Global Strategies: Socratic Questioning & Role-Playing

The Role of the Teacher

A teacher committed to teaching for critical thinking must think beyond compartmentalized subject matter, teaching toward ends and objectives that transcend subject matter classification. To teach for critical thinking is, first of all, to create an environment in the class and in the school that is conducive to critical thinking. It is to help make the classroom and school environment a mini-critical society, a place where the values of critical thinking (truth, openmindedness, empathy, autonomy, rationality, and self-criticism) are encouraged and rewarded. In such an environment, students learn to believe in the power of their own minds to identify and solve problems. They learn to believe in the efficacy of their own thinking. Thinking for themselves is not something they fear. Authorities are not those who tell them the “right” answers, but those who encourage and help them to figure out answers for themselves, who encourage them to discover the powerful resources of their own minds.

The teacher is much more a questioner than a preacher in this model. The teacher learns how to ask questions that probe meanings, that request reasons and evidence, that facilitate elaboration, that keep discussions from becoming confusing, that provide incentive for listening to what others have to say, that lead to fruitful comparisons and contrasts, that highlight contradictions and inconsistencies, and that elicit implications and consequences. Teachers committed to critical thinking realize that the primary purpose of all education is to teach students how to learn. Since there are more details than can be taught and no way to predict which the student will use, teachers emphasize thinking about basic issues and problems. Thus, details are learned as a necessary part of the process of settling such questions, and so are functional and relevant.

The teacher who teaches students how to learn and think about many basic issues gives them knowledge they can use the rest of their lives. This teacher realizes that subject matter divisions are arbitrary and are a matter of convenience, that the most important problems of everyday life
rarely fall neatly into subject matter divisions, that understanding a situation fully usually requires a synthesis of knowledge and insight from several subjects. An in-depth understanding of one subject requires an understanding of others. (One cannot answer questions in history, for example, without asking and answering related questions in psychology, sociology, etc.) Students must discover the value of knowledge, evidence, and reasoning by finding significant payoffs in dealing with their everyday life problems outside of school. Recognizing the universal problems we all face, the teacher should encourage each student to find personal solutions through self-reflective experiences and thought processes:

Who am I? What is the world really like? What are my parents, my friends, and other people like? How have I become the way I am? What should I believe in? Why should I believe in it? What real options do I have? Who are my real friends? Whom should I trust? Who are my enemies? Need they be my enemies? How did the world become the way it is? How do people become the way they are? Are there any really good people in the world? Are there any really bad people in the world? What is good and bad? What is right and wrong? How should I decide? How can I decide what is fair and what is unfair? How can I be fair to others? Do I have to be fair to my enemies? How should I live my life? What rights do I have? What responsibilities?

The teacher who believes in personal freedom and thinking for oneself does not spoon-feed students with predigested answers to those questions. Nor should students be encouraged to believe that the answers to them are arbitrary and a matter of sheer opinion. Raising probing questions whenever they are natural to a subject under discussion, the teacher realizes that, in finding the way to answers, the student forges an overall perspective into which subject matter discoveries will be fit. Neither the discussion nor the student should be forced to conclusions that do not seem reasonable to the student.

Thus, such teachers reflect upon the subjects they teach, asking themselves, “What ideas and skills are the most basic and crucial in this subject? What do practitioners in this field do? How do they think? Why should students be familiar with this subject? What use does a well-educated person and citizen of a republic make of this subject? How can these uses be made apparent to and real for my students? Where do the various subject areas overlap? How should the tools and insights of each subject inform one’s understanding of the others? Of one’s place in the world?”

The teacher committed to teaching for critical thinking realizes that the child has two sources of belief: beliefs that the child forms as a result of personal experience, inward thinking, and interaction with peers and environment; and beliefs that the child learns through instruction by adults. The first could be called "real" or "operational" beliefs. They are what define the child's real world, the foundation for action, the source of acted-upon values. They are a result of the child making sense of or figuring out the world. They are heavily influenced by what has been called "pleasure-principle thinking". They are in large measure egocentric, unreflective, and unarticulated.

People believe in many things for egocentric, irrational reasons: because others hold the belief, because certain desires may be justified by the belief, because they feel more comfortable with the belief, because they are rewarded for the belief, because they ego-identify with the belief, because others reject them for not acting on the belief, because the belief helps to justify feelings of like or dislike toward others.

Students, of course, also have spontaneously formed reasonable beliefs. Some of those are inconsistent with the expressed beliefs of parents and teachers. As a result of this contradiction with authority, students rarely raise these beliefs to what Piaget calls "conscious realization".
Students have also developed their own theories about psychology, sociology, science, language, and so on, covering most subjects. The totality of these real beliefs is unsynthesized and contains many contradictions which students will discover only if encouraged to freely express them in an atmosphere that is mutually supportive and student-centered.

The other source of belief, didactic instruction from adult authority figures, is an authority's interpretation of reality, not the students'. The students learn to verbalize it but do not synthesize it with operational beliefs. Therefore, they rarely recognize contradictions between these two belief systems. A student's own theories and beliefs are not necessarily replaced with the knowledge offered in school.

The teacher concerned with this problem, then, provides an environment in which students can discover and explore their beliefs. Such teachers refrain from rushing students who are struggling to express their beliefs, allow time for thoughtful discussion, refuse to allow anyone to attack students for their beliefs, reward students for questioning their own beliefs, and support students when they consider many points of view.

