5) Socratic Questioning

In this section we have placed transparencies that deal with Socratic Questioning. The ability to question oneself or others Socratically is a powerful tool of thought.

Socratic Thinking

Probing analytic, synthetic, creative, connection-forming thought

The construction of a logical system of understandings

leading to insight

A natural way to develop & test our understanding of content

A natural way to give life to content

based on the universal features of thinking & the questions knowledge of those features generate

Socratic Questioning

Enables us to Make
Connections & See the
Big Picture

Workshop Assumptions

- 1) That Socratic thinking can be mastered only with extended practice over an extended period.
- 2) that we are providing a basic model that is useful in guiding this practice.
- 3) That participants will "give themselves" to the process, willingly undergoing the frustration & challenge of the learning process that Socratic thinking imposes on us.

- 1) You will work in groups of 4. Two of you will be engaged in one-on-one Socratic discussion. The other two will be specialized observers.
- 2) You will spend approximately 20 minutes in practicing in the following way:
 - a) For 5 minutes person A will socratically question person B.
 - b) For 5 minutes (2 1/2 minutes each) the observers will give some feedback on the process
 - c) For 5 minutes person B will socratically question person A
 - d) For 5 minutes (2 1/2 minutes each) the observers will give some feedback on the process

Designing a Unit:

Purpose:

To understand how psychologists use the scientific experiment in answering psychological questions.

- 1) Before class, have students write answers to these questions:
 - a) What is a scientific experiment?
 - b) What are the parts of an experiment?
 - c) In what ways do psychologists use the experimental method to answer psychological questions?
- 2) In class, have students work in groups of two to discuss these questions briefly.
- 3) Lead general discussions of subject, helping students come to accurate answers to the questions.
- 4) In groups of four, have students design an experiment around a problem / questions.

Specific criteria:

- •question at issue must be important
- •adhere to ethical standards
- •some variable muse be manipulated
- •list potential problems / weaknesses in design
- 5) Random reporting with time for students to clarify, probe for significance, feasibility, relevance

A DIALOGUE ON SCIENTIFIC THINKING (K-6)

Question: What is science?

Answer: Science is a form of thinking in which you need intelligence.

Q: When do you need scientific thinking?

A: When you need to make things.

Q: What sort of things do scientists make?

A: Stuff we need to improve the earth?

Q: Can you name some things that scientists have made that improved the earth?

A: Microwave Ovens, Toasters, Cars, Trucks, Stereos, and a lot of other stuff.

Q: Why is it hard to do scientific thinking?

A: Because I am a kid and not a scientist?

Q: What subjects would a person have to study to become good at science?

A: Mathematics, English, Biology, Chemistry, Physics, and Geography.

Q: Why is mathematics important?

A: Because you have to be able to add, subtract, multiply, and divide in order to be a scientist.

Q: Adding, subtracting, multiplying, and dividing helps us to figure out "how much" we have of something. Can you tell me why it is important sometimes to figure out "how much" we have of something?

A: If I have chips that are worth so much money each, then I have to add or multiply to figure out how much money I have.

Q: So do you think that scientists often have to figure out the size or amount of things?

A: They often have to figure out how much stuff it takes to make chemicals of different kinds.

Q: What sorts of things can we do with chemicals?

A: We can clean a pool of water or defrost windows or protect the car from freezing or clean your body or clothes.

Q: So do scientists help us to do all of these things?

A: Yes, they do, and a lot of other things.

Q: So, someday, would you like to be a scientist?

A: No, I wouldn't because I want to be an engineer.

Q: But don't engineers have to study a lot of science to become an engineer?

A: Gosh, I didn't think of that, you're right!!!!!!!!!

♦ 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

Teacher: How does your mind work? Where's your mind?

