

Lesson Transcript

T = Teacher (Philippa Haynes, New Prospect Elementary School, Inman, SC), S = Students

CONNECT/ENGAGE

T: All right, guys. Yesterday, we did a lot of research about a specific type of severe weather. Yesterday you guys looked through a whole bunch of different resources and decided to pick two.

So today we're going to do some comparing and contrasting between the information we learned from these two resources. So compare means how is that information the –

S: (unison) same

T: And contrast is how is that information –

S: different.

T: So before we can decide which information is the same and different, we probably need to go back and review the information. Wouldn't you agree?

S: We might want to use our resources to go back and find what information we put.

T: Well, we don't even need to go as far as that, because you did all that work yesterday, you wrote down your information. So you may not even need your resources today. You may just look at your notes. So let's take a look at Resource 1. I want all eyes up here and I want you to help me read this.

So for Resource 1, which was the Weather Wiz kids website article we looked at, we learned that (reads) Tsunamis occur when there is an earthquake or a volcanic explosion. So we talked about 2 ways that a tsunami can occur. We also drew this cool little diagram and this diagram was showing what?

S: Like how do they form with the lava comes up.

T: So you're talking about this, the volcanic explosion, and the lava comes up and what would happen to the water?

S: It (inaudible)

T: You're right. It would start making waves.

T: Now that we've reviewed our information from resource one, let's review our information from resource two. So let's take a look at the information we found here. So here, we had a picture of what?

S: The tsunami.

T: What was this diagram showing? Be specific.

S: It shows you how it cracked, and how the waves get bigger until it gets way big.

T: Yes, so right here you can see the earthquakes. Kind of shake your bodies, like an earthquake. And then what happened to the waves? They were slow at first and then they, what – got bigger and bigger. So let's do what the waves look like. They were slower at first – do it with me – not very big – and then they got bigger and bigger. I really like that diagram. And that really helped me understand what's happening from the time an earthquake happens to the time the tsunami hits the shore. All right, let's look at what else we learned.

MODEL/GUIDE

T: Ok, now that we've reviewed our facts, let's go back and compare and contrast. So let's start with comparing, which means how are they the same. Looking at resource 1 information, and resource 2 information, what information was the same?

T: I want you to put your eyes on it and I want you to almost study it and make that your focal point.

Really take a look and try to think, what information is the same. I'll give you a minute to think about it.

When you think you see something that is the same between this resource and this resource, go ahead

and put your hand up and that will let me know you're ready. I want to make sure I give you enough time, because you have to kind of tell your brain, OK, what do I see here and here that's the same information. A, what did you notice?

S: CAPTION: Resource 1 and Resource 2 the second one are the same.

T: What do you mean, the second one? Which part is the same?

S: #1 on resource 1, and #3 on resource 2.

T: OK, so if I read the first one in Resource 1, "Tsunamis occur when there is an earthquake or volcanic explosion" and then you said in the second one, #3, it says "tsunamis are caused by earthquakes and meteorites." Which part is the same?

S: earthquakes.

T: Yeah. Both resources told me that tsunamis are caused by earthquakes. So should I write that down as the same? Absolutely. So I'm going to write, Tsunamis are caused by earthquakes. So do you think it's fair to say that definitely tsunamis are caused by earthquakes. If I had 2 resources that told me that? Yeah. What else is the same? I'm going to give you a second to really study this

S: CAPTION: Resource 1 #5 and Resource 2 #5.

T: So this one said that, "When it approaches, the ground may shake or there may be a loud noise," and then you said Resource 2, #5, "Animals act oddly and you can feel the ground shaking." So which part of those was the same?

S: CAPTION: The ground shaking and the ground may shake.

T: So can we say that it's probably very likely that the ground shakes when a tsunami is approaching?

S: Yes

T: So should I write that down as the same information? Absolutely. So what would my sentence look like? What should I say? AJ?

S: CAPTION: Once a tsunami is coming the ground usually shakes.

T: Now let's take a look what's different between these two resources, because there's some information that was the same, but then there was some information that was what?

S: Different

T: That was different. So what information was different and I want you to think beyond, well, this resource talked about the Ring of Fire and this resource didn't. I want you to see if one resource almost said the opposite of what this resource said. And I'm going to give you a second to really think about that.