Unless the teacher provides conditions in which students can discover operational beliefs through reflective thinking, these two systems of beliefs will exist in separate dimensions of their lives. The first will control their deeds, especially private deeds; the second will control their words, especially public words. The first will be used when acting for themselves; the second when performing for others. Neither, in a sense, will be taken seriously. Neither will be subjected to rational scrutiny: the first because it isn't openly expressed and challenged verbally; the second because it is not tested in the crucible of action and practical decision-making. This dichotomy, when embedded in an individual's life, creates a barrier to living an "examined life". Students lack the wherewithal to explore contradictions, double standards, and hypocrisies. They will use critical thinking skills, if at all, as weapons in a struggle to protect themselves from exposure, and to lay bare the contradictions of the "other", the "enemy". When they integrate critical thinking skills into this dichotomous thinking, they become self-serving, not fairminded, critical thinkers.

The role of the teacher could be summarized as follows:

- help break big questions or tasks into smaller, more manageable parts
- create meaningful contexts in which learning is valued by the students
- help students clarify their thoughts by rephrasing or asking questions
- pose thought-provoking questions
- help keep the discussion focused
- encourage students to explain things to each other
- help students find what they need to know by suggesting and showing students how to use resources
- ensure that students do justice to each view, that no views are cut off, ignored, or unfairly dismissed
Socratic Questioning: Wondering Aloud About Meaning and Truth

Introduction

Socratic discussion, in which students' thought is elicited and probed, allows students to develop and evaluate their thinking by making it explicit. By encouraging students to slow their thinking down and elaborate on it, Socratic discussion gives students the opportunity to develop and test their ideas — the beliefs they have spontaneously formed and those they learn in school. Thus, students can synthesize their beliefs into a more coherent and better-developed perspective.

Socratic questioning requires teachers to take seriously and wonder about what students say and think: what they mean, its significance to them, its relationship to other beliefs, how it can be tested, to what extent and in what way it is true or makes sense. Teachers who wonder about the meaning and truth of students' statements can translate that curiosity into probing questions. By wondering aloud, teachers simultaneously convey interest in and respect for student thought, and model analytical moves for students. Fruitful Socratic discussion infects students with the same curiosity about the meaning of and truth of what they think, hear, and read and gives students the clear message that they are expected to think and to take everyone else's beliefs seriously.

Socratic questioning is based on the idea that all thinking has a logic or structure, that any one statement only partially reveals the thinking underlying it, expressing no more than a tiny piece of the system of interconnected beliefs of which it is a part. Its purpose is to expose the logic of someone's thought. Use of Socratic questioning presupposes the following points: All thinking has assumptions; makes claims or creates meaning; has implications and consequences; focuses on some things and throws others into the background; uses some concepts or ideas and not others; is defined by purposes, issues, or problems; uses or explains some facts and not others; is relatively clear or unclear; is relatively deep or superficial; is relatively critical or uncritical; is relatively elaborated or undeveloped; is relatively monological or multi-logical. Critical thinking is thinking done with an effective, self-monitoring awareness of these points.

Socratic instruction can take many forms. Socratic questions can come from the teacher or from students. They can be used in a large group discussion, in small groups, one-to-one, or even with oneself. They can have different purposes. What each form has in common is that someone's thought is developed as a result of the probing, stimulating questions asked. It requires questioners to "try on" others' beliefs, to imagine what it would mean to accept them, and to wonder what it would be like to believe otherwise. If a student says that people are selfish, the teacher may wonder aloud as to what it means to say that, or what the student thinks it means to say that an act or person was unselfish. The discussion which follows should help clarify the concepts of selfish and unselfish behavior, identify the kind of evidence required to determine whether or not someone is or is not acting selfishly, and explore the consequences of accepting or rejecting the original generalization. Such a discussion enables students to examine their own views on such concepts as generosity, motivation, obligation, human nature, and right and wrong.

Some people erroneously believe that holding a Socratic discussion is like conducting a chaotic free-for-all. In fact, Socratic discussion has distinctive goals and distinctive ways to achieve them. Indeed, any discussion — any thinking — guided by Socratic questioning is structured.
The discussion, the thinking, is structured to take student thought from the unclear to the clear, from the unreasoned to the reasoned, from the implicit to the explicit, from the unexamined to the examined, from the inconsistent to the consistent, from the unarticulated to the articulated. To learn how to participate in it, one has to learn how to listen carefully to what others say, to look for reasons and evidence, to recognize and reflect upon assumptions, to discover implications and consequences, to seek examples, analogies, and objections, to seek to discover, in short, what is really known and to distinguish it from what is merely believed.

### Socratic Questioning

- raises basic issues
- probes beneath the surface of things
- pursues problematic areas of thought
- helps students to discover the *structure* of their own thought
- helps students develop sensitivity to clarity, accuracy, and relevance
- helps students arrive at judgment through their own reasoning
- helps students note claims, evidence, conclusions, questions-at-issue, assumptions, implications, consequences, concepts, interpretations, points of view — the elements of thought

### Three Kinds of Socratic Discussion

We can loosely categorize three general forms of Socratic questioning and distinguish three basic kinds of preparation for each: the spontaneous, the exploratory, and the focused.

#### Spontaneous or unplanned

Every teacher’s teaching should be imbued with the Socratic spirit. We should always keep our curiosity and wondering alive. If we do, there will be many occasions in which we will spontaneously ask students questions about what they mean and explore with them how we might find out if something is true. If one student says that a given angle will be the same as another angle in a geometrical figure, we may spontaneously wonder how we might go about proving or disproving that. If one student says Americans love freedom, we may spontaneously wonder about exactly what that means (Does that mean, for example, that we love freedom more than other people do? How could we find out?). If in a science class a student says that most space is empty, we may be spontaneously moved to raise some question on the spot as to what that might mean and how we might find out.