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

- T: Does your mind do anything?
- S: It helps you remember and think.
- S: It helps, like, if you want to move your legs. It sends a message down to them.
- S: This side of your mind controls this side of your body and that side controls this other side.
- S: When you touch a hot oven it tells you whether to cry or say ouch!
- T: 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?
- S: When you're hurt it tells you to be sad.
- S: If something is happening around you is sad.
- S: If there is lightning and you are scared.
- S: If you get something you want.
- S: It makes your body operate. It's like a machine that operates your body.
- T: 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?
- S: You get the same toy. One person might like it. The other gets the same toy and he doesn't like the toy.
- T: Why do you think that some people come to like some things and some people seem to like different things?
- S: Cause everybody is not the same. Everybody has different minds and is built different, made different.
- S: They have different personalities?
- T: Where does personality come from?
- S: When you start doing stuff and you find that you like some stuff best.
- T: Are you born with a personality or do you develop it as you grow up?
- S: You develop it as you grow up.

Trans 294

- T: What makes you develop one rather than another?
- S: Like, your parents or something.
- T: How can your parent's personality get into you?
- S: 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.
- S: Like, if you are in a tradition. They want you to carry on something that their parents started.
- T: 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?
- S: Yes.
- T: What would make you behave more like kids around you than like Eskimo kids?
- S: Because you're around them.
- S: Like, Eskimo kids probably don't even know what the word 'jump-rope' is. American kids know what it is.
- T: And are there things that the Eskimo kids know that you don't know about?
- S: Yes.
- S: 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.
- T: 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?
- S: Yes.
- T: How do you do that do you think?
- S: Well if someone says to jump off a five-story building, you won't say O.K. You wouldn't want to do that ...
- T: Do you ever sit around and say, "Let's see shall I be a smart person or a dumb one?"
- S: Yes.
- T: But how do you decide?
- S: Your grades.
- T: But I thought your teacher decided your grades. How do you decide?
- S: 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.
- T: So you decide that, right?
- S: 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.
- S: You can't just decide you want to be smart, you have to work for it.
- S: You got to work to be smart just like you got to work to get your allowance.

- T: 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?
- S: 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.
- T: 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?
- S: 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.
- T: 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?
- S: 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.
- T: 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?
- S: [Chorus] NO!
- T: 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.
- S: Like, everyone might think you were good, but you might be going on dope or something.
- S: 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?
- T: I'm not sure ...
- S: 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?
- T: Suppose somebody is trying to be good just to get a good reputation why are they trying to be good?
- S: So they can get something they want and they don't want other people to have?
- S: They might be shy and just want to be left alone.
- S: You can't tell a book by how it's covered.
- T: 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?
- S: Yeah.
- S: Terrorists and stuff.
- S: Night-stalker.
- S: The TWA hijackers.

- S: Robbers.
- S: Rapers.
- S: Bums.
- T: Bums, are they bad?
- S: Well, sometimes.
- S: The Ku Klux Klan.
- S: 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.
- T: 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.
- S: Libyan guys and Machine gun Kelly.
- T: Let me ask you, do the bad people think they're bad?
- S: A lot of them don't think they're bad, but they are. They might be sick in the head.
- T: Yes, some people are sick in their heads.
- S: A lot of them (bad guys) don't think they're bad.
- T: Why did you say Libyan people?
- S: Cause they have a lot o' terrorists and hate us and bomb us ...
- T: If they hate us do they think we are bad or good?
- S: They think we are bad.
- T: And we think they are bad? And who is right?
- S: Usually both of them.
- S: None of us are really bad!
- S: Really, I don't know why our people and their people are fighting. Two wrongs don't make a right.
- S: 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.
- T: So it can depend on which country you're from who you consider right or wrong, is that right?
- S: Like a robber might steal things to support his family. He's doing good to his family but actually bad to another person.
- T: And in his mind do you think he is doing something good or bad?
- S: 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.
- S: It's like the underground railroad a long time ago. Some people thought it was bad and some people thought it was good.
- T: 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?

- S: Go by what you think!
- T: But how do you figure out what to think?
- S: Lots of people go by other people.
- T: But somebody has to decide for themselves, don't they?
- S: Use your mind?
- T: 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?
- S: You could try to meet her and decide whether she was bad or good.
- T: 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?
- S: No, because she said I'll give you this so you'll like me. She wouldn't be very nice.
- T: So why should you like people?
- S: Because they act nice to you.
- T: Only to you?
- S: To everybody!
- S: I wouldn't care what they gave me. I'd see what they're like inside.
- T: But how do you find out what's on the inside of a person?
- S: You could ask, but I would try to judge myself.

