:** Ask a question and have groups of students list their ideas on a small dry erase board (or iPad). Then ask them to select an idea to share with the whole class.
- **Conversation grab bag:** Have students write a comment or question on a piece of paper and fold it. Put all the pieces into a container, shake it, and then have students pick a random note. Have students share their notes with a partner and then agree, disagree, or add to the thought on their note.

[i] Douglas Barnes and Frankie Todd. *Communication and Learning Revisited: Making Meaning through Talk*. (Portsmouth, NH: Boynton/Cook Publishers, 1995).

[ii] Don McCormick and Michael Kahn. "Barn Raising: Collaborative Group Process in Seminars." *Exchange: The Organizational Behavior Teaching Journal* 7, no. 4 (1982): 16-20.