Such spontaneous discussions provide models of listening critically as well as exploring the beliefs expressed. If something said seems questionable, misleading, or false, Socratic questioning provides a way of helping students to become self-correcting, rather than relying on correction by the teacher. Spontaneous Socratic discussion can prove especially useful when students become interested in a topic, when they raise an important issue, when they are on the brink of grasping or integrating a new insight, when discussion becomes bogged down or confused or hostile. Socratic questioning provides specific moves which can fruitfully take advantage of the interest, effectively approach the issue, aid integration and expansion of the insight, move a troubled discussion forward, clarify or sort through what appears confusing, and diffuse frustration or anger.
Although by definition there can be no pre-planning for a particular spontaneous discussion, teachers can prepare themselves by becoming familiar and comfortable with generic Socratic questions, and developing the art of raising probing follow-up questions and giving encouraging and helpful responses. Ask for examples, evidence, or reasons, propose counter-examples, ask the rest of the class if they agree with a point made, suggest parallel or analogous cases, ask for a paraphrase of opposing views, rephrase student responses clearly and succinctly. These are among the most common moves.

**Translating Wonderings into Questions**

- If you see little or no relevance in a student comment, you may think, “I wonder why this student mentioned that now?” and ask, “What connection do you see between our discussion and your point that ...?” or “I’m not sure why you mentioned that now. Could you explain how it’s related to this discussion?” or “What made you think of that?” Either the point is germane, and you can clarify the connection, or only marginally related, and you can rephrase it and say “A new issue has been raised.” That new issue can be pursued then, tactfully postponed, or can generate an assignment.

- If a student says something vague or general, you may think, “I wonder about the role of that belief in this student’s life, the consequences of that belief, how the student perceives the consequences, or if there are any practical consequences at all.” You may ask, “How does that belief affect how you act? What, for example, do you do or refrain from doing because you believe that?” You might have several students respond and compare their understandings, or suggest an alternative view and have students compare its consequences.

To summarize: Because we begin to wonder more and more about meaning and truth, and so think aloud in front of our students by means of questions, Socratic exchanges will occur at many unplanned moments in our instruction. However, in addition to these unplanned wonderings we can also design or plan out at least two distinct kinds of Socratic discussion: one that explores a wide range of issues and one that focuses on one particular issue.

**Exploratory**

What we here call exploratory Socratic questioning is appropriate when teachers want to find out what students know or think and to probe into student thinking on a variety of issues. For example, you could use it to assess student thinking on a subject at the beginning of a semester or unit. You could use it to see what students value, or to uncover problematic areas or potential biases, or find out where your students are clearest and fuzziest in their thinking. You could use it to discover areas or issues of interest or controversy, or to find out where and how students have integrated school material into their belief systems. Such discussions can serve as preparation in a general way for later study or analysis of a topic, as an introduction, as review, to see what students understood from their study of a unit or topic before they take a test, to suggest where they should focus study for test, as a basis for or guide to future assignments, or to prepare for an assignment. Or, again, you might have students take (or pick) an issue raised in discussion and give their own views, or have students form groups to discuss the issue or topic.
With this type of Socratic questioning, we raise and explore a broad range of interrelated issues and concepts, not just one. It requires minimal pre-planning or pre-thinking. It has a relatively loose order or structure. You can prepare by having some general questions ready to raise when appropriate by considering the topic or issue, related issues and key concepts. You can also prepare by predicting students’ likeliest responses and preparing some follow-up questions. Remember, however, that once students’ thought is stimulated there is no predicting exactly where discussion will go.

**Focused**

Much of the time you will approach your instruction with specific areas and issues to cover. This is the time for focused Socratic questioning. To really probe an issue or concept in depth, to have students clarify, sort, analyze and evaluate thoughts and perspectives, distinguish the known from the unknown, synthesize relevant factors and knowledge, students can engage in an extended and focused discussion. This type of discussion offers students the chance to pursue perspectives to their most basic assumptions and through their furthest implications and consequences. These discussions give students experience in engaging in an extended, ordered, and integrated discussion in which they discover, develop, and share ideas and insights. It requires pre-planning or thinking through possible perspectives on the issue, grounds for conclusions, problematic concepts, implications, and consequences. You can further prepare by reflecting on those subjects relevant to the issue: their methods, standards, basic distinctions and concepts, and interrelationships — points of overlap or possible conflict. It is also helpful to be prepared by considering likeliest student answers. This is the type of Socratic questioning most often used in the lesson remodels themselves. Though we can’t provide the crucial follow-up questions, we illustrate pre-planning for focused Socratic questioning in numerous remodels.

All three types of Socratic discussion require development of the art of questioning. They require the teacher to develop familiarity with a wide variety of intellectual moves and sensitivity to when to ask which kinds of questions, though there is rarely one best question at any particular time.

### Some Topics for Socratic Discussion

- What are friends? Why do people have friends? Does having friends ever cause problems? When is it hard to be a good friend? What's the difference between friends and best friends?
- What's the difference between wanting something and needing it?
- What is good? What is bad? What's the difference between good and bad?
- What are rules? What are they for? What's the difference between good rules and bad rules?
- What are the differences between people and animals?