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.

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.

✦ Helping Students to Think Seriously about Complex Social Issues

In the following extended discussion, Rodger Halstad, Homested High School Social Studies teacher, Socratically questions students about their views about the Middle East. He links up the issue with the holocaust during WWII and, ultimately, with the problem of how to correct one injustice without committing another.

- T: I thought what we'd do now is to talk a little about the Middle East. Remember we saw a film, "Let My People Go," which depicted some of the things that happened in the death-camps of Nazi Germany during World War II. Remember that? It's pretty hard to forget. Who do you hold responsible for what happened to the Jewish people during the holocaust, the Nazi holocaust of the 1940's and the late 1930's? Who do you hold responsible for that?
- S: Everyone. Um ...
- T: What do you mean, "everyone?"
- S: It started in Germany. My first thought goes to Hitler; then it goes to the German people that allowed him to take control without seeing what he was doing before it was too late.
- T: Would you punish all Germans? No? OK, then who would you punish?
- S: Hitler.
- T: OK. I think probably we'd all agree to that. Anyone else?
- S: Probably his five top men. I ... I'm not sure ... there are a lot of Nazis out there.
- T: Well, are you sure everyone was a member of the Nazi party?
- S: Well, not all Germans were ... um ...
- T: Do you want to think about it?
- S: Yeah.
- T: How about somebody else? First of all, we all agree that somebody should have been punished, right? Alright, these are not acts that should have gone unpunished.
- S: Well, it'd be kind of hard, but, like, I think that every soldier or whatever, whoever took a life, theirs should be taken.
- T: Every Nazi soldier who was in the camps?
- S: Everyone who had something to do with what happened.
- T: Everyone who had something to do with the killing of the people in the camps. The Jews, the gypsies, the opponents of Hitler, all those people. All the millions killed. Anybody that played a direct role. You would punish them. What if we had a corporal here and the corporal said, "I only did this because I was ordered to do it. And if I didn't do it, my family was going to be injured, or something bad was going to happen to my family." Are you going to punish that corporal?
- S: Well, I guess ... well, I mean they still took a life, you know, but they were just following the rules. But I mean, you know, if you take a life ...
- T: What if they didn't take a life? What if they just tortured somebody?
- S: Then they, they should be tortured in the same way.
- T: So you say anybody who was directly responsible for any injury, torture, murder, whatever in

the camps; they themselves should get a similar kind of punishment. What about the people who were in the bureaucracy of the German government who set up the trains and the time schedule of the trains? What about the engineer on the train?

- S: Well, yeah, I guess ...
- T: All those people?
- S: Yeah, because if you think about it, if they hadn't of done that, they couldn't have gotten the people there
- T: OK, and what about the people standing on the streets while the Jews got in the trucks?
- S: No, I think that's going a little too far
- T: OK, so anybody who participates in any way in the arrest, the carrying out of all these activities, including even people who, ah ... what about people who typed up the memos?
- S: Yeah, I guess
- T: No, says Manual. Why no?
- S: Like, for example, if they're put under a lot of pressure. Like, ah, we're going to kill your family, we're going to hurt your family, put them in a concentration camp too.
- · T: Yes. Yes?
- S: It, it's just total ... you just can't hold them responsible because their family ... it's just like, ah ... the next, the closest thing to them, and you can't just say you have to punish them because I don't think they did it on purpose. They didn't do it because they wanted to see them suffer. They did it because they didn't want to see their family suffer.
- T: So your saying that anyone who enjoyed what they were doing needs to be punished? right? What if I do it, but I don't enjoy it?
- S: I don't think they should be punished.
- T: OK, suppose we brought all those people in here and asked them if they did it because the wanted to and they all said no. They all did it because it was orders. What then? How do we know if they enjoyed it or not?
- S: That's a good question.
- S: Yeah.
- S: Well, ah ... that's why I think that it should maybe just be the leadership because they're the ones who made up the concentration camps, and they're the ones who tell the people to do it. And some people will want to do these things, and some people won't, and you can't determine who wants to do it and who doesn't.
- T: OK, suppose I 'm Hitler and you are one of my top men and I order you to kill someone or you will be killed and you do it even if you didn't want to should you be punished?
- S: Yeah, because you shouldn't be a Nazi in the first place.
- T: So any body who is in the camp who does these deeds even though they did not want to do them they should also be held responsible and punished?
- S: You can't. There are too many of them. It's stooping to the Nazi's level by killing, by punishing all these people
- T: So will you let some of them go free because you can't punish all of them.

