

## Lesson Transcript

T = Teacher (Apryl Whitman, Meadowfield Elementary School, Columbia, SC) , S = Students

### CONNECT/ENGAGE

T: I want to, real quick, review what we've been learning about with water. What did we learn about last week? What have you learned?

T: Raise your hand? H?

S: It comes from fresh water.

T: It comes from fresh water. Yes?

S: It comes from the sewer.

T: OK, it comes from pipes maybe. \_\_\_?

S: What are we talking about again?

T: Water, what you've learned about water.

S: It comes from pipes.

T: OK, it comes from pipes. S?

S: I learned about surface water.

T: Surface water, OK.

T: What did you learn, S?

S: (inaudible)

T: Oh, some water comes from under the ground.

S: CAPTION: It comes from lakes.

T:Lakes

S: When the ice melts (inaudible)

T: I'm not sure you heard what A said, A, can you say that a little bit louder?

S: CAPTION: When ice melts from off the mountain, it goes down.

T: I think A is remembering from the video. Remember, they had the ice on top of the mountains, and it melted and it went down into a reservoir and they were able to get pipes and pull that water out. N?

S: CAPTION: It goes to the water treatment plant.

T: Then the water goes to the water treatment plant. Why does it go to the water treatment plant?

S: To get clean.

T: So it can get clean.

### MODEL AND GUIDE

T: I want to stop for a second and piggy back on what Nora said. I want us to take a look at this picture. It might be a little shocking, so don't get too loud, OK? I'll hold it up. (shows around the circle) Oh, I like that question that just popped into your head. P, can you say that a little louder, what you just asked?

S: What happened?

T: What happened? Good readers, when we're reading, or looking at pictures, questions pop in our head. We've been talking about that. So P wants to know, what happened. So I'm going to write a little upside down because I'm going to write all around the picture. So P wants to know, (writes) What happened? Now, S, can you share what you were thinking?

S: I was thinking, why did it happen?

T: Why did it happen? OK, why – and you said "it's sad." Why is this sad? 6:45

S: CAPTION: Because they have a little bit of water, and there's a lot of garbage, so it will be polluted.

T: What does that word, 'polluted' mean?

S: Polluted means it's dirty.

T: It's dirty. So she says that this right here is garbage. So I'm going to draw a line and I'm going to write, garbage,

T: and I like that word

S: CAPTION: It may be the flood, it may have been the flood, or people did that.

T: So maybe a flood caused this, and maybe people caused it. We aren't sure, are we. We don't have any words on here, we just have pictures, so we're kind of inferring what happened. So let me write that down. Maybe – I like that word 'maybe' because we're thinking, 'maybe a flood happened'

'or maybe people did it' which is not good, is it?

S: No!

T: Yes, what are you thinking?

S: CAPTION: I would've pushed all the trash out of the way.

T: So if you were them, you would push all the trash out of the way?

S: With a shovel.

T: With a shovel. So do you think maybe something needs to be done about this? What do you think?

S: CAPTION: Get a garbage truck and take it away.

T: Like get a garbage truck and put it in there. And you're thinking, how will they get it there? Why do you think that might be difficult?

S: CAPTION: Because most of the trash is in the water, so how - they can't go in the water to get the trash.

T: So \_\_ is saying, just get that stuff right there, but B is saying that the stuff in the water, that would be difficult to get out, wouldn't it.

S: Yes

T: So what questions should we write for that? Can we write, "How do we clean this up?"

S: Yeah.

T: (writes) How do we clean this up?

T: C, what are you thinking? What thoughts are popping up in your head?

S: If there's trash in the water, it's dirty water, and animals are dying.

T: Oh, can you say that a little louder. If the water's dirty, tell them what might happen.

S: If the water's dirty, all the animals in the water might die.

T: Why?

S: Because it's bad for animals

T: Animals might die –

S: to drink it. I'm going to write, "Animals – might – we don't know for sure – be dying.