### A Taxonomy of Socratic Questions

It is helpful to recognize, in light of the universal features in the logic of human thought, that there are identifiable categories of questions for the adept Socratic questioner to dip into: questions of clarification, questions that probe assumptions, questions that probe reasons and evidence, questions about viewpoints or perspectives, questions that probe implications and consequences, and questions about the question. Here are some examples of generic questions in each of these categories. Many of these questions may need to be modified to take the grade level into account.
Questions of Clarification
- What do you mean by _____?
- What is your main point?
- How does _____ relate to _____?
- Could you put that another way?
- What do you think is the main issue here?
- Is your basic point _____ or _____?
- Let me see if I understand you; do you mean _____ or _____?
- How does this relate to our discussion/problem/issue?
- What do you think John meant by his remark? What did you take John to mean?
- Jane, would you summarize in your own words what Richard has said? Richard, is that what you meant?

Questions that Probe Assumptions
- What are you assuming?
- What is Karen assuming?
- What could we assume instead?
- You seem to be assuming ______. Do I understand you correctly?
- All of your reasoning depends on the idea that _____. Why have you based your reasoning on _____ rather than _____?
- You seem to be assuming _____. How would you justify taking this for granted?
- Is it always the case? Why do you think the assumption holds here?

Questions that Probe Reasons, Evidence, and Causes
- What would be an example?
- What are your reasons for saying that?
- What other information do we need to know?
- Could you explain your reasons to us?
- Is that good evidence for believing that?
- Are those reasons adequate?
- Is there reason to doubt that evidence?
- Who is in a position to know if that is the case?
- What would you say to someone who said ____?
- What do you think the cause is?
- By what reasoning did you come to that conclusion?
- How could we go about finding out whether that is true?
- Can someone else give evidence to support that response?

Questions About Viewpoints or Perspectives
- You seem to be approaching this issue from _____ perspective. Why have you chosen this rather than that perspective?
- How would other groups/types of people respond? Why? What would influence them?
- How could you answer the objection that _____ would make?
- Can/did anyone see this another way?
- What would someone who disagrees say?
- What is an alternative?
- How are Ken's and Roxanne's ideas alike? Different?

Questions that Probe Implications and Consequences
- What are you implying by that?
- When you say _____, are you implying _____?
- But if that happened, what else would also happen as a result? Why?
• What effect would that have?
• Would that necessarily happen or only probably happen?
• What is an alternative?
• If this and this are the case, then what else must be true?

Questions About the Question
• How can we find out?
• How could someone settle this question?
• Is the question clear? Do we understand it?
• Is this question easy or hard to answer? Why?
• Would _____ put the question differently?
• Does this question ask us to evaluate something?
• Do we all agree that this is the question?
• To answer this question, what other questions would we have to answer first?
• I'm not sure I understand how you are interpreting the main question at issue.

There are Four Directions in which Thought Can Be Pursued

There is another way to classify, and so arrange in our minds, questions we can ask to help stimulate student thought. This second taxonomy emphasizes “four directions in which thought can be pursued”. For some of our readers this additional way of thinking about the kinds of questions that help students develop and discipline their thought may make the categories above more intuitive. As you examine the diagram below, you will see that all of the categories above except two are accentuated.

This diagram, and the classifications implicit in it, helps accentuate the following important facts about thinking. All thinking has a history in the lives of particular persons. All thinking depends upon a substructure of reasons, evidence, and assumptions. All thinking leads us in some direction or other (has implications and consequences). And all thinking stands in relation to other possible ways to think (there is never just one way to think about something). This classificatory scheme highlights, therefore, four ways we can help students come to terms with their thought:

✔ We can help students reflect on how they have come to think the way they do on a given subject. (In doing this, we are helping them look into the history of their thinking on that subject, helping them find the source or origin of their thinking in their biographies.)

✔ We can help students reflect on how they do support or might support their thinking (in doing this, we are helping them to express the reasons, evidence, and assumptions that underlie what they think.)

✔ We can help students reflect on what “follows from” their thinking, what implications and consequences their thinking generates. (In doing this, we are helping them to realize that all thinking entails or involves “effects” or “results” that we are obliged to consider.)

✔ We can help students reflect on how it is that people with points of view different from theirs’ might raise legitimate objections or propose alternative ways to think that they should take into account. (In doing this, we are helping them to think more broadly, more comprehensively, more fairly mindedly).

One disadvantage of this four-fold classification is that it does not highlight the important categories of “questions of clarification” and “questioning the question”, so, if we find this four-fold classification helpful, we should take pains not to forget these categories.
Socratic Discussion
There are four directions in which thought can be pursued.

**CONFLICTING VIEWS**
How does this student’s thinking conflict with other points of view?
What would you say to someone who said that people basically want to accomplish things and learn about things, that people need to work and keep busy and feel that they contribute? Could there be other reasons why people seem lazy, like maybe people are afraid of messing up, and that’s why they don’t go out there and do stuff? Your history book is full of people who did things, worked hard, fought, and so on — how do you explain that?

**ORIGIN OR SOURCE**
How did the student come to form this point of view?
What makes you say that? Have you always thought that? (If not,) What made you change your mind? Why did that change your mind?

**A student’s main point**
*For example, “Most people are lazy.”*

**IMPLICATIONS & CONSEQUENCES**
Where does this student’s point take us, what follows from it?
If that’s true, then should we let people be lazy? If not, how can we get people to do things? What makes some people different, not lazy? If most people are lazy because X (student’s reason), then most people must be X — is that true?