- S: Right, you can't, you can't punish a whole entire group of people, that's like millions of people.
- T: Why can't you do that?
- S: Because it's doing what they were doing to the Jewish people.
- T: We'll we get some disagreement here, Jeannette?
- S: If you can't call a person responsible for making a decision, where does that leave society.
- T: What kind of decision?
- S: They made a decision to follow the order.
- T: But what if they did it under duress?
- S: They could've ... faced the responsibilities, you have to face responsibilities either way, you can't just do something.
- T: Suppose, suppose I say to you, "Jeanette you, I want you to ah pull Bill's eyeballs out of his head. (Laughter) And if you don't do that, I am going to kill you, Jeanette."
- S: I am responsible
- T: Are you responsible?
- S: I'm responsible.
- T: You're going to die!
- S: I'm responsible!
- T: So we should punish you because you do this deed even though you would have died if you hadn't done it?
- S: No! it's still my decision.
- S: But they, what if they were drafted into being in the Nazi camps and they were forced to do that and they did not want to do that?
- S: How did they force ...
- S: Just like we had American troops in Viet Nam, they were killing people.
- S: And they were drafted.
- S: A lot of people ran though.
- T: Time out! time out, we have a real important discussion and that is the issue of the people who did not willingly do it who did it because of orders, are they or are they not responsible?
- S: I agree with Janet. They are responsible, they made the decision to do it, they have a choice but some people I'm sure made the choice to die rather than to do this. I'm sure there were people that did that. And that was their decision because they could not go through with the order. You can't live with that. They went through it and made that decision. They have to live with what they did and they have to be punished for it because they took the lives of other people.
- T: Wait a minute, Do you know the story of Patty Hearst at all? I know its ancient history to you. When she was kidnapped by a group called the SLA she was brainwashed and she was beaten. She was abused and eventually she joins the group and they rob a bank and she had a part in the bank robbery. After she was freed she was put on trial and she argued that during the bank robbery they had a gun on her and she didn't have any choice. Is she responsible for her acts in that bank robbery? Does she go free or do you punish her for the bank robbery?

- S: That's a hard question. (yeah, no fair) was it proven that there was a gun on her?
- T: Yes they had tape. It was not clear whether there were bullets in the gun or so forth. There is tape of a gun.
- S: Well, if there's really proof, that's different.
- T: What do you mean that's different?
- S: Well, different than someone who was a Nazi
- T: No, no, let's not get to Nazi yet. Imagine you're on a jury, are you going to vote guilty or innocent?
- S: Innocent
- T: Why?
- S: Because there was proof that she was forced; it wasn't a threat that something was going to happen. She was forced.
- T: Did she do it under threat of her own life?
- S: Yes
- T: All right. Suppose you leslie are a Nazi, and you Gayle are neutral. Leslie tells Gayle if you don't kill Ariel the Jew, you will be punished. Gayle kills Ariel the Jew. She does is because Leslie threatened her to do it. Is Gayle guilty?
- S: No, I guess.
- T: But look. Do you see the inconsistency with the previous position? On the one hand you say that Patty Hearst was not guilty because she was forced but on the other hand you say that a Nazi is guilty even if they were forced too.
- S: I think its conditional.
- T: What is conditional?
- S: Well, that, that the people are ultimately responsible for their actions because in the Patty Hearst case, she umm, it was a bank robbery, and that wasn't directly, I mean that was, are not supposed to steal people's money and that would affect people but it's not physically, its not physical pain and it's not, you know, killing them, and so I think they should of um punish all the people who are in the Nazi camp because they were responsible for physical pain and ah their deaths.