T: What we did is what we did last week, we were making inferences. We took what we already knew – things that we had done, we had seen, we had heard, and we were putting them together with clues. Our clue is this picture, isn't it? It's a really big picture, right J? And we came up with new ideas. So what I want you guys to do today, you're going to do the same thing, like we did last week. I'm going to give you a piece of paper, and you're going to have a picture in the middle. What I want you and your partner to do, you and your partner are going to do the same thing that we just did together. You guys can write down questions, you can write down ideas, thoughts, I think this is what's going on, I think this is happening, maybe this is what we can do to help. When I call time, we're going to come back to the carpet and we'll share and discuss what you discovered. 13:42

## **COLLABORATIVE PRACTICE 1**

(View of kids on rug starting to work together)

S: What shall we do first?  
S: Maybe they're cleaning the water.  
(girls working together)  
S: There's too much dirt to go in the factory.  
S: Oh yeah, there's too much. So they have to (inaudible) (kids writing and saying the words as they write)

T: "Let's take a look at this man – or woman – it's a person  
S: We just need to put a question mark – Who is this?  
S: She's cleaning the water  
T: Maybe they're cleaning the water? So maybe you can write the question, "Who is this?" and maybe you can write the idea that maybe they're cleaning the water.  
S: Maybe  
T: May – be. May-be. Do you see it up on the chart? May-be. What does it start with?  
S: M  
T: M. You can do this.  
T: Why do you think they this stuff on?  
S: CAPTION: Because they're trying to get protected.  
T: It's their protection. Be sure you write that down. They don't want to get dirty.

T: What did you write?  
S: (reads) the – fish –is – dying.  
T: Or the fish is dead, aren't they? Why do you think the fish are dead?  
S: Because the water is dirty.  
T: Because the water is dirty and that might have caused it? OK, can we write that maybe next to this when S is done writing?  
That maybe they died because the water is dirty. What do you think, S, why do you think they died?  
S: Caption: Because they're out of the water and the water is dirty.  
T: The water is dirty. And can fish live in dirty water?  
S: No! They have to have clean water.  
T: They have to have clean water so that they breathe and drink and eat. So maybe after you write, "they died because the water is dirty," maybe you guys can think about why the water got dirty. OK? Can you think about that together?

Oh, wow, look at your picture. What do you think is going on here?  
S: CAPTION: It looks like she's cleaning up the trash by herself.  
T: She's cleaning up the trash all by herself. Does that seem fair?  
S: No.  
T: No. Let's put it in the middle so we can both see it. What do you think is going on?  
S: It's a mess.  
T: It's a mess, isn't it! Did you write that? This is a mess, isn't it. Do you want to write that? Just draw a line and write, this is a mess. And I wonder who made this mess, that's my question.  
T: What are you going to write, N?  
S: CAPTION: It's not fair because she's doing it herself.  
T: Oh, I like that. It's not fair she's doing it all by herself, because did she make all that mess herself?  
S: No.  
T: No. So other people should help, shouldn't they. Go ahead and write that down – it's not fair that she's cleaning that up all by herself.

## **COLLABORATIVE PRACTICE 2**

S: Like this is clean and this is dirt.  
T: Alright. So if this is clean and this is dirty, why do you think they put this here?  
S: So it can-  
S: So it can't get in the clean water.

T: So the dirty water can't come into the clean water? So do you think this is some kind of protection?

S: Yes, and they're putting something around it so the dirty water won't flow into the clean water.

T: Let's look at it. Well look at it, it's some type of machine, isn't it?

S: CAPTION: Yeah, it might be going in the water.

T: It might be going in the water. And look at those 2 things there.

Have you seen anything like this before?

S: no

T: Where's Patrick? Patrick, come here, maybe your expertise can help us. Cause he knows a lot about trucks and things like that. Do you think you know what that is? Have you seen something like that before/

S: nods yes

T: Where have you seen something like that before?

S: CAPTION: In a book.

T: A truck book? Does that go on the end of the truck? What does it do?

S: CAPTION: It's a crane that picks up water and dirt.

T: It's attached to a crane, and it picks things up. Thank you, appreciate the expertise.

T: So what do you think it's picking up?

S: The trash, so that can turn into clean water.

T: So you think it's polluted. Why do you think it's polluted?

S: CAPTION: Because look, there's garbage in the water. When the waves go down, it pulls the water into the ocean.

T: So, because there's pollution or garbage on the land, when the water comes in, it's pulling that pollution into the water, isn't it?

S: Yes

T: So we shouldn't pollute on the land either, should we? No! What do you notice (to other child)

S: CAPTION: But if the water gets dirtier, and the animals try to drink it, they'll get sick, and they'll try to die.

S: Can you write that for me, that the animals might get sick? Maybe you (to other child) can write something about what you guys said about there being garbage on the shore. She said this was the shore, which is the area by the water.