**SUPPORT, REASONS, EVIDENCE, & ASSUMPTIONS**
Can the student support his or her view with reasons or evidence?
Why do you think so? Are there certain kinds or groups of people that aren’t lazy? Why are most people lazy? How do you know? How could we find out if that might be so? Do people chose to be lazy, or decide that it doesn’t matter if they are lazy, or are they just that way naturally? Do you think most people think of themselves as lazy? Why?
Wondering (And Wondering About Your Wonderings)

As a blossoming critical thinker, you will find yourself wondering in many directions. You will often, however, be unsure about how many of these wonderings to share with your students. You certainly don't want to overwhelm them. Neither do you want to confuse them or lead them in too many directions at once. So when do you make the wonderings explicit in the form of a question and when do you keep them in the privacy of your mind?

There is no pat formula or procedure for answering these questions, though there are some principles:

- **Test and find out.** There is nothing wrong with some of your questions misfiring. You won't always be able to predict what questions will stimulate students thought. So you must engage in some trial-and-error questioning.
- **Tie in to student experience and perceived needs.** You may think of numerous examples of ways students can apply what they learn, and formulate questions relating academic material to students' lives.
- **Don’t give up too soon.** If students don’t respond to a question, wait. If they still don’t respond, you could rephrase the question or break it down into simpler questions.

The teacher must use care and caution in introducing students to Socratic questioning. The level of the questions should match the level of the students’ thought. It should not be assumed that students will be fully successful with it, except over time. Nevertheless, properly used, it can be introduced in some form or other at virtually any grade level.

Transcript of a 4th Grade Socratic Discussion

The following is a transcript of a 4th grade exploratory Socratic discussion. The discussion leader was with these particular students for the first time. The purpose was to determine the status of the children’s thinking on some of the abstract questions whose answers tend to define our broadest thinking. The students were eager to respond and often seemed to articulate responses that reflected potential insights into the character of the human mind, the forces that shape us, the influence of parents and peer group, the nature of morality and of ethnocentric bias. The insights are disjointed, of course, but the questions that elicited them and the responses that articulated them could be used as the basis of future discussions or simple assignments with these students.

While reading the transcript which follows, you may want to formulate questions that could have been asked but weren’t: student responses that could have been followed up, or other directions the discussion could have taken. Other ways to approach the manuscript would include explaining the function of each question or categorizing the questions.

Transcript

- **How does your mind work?**
  - **Where's your mind? (A Foundational Question)**

Student: In your head. (numerous students point to their heads)

- **Does your mind do anything? (Question of Clarification)**

Student: It helps you remember and think.

Student: It helps, like, if you want to move your legs. It sends a message down to them.
Student: This side of your mind controls this side of your body and that side controls this other side.

Student: When you touch a hot oven it tells you whether to cry or say ouch!

→ Does it tell you when to be sad and when to be happy?  
   How does your mind know when to be happy and when to be sad?  
   (Clarification and Probing Implications)

Student: When you're hurt it tells you to be sad.

Student: If something is happening around you is sad.

Student: If there is lightning and you are scared.

Student: If you get something you want.

Student: It makes your body operate. It's like a machine that operates your body.

→ Does it ever happen that two people are in the same circumstance but one is happy and the other is sad? Even though they are in exactly the same circumstance?  
   (Exploring Viewpoints or Perspectives)

Student: You get the same toy. One person might like it. The other gets the same toy and he doesn't like the toy.

→ Why do you think that some people come to like some things and some people seem to like different things?  
   (Exploring Viewpoints or Perspectives)

Student: Cause everybody is not the same. Everybody has different minds and is built different, made different.

Student: They have different personalities?

→ Where does personality come from?  (Probing the Cause)

Student: When you start doing stuff and you find that you like some stuff best.

→ Are you born with a personality or do you develop it as you grow up?  (Probing the Cause)

Student: You develop it as you grow up.

→ What makes you develop one rather than another?  (Probing the Cause)

Student: Like, your parents or something.

→ How can your parent's personality get into you?  (Probing the Cause)

Student: Because you're always around them and then the way they act, if they think they are good and they want you to act the same way, then they'll sort of teach you and you'll do it.

Student: Like, if you are in a tradition. They want you to carry on something that their parents started.

→ Does your mind come to think at all the way the children around you think? Can you think of any examples where the way you think is like the way children around you think? Do you think you behave like other American kids?  
   (Exploring Viewpoints or Perspectives)

Student: Yes.
What would make you behave more like kids around you than like Eskimo kids?
(Exploring Viewpoints or Perspectives)

Student: Because you're around them.

Student: Like, Eskimo kids probably don't even know what the word 'jump-robe' is. American kids know what it is.

And are there things that the Eskimo kids know that you don't know about?
(Exploring Viewpoints or Perspectives)

Student: Yes.

Student: And also we don't have to dress like them or act like them, and they have to know when a storm is coming so they won't get trapped outside.

O.K., so if I understand you then, parents have some influence on how you behave and the kids around you have some influence on how you behave.... Do you have some influence on how you behave? Do you choose the kind of person you're going to be at all?
(Probing Causes)

Student: Yes.

How do you do that do you think?
(Probing Reasons and Causes)

Student: Well if someone says to jump off a five-story building, you won't say O.K. You wouldn't want to do that...

Do you ever sit around and say, 'Let's see shall I be a smart person or a dumb one?'
(Probing Implications)

Student: Yes.

But how do you decide?
(Probing Causes)

Student: Your grades.

But I thought your teacher decided your grades. How do you decide?
(Probing Causes)

Student: If you don't do your homework you get bad grades and become a dumb person but if you study real hard you'll get good grades.

So you decide that, right?
(Probing Causes)

Student: And if you like something at school, like computers, you work hard and you can get a good job when you grow up. But if you don't like anything at school you don't work hard.

Student: You can't just decide you want to be smart, you have to work for it.

Student: You got to work to be smart just like you got to work to get your allowance.

What about being good and being bad, do you decide whether you're good or you're bad?
How many people have decided to be bad? (3 students raise their hands) [To first student:] Why have you decided to be bad?
(Probing Causes)

Student: Well, I don't know. Sometimes I think I've been bad too long and I want to go to school and have a better reputation, but sometimes I feel like just making trouble and who cares.

Let's see, is there a difference between who you are and your reputation?
What's your reputation? That's a pretty big word. What's your reputation?
(Clarification)
Student: The way you act. If you had a bad reputation people wouldn't like to be around you and if you had a good reputation, people would like to be around you and be your friend.

→ Well, but I'm not sure of the difference between who you are and who people think you are. Could you be a good person and people think you bad? Is that possible?  
(Clarifying and Probing Implications)

Student: Yeah, because you could try to be good. I mean, a lot of people think this one person's really smart, but this other person doesn't have nice clothes, but she tries really hard and people don't want to be around her.

→ So sometimes people think somebody is real good and they're not and sometimes people think that somebody is real bad and they're not. Like if you were a crook, would you let everyone know you're a crook?  
(Probing Implications)

Students: [Chorus] NO!

→ So some people are really good at hiding what they are really like. Some people might have a good reputation and be bad; some people might have a bad reputation and be good.  
(Clarification)

Student: Like, everyone might think you were good, but you might be going on dope or something.

Student: Does reputation mean that if you have a good reputation you want to keep it just like that? Do you always want to be good for the rest of your life?

→ I'm not sure ...  
(Clarification)

Student: So if you have a good reputation you try to be good all the time and don't mess up and don't do nothing?

→ Suppose somebody is trying to be good just to get a good reputation — why are they trying to be good?  
(Probing Causes)

Student: So they can get something they want and they don't want other people to have?

Student: They might be shy and just want to be left alone.

Student: You can't tell a book by how it's covered.

→ Yes, some people are concerned more with their cover than their book. Now let me ask you another question. So, if its true that we all have a mind and our mind helps us to figure out the world, and we are influenced by our parents and the people around us, and sometimes we choose to do good things and sometimes we choose to do bad things, sometimes people say things about us and so forth and so on ... Let me ask you: Are there some bad people in this world?  
(Probing Causes)

Student: Yeah.

Student: Terrorists and stuff.

Student: Night-stalker.

Student: The TWA hijackers.

Student: Robbers.

Student: Rapers.

Student: Bums.
Global Strategies: Socratic Questioning & Role Playing

→ Bums, are they bad?  (Clarification)
Student: Well, sometimes.
Student: The Klu Klux Klan.
Student: The Bums ... not really cause they might not look good but you can't judge them by how they look. They might be really nice and everything.
→ O.K., so they might have a bad reputation but be good, after you care to know them. There might be good bums and bad bums. (Clarification)
Student: Libyan guys and Machine gun Kelly.
→ Let me ask you, do the bad people think they're bad?  (Exploring Perspectives)
Student: A lot of them don't think they're bad, but they are. They might be sick in the head.
→ Yes, some people are sick in their heads. (Clarification)
Student: A lot of them [bad guys] don't think they're bad.
→ Why did you say Libyan people? (Probing Reasons)
Student: Cause they have a lot o' terrorists and hate us and bomb us ...
→ If they hate us do they think we are bad or good? (Probing Implications)
Student: They think we are bad.
→ And we think they are bad? And who is right? (Exploring Perspectives)
Student: Usually both of them.
Student: None of us are really bad!
Student: Really, I don't know why our people and their people are fighting. Two wrongs don't make a right.
Student: It's like if there was a line between two countries, and they were both against each other, if a person from the first country crosses over the line, they'd be considered the bad guy. And if a person from the second country crossed over the line, he'd be considered the bad guy.
→ So it can depend on which country you're from who you consider right or wrong, is that right? (Exploring Perspectives)
Student: Like a robber might steal things to support his family. He's doing good to his family but actually bad to another person.
→ And in his mind do you think he is doing something good or bad? (Exploring Perspectives and Implications)
Student: It depends what his mind is like. He might think he is doing good for his family or he might think he is doing bad for the other person.
Student: It's like the underground railroad a long time ago. Some people thought it was bad and some people thought it was good.
→ But if lots of people think something is right and lots of people think something is wrong, how are you supposed to figure out the difference between right and wrong? (Probing Causes)
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Student: Go by what you think!

→ But how do you figure out what to think?  (Probing Causes)

Student: Lots of people go by other people.

→ But somebody has to decide for themselves, don’t they?  (Probing Implications)

Student: Use your mind?

→ Yes, let’s see, suppose I told you: “You are going to have a new classmate. Her name is Sally and she’s bad.” Now, you could either believe me or what could you do?  (Probing Consequences)

Student: You could try to meet her and decide whether she was bad or good.