T: Did you guys discover anything else?

S: CAPTION: I discovered – I said, "No garbage, help the water, it costs a lot of money.

T: What costs a lot of money?

S: the water. It costs a lot of money.

T: To clean it up?

S: Yeah.

T: What does this mean here? You drew a line, a circle and a line through it. What does that mean?

S: CAPTION: That means no, like no running.

T: So you're making a sign to other people?

S: Yes.

T: And what does it say in the sign?

S: No garbage.

T: No garbage. So maybe we can teach people what they can do, right?

S: Yes.

T: Oh, I'd like you to share that when we go to the carpet. Can you share that on the carpet?

S: Yes.

## SHARING

T: Now what I would like for us to do – I heard a lot of new thinking, and questions, and inferences based on what you saw in the picture and what you already knew.

Let's have these 2 gentlemen, show your picture real quick. When you show your picture, you can show it like this (demonstrates). What do you think is going on in your picture?

S: There is a duck right there and it flies into the dirty water it might die.

T: They have an animal near their dirty water and they're afraid it might die.

What are they doing in this picture?

S: Picking up trash.

T: Picking up the trash. Can you see that?

S: And the people wasn't picking up trash and going in it, they were using a machine so instead of going in the water it would be difficult to pick up the trash.

T: Oh, so they're saying it would be difficult to pick up the trash so they're using a machine to clean up the water. Did any of you have a machine in your picture cleaning up the water?

T: So there are different ways to clean up the water. They had a machine. By touching your nose, how many of you had a person cleaning up the trash in your picture? (repeats)

T: I have a quick question for you guys. Does it look easy or hard to clean up the trash?

S: (unison) Hard!

T: Go ahead, say it loud.

S: It would probably take all night.

S: It's hard to pick up trash because you know how the water floats around and when you try to pick it up it might float around.

S: It looks like the person is cleaning the water so people can drink out of the water and the black stuff and brown stuff on him looks like – the brown stuff looks like mud but the black stuff I'm not sure what it is.

T: Is it good stuff?

S: I'm not sure if it is.

T: \_\_\_\_, can you look at this picture, you might be able to answer their question. They're wanting to know what that black stuff is.

S: The black stuff is probably gas from a boat that somebody probably traveled in.

T: Can you show them your picture? Do you have that same black stuff in your picture?

S: Yes

T: Does anybody else have that black stuff in your picture?

S: That could be oil.

T: What?

S: Oil.

T: Oil. Oil comes from boats that are traveling in the water, and sometimes it spills and leaks into the water.

S: Like the big boat, the cruise ships.

T: The really big boats, it can leak, because they are using the oil, or they are carrying the oil. And when the oil gets in the water - And I'll have to bring some oil and water tomorrow and show you what happens.

S: Little dots

T: Yes, the little dots get in there, and can you get the oil out of the water?

S: No

S: It will spread around the ocean and (inaudible)

T: What else – what do you have in your picture that it's hurting?

S: The animals.

T: The oil gets on them, and unless people come and help clean them up, they can't get that oil off of them. Do you think that duck can live with all that oil on him?

S: No.

S: I made a sign that says No garbage.

T: She made a circle with a line through it and it says, no garbage. Why did you do that?

S: Because that means no garbage.

T: Who is that sign for?

S: The sign is don't put that in the water and no garbage

T: OK to show and teach other people not to pollute.

(holds up chart) T: I want to review what all of you said. Pencils down, paper, let's see who's ready. Thank you... fantastic. I wrote some notes while you were sharing. You guys taught me that when water is polluted, or we have pollution in the water, whether that's oil, or trash, or chemicals, it's really hard to clean up, isn't it? You told me we need to keep pollution out of fresh water because we drink it and animals live in it; that oil and chemicals also pollute the water, it's not just trash; it makes people and animals very sick; we don't need to pollute the land either because as S said, it can float into the water, and then what S said is that we need to teach other people not to do this. Because it is fair for that one woman to have to do all that by herself?

S: No.

T: If people would stop polluting, would we have this problem? No. So guess what, what we're going to be learning about this week and next week is all about we're going to be learning about pollution, how it happens, different types of pollution, and guess what, we're going to teach other people how to stop doing it. We're going to teach other people how to keep our water clean. Do you think you guys can do that?

S: Yes.

T: Yes. I think you can teach other people how to do that.