→ Suppose she came and said to you: “I’m going to give you a toy so you’ll like me.” And she gave you things so you would like her, but she also beat up on some other people, would you like her because she gave you things?  (Probing Consequences)

Student: No, because she said I’ll give you this so you’ll like me. She wouldn’t be very nice.

→ So why should you like people?  (Probing Reasons)

Student: Because they act nice to you.

→ Only to you?  (Probing Implications)

Student: To everybody!

Student: I wouldn’t care what they gave me. I’d see what they’re like inside.

→ But how do you find out what’s on the inside of a person?  (Probing Causes and Reasons)

Student: You could ask, but I would try to judge myself.

Socratic questioning is flexible. The questions asked at any given point will depend on what the students say, what ideas the teacher wants to pursue, and what questions occur to the teacher. Generally, Socratic questions raise basic issues, probe beneath the surface of things, and pursue problematic areas of thought.

The above discussion could have gone in a number of different directions. For instance, rather than focussing on the mind’s relationship to emotions, the teacher could have pursued the concept ‘mind’ by asking for more examples of its functions, and having students analyze them. The teacher could have followed up the response of the student who asked, “Does reputation mean that if you have a good reputation you want to keep it just like that?” He might, for instance, have asked the student why she asked that, and asked the other students what they thought of the idea. Such a discussion may have developed into a dialogical exchange about reputation, different degrees of goodness, or reasons for being bad. Or the concept ‘bad people’ could have been pursued and clarified by asking students why the examples they gave were examples of bad people. Students may then have been able to suggest tentative generalizations which could have been tested and probed through further questioning. Rather than exploring the influence of perspective on evaluation, the teacher might have probed the idea, expressed by one student, that no one is “really bad”. The student could have been asked to explain the remark, and other students could have been asked for their responses to the idea. In these cases and others, the teacher has a choice between any number of equally thought provoking questions. No one question is the ‘right’ question.
Excerpts from a First Grade Socratic Discussion

Consider the following transcript taken from "Instruction for Self-Regulated Reading", by Annemarie Sullivan Palincsar and Ann L. Brown.* Six children, five with language difficulties which made them at-risk, participated in a "Reciprocal Teaching" program.

(The teacher reads a text about bear cubs.) "Baby Bear was bigger than his sister and he began to play too rough. His sister jumped onto a tree trunk and climbed quickly upward."

Kendra interrupts for a clarification: "What's rough?"

Mara, one of the children, suggests, "Like you say rough texture."

The teacher interjects, "Well, that's one kind of rough."

Another child, Robert, adds, "The other one is like they beat you up."

The teacher turns their attention to the text for clarification. "That's another kind of rough. Let me read the sentence and see which one you think it is. If it's the way you feel the texture, or the beating up. (Rereads.) "Baby Bear was bigger than his sister and he began to play too rough."

Mara says, "It's the kind he means (referring to Robert)."

Teacher replies, "The punching and the hitting, playing too hard. Okay."

(The teacher continues reading and comes to a portion of the text where a prediction would be appropriate.) "His front paws caught hold on the branch, but he could not pull himself up. He hung there, swinging in midair. ... Now the limb bent lower, and lower, SNAP... (Teacher stops reading.) Prediction?"

Children answer, "It fell."

The teacher replies, "That's your prediction. Let's see if it's true." (The teacher reads) "The limb broke and Baby Bear fell, splash into the cold stream. He squalled for his mother. Now the mother splashed into the water..."

Robert interrupts for another clarification. "What's squalled?"

(Teacher rereads) "He squalled for his mother. What do you think he did when he fell into the water?"

Robert answers, "Whining, whining and crying."

Teacher: "Good, Robert!"

The teacher then continued reading and asked the discussion leader, Margo, to begin by asking her question.

Margo asks, "What did he lay in?"

The group has been talking about the different kinds of questions that one can ask: questions that are about details in the story and questions that you have to think about to answer. Perhaps as a consequence of these discussions, Mara offers the following comment on Margo's question: "It's true you could get an answer for that question. But is that gonna get an answer from more than one people? Probably, it's just gonna get an answer from one, and there's better questions you could ask."

The teacher interjects at this point: "Well, let's go ahead and answer her and see if we can get this one."

The children then answer Margo's question and she asks another one, "What did the mother do after he squalled? Robert?"

Robert: "Licked him all over."

Margo: "Correct. Any more questions?"

Several children have additional questions which the group discussed.

The teacher then asks Margo to summarize:

Margo: “This part of the story told us about Baby Bear and sister bear are wrestling.”

The teacher provides the following feedback regarding Margo’s summary: “Tell us a little bit more. There’s an important thing you left out. While they were wrestling, what happened?”

The children then complete the summary as a group, adding additional details about the events which occurred in that part of the story. Included in their summary is the observation that Baby Bear didn’t get hurt.”

“Why didn’t he get hurt?”

Kinata: “Water is real soft, like you can jump on it like a mat. If you land on a rock you will hurt yourself.”

Teacher: “A rock doesn’t give way does it? It just stays hard; but the water will give way and come around you. Good point! We got some good discussion.”

Mara: “You know what time of year it was when it told you he would splash, because if it was this time of year (February), I don’t think he’d splash in the water. I think he’d crack!”

The teacher then reads on. The next portion of the text concerns the diet of the bear cubs. The teacher has earlier made the prediction that the bear cubs are no longer nursing, sharing her reasoning that they now go in search of stream water. In this portion of the text, it becomes clear that the cubs are indeed still nursing. The teacher corrects herself: “They are still nursing. They are still taking their mother’s milk. Mine wasn’t a very good prediction then, was it? I thought that when they said they were drinking water that they had finished drinking their mother’s milk.”

However, Kinata reassures the teacher: “Well, that was a good prediction. It just didn’t come true.”

When discussing this program, the authors mention that these students spontaneously engage their teachers in similar discussion during small-group reading time.

Role Playing and Reconstructing Opposing Views

A fundamental danger for human thought is narrowness. We do not naturally and spontaneously open our minds to the insights of those who think differently from us. We have a natural tendency to use our native intelligence and our cognitive skills to protect and maintain our system of beliefs rather than to modify and expand it, especially when ideas are suggested that have their origin in a very different way of thinking. We can never become fair-minded unless we learn how to enter sympathetically into the thinking of others, to reason from their perspectives and eventually to try seeing things as they see them.

Learning how to accurately reconstruct the thinking of others and how to role play their thinking (once reconstructed) are fundamental goals of critical thinking instruction. Very little work has yet been done in giving students opportunities to role play the reasoning of others, so it is not now clear to what extent or in what forms role playing to enhance critical reciprocity is possible.

But imagine some possible experiments. Students could brainstorm two lists, one list of their reasons for being allowed to stay up late and one for the reasons their parents might give forbidding it. A role play might be devised in which two students would pretend that they were parents and were asked, in that role, to give their reasons why their children should not be allowed to stay up late. It would be interesting to see how accurately the students could reconstruct the reasoning of their parents. They will probably find this challenging and should be encouraged to be
as clear as possible in their reasons. Socratically questioning them would reveal more about their thinking. Then one might experiment with a discussion between a student playing “parent” and another student playing “daughter” or “son”. The class might subsequently discuss what the best reasons were on each side of the dispute and who seemed to have the stronger argument.

An interesting follow-up exercise might be to have the students, either in pairs or singly, compose a dialogue on a given issue or on a chosen one. Remind them to brainstorm lists of reasons for both sides of the issue, being sure to focus on the side they don’t hold. Then have them write a short dialogue expressing the opposing viewpoints. Some of the pairs of students could present their dialogues to the class.

**Teaching the Distinction Between Fact, Opinion, and Reasoned Judgment**

Many texts claim to foster critical thinking by teaching students to divide all statements into facts and opinions. When they do so, students fail to grasp the significance of dialogical thinking and reasoned judgment. When an issue is fundamentally a matter of fact (for example, “What is the weight of this block of wood?” or “What are the dimensions of this figure?”), there is no reason to argue about the answer; one should carry out the process that yields the correct answer. Sometimes this might require following complex procedures. In any case, weighing and measuring, the processes needed for the questions above, are not typically matters of debate.

On the other hand, questions that raise matters of mere opinion, such as, “What sweater do you like better?” “What is your favorite color?” or “Where would you like to spend your vacation?” do not have any one correct answer since they ask us merely to express our personal preferences.

But most of the important issues we face in our lives are not exclusively matters of fact or matters of preference. Many require a new element: that we reason our way to conclusions while we take the reasoned perspectives of others into account. As teachers, we should be clear in encouraging students to distinguish these three different situations: the ones that call for facts alone, the ones that call for preference alone, and the ones that call for reasoned judgment. When, as members of a jury, we are called upon to come to a judgment of innocence or guilt, we do not settle questions of pure fact, and we are certainly not expected to express our subjective preferences.

Students definitely need to learn procedures for gathering facts, and they doubtless need to have opportunities to express their preferences, but their most important need is to develop their capacities for reasoned judgment. They need to know how to come to conclusions of their own based on evidence and reasoning of their own within the framework of their own perspectives. Their values and preferences will, of course, play a role in their perspectives and reasoning, but their perspectives should not be a matter of pure opinion or sheer preference. I should not believe in things or people just because I want to. I should have good reasons for my beliefs, except, of course, where it makes sense to have pure preferences. It does make sense to prefer butterscotch to chocolate pudding, but it does not make sense to prefer taking advantage of people rather than respecting their rights. Over time, students need to distinguish fact, opinion, and reasoned judgment, since they will never be good thinkers if they commonly confuse them as most students now do. (See the section on Text Treatment of Critical Thinking in “Thinking Critically about Teaching: From Didactic to Critical Teaching”.)

In passing, be sure not to confuse this distinction with that of convergent and divergent questions. Questions of opinion and questions of reasoned judgment are both divergent, but the first
does not involve the question of truth or accuracy (because it calls for expression of preference), while the second does (since reasoned judgment can be more or less reasonable, more or less prejudiced, more or less justified).

We have put this distinction into the "Global Strategies" chapter to underscore its importance as a pervasive emphasis in all instruction. In any event, we should always keep in mind global, as well as more specific, strategies for fostering critical thinking. When we habitually reflect on our role as teachers, play the role of Socratic questioner, seek opportunities to have students reconstruct and role play the thinking of others, and habitually encourage students to distinguish preference from reasoned judgment, we will discover new possibilities for critical thinking instruction and will develop global insights that help guide us in understanding and applying the strategies illustrated more specifically in the lesson remodels that follow.

"Be aware of the hidden curriculum in all schools. If teachers ask only factual questions that test memory and recall, students assume that this is the most important aspect of learning. If principals spend more time focusing on administrative concerns, discipline, or standardized test scores, teachers also assume these aspects of school are the most important."

Greensboro Handbook, Greensboro Public Schools Reasoning and Writing Project