I'll give you a second to look, because I know it takes your brain almost a minute to process that, because you have to read all of the information over and then you have to tell your brain, "OK, brain, what do I notice in this resource that is different or provides me contradictory information than this resource?"

T: Turn to your partner real quick and see if you can tell them what you noticed is something very different between the information in resource 1 and resource 2.

S: CAPTION: I think #6, both #6, because that one says gather supplies before the tsunami approaches, but that one says the opposite, the complete opposite, if the tsunami is coming, leave all your stuff and run.

T: L, do you want to share what you were saying?

S: In Resource 1 it said, "gather supplies" and Resource 2 said leave your stuff behind.

T: Wow! What do I do? What would you do? Which one would you follow? This one says to gather your supplies if the tsunami is coming and this one says what

S: If the tsunami is coming leave all your stuff behind. That's way different.

T: That is way different, isn't it?

T: Let me ask you this, does that make you confused?

S: Yes.

T: Does that make you confused at what you're supposed to do if the tsunami comes? That's what I'm thinking

(teacher is writing)

S: Resource 2 said leave your stuff behind and run.

T: Wow. Interesting, huh? Same topic, different information. Some of it was the same, but some of it was what?

S: Different.

T: I want you guys today, when you go back with your groups, I want you to take a look at all the information that you gathered, so that means you have to look over it and read it first, because you have to remind yourself, what did I learn, what did I write down, and then I want you to try to think of what part of this information is the same, and then what's different.

S: So we just write one thing that was the same and one thing that was different?

T: Well, your information may only have one thing that's the same or one thing that's different, but that's not the case for everybody. Some people may have a lot of things the same, like 1,2, or 3 things that are the same, and then maybe just one thing that's different. So it's really going to depend on what your information is. I can't sit here and say you have to find one thing that's the same and one thing that's different, because that may not be the case for your group.

COLLABORATIVE PRACTICE

(students reading and writing together in groups)

S (reading) There are 1000

S: Those go together

S: CAPTION: This one says there are 1000 tornadoes reported and this one says there are 1500 tornadoes

T: So what are you telling him? The information's the same – it's talking about the same thing but what are you noticing is different?

S: This number here is -

T: What did you say – what's different –

S: CAPTION: The numbers

T: The numbers. So where would you put that? Would you say that information is the same, or it's different?

S: Different.

T: So you could just put that resource 1 says 1000 tornadoes a year and resource 2 says what?

S: 1500

T: Look at that! Look at that! Amazing!

T: When you were reading the information in resource 1 and resource 2, is there anything that stood out in your mind, that hmmm, this and this are the same thing? (Pause) Did you notice anything? Your eyes are going to have to go on your text, because if your eyes aren't on your text, I don't expect you to have it memorized in your brain already. You've got to go back and you've got to reread it. What did you notice was the same? What concept or topic were they talking about that's the same? Are you reading it? (pause)

S: These two?

T: What did you notice, J?

S: CAPTION: Both are talking about how hail can fall during a thunderstorm.

T: Oh, so how would you share that with your friends? How would you say to them to get them to notice that?

S: CAPTION: #1 and #5 are the same.

T: How are they the same?

S: CAPTION: They both talk about how hail can fall during a thunderstorm.

T: Ah, is that the same information coming from two different resources? So what could you write here?

S: A thunderstorm is a storm that has lightning, thunder and sometimes hail?

T: So which part of that did you notice was the same? What was in this resource and this resource? It talked about a thunderstorm can have what?

S: Hail.
T: Hail. So that's probably what you want to put for the same information, right?
S: A thunderstorm can have hail?
T: Is that what we were talking about?
S: (nods yes)
T: I like that way that G read – said his thought out loud to himself before he wrote it. That's what writers do all the time. Sometimes they'll think out loud before they write it to be sure they write down the right thing. Look at you, you're a writer already, and you're only 7.

S: Resource two tells us how a hurricane forms; resource 1 shows us with that diagram!
T: What do you mean, shows us?
S: With the diagram!
T: Interesting. So in your opinion, which one was more helpful in figuring out how a hurricane forms?
S: (points to the diagram)
T: Why do you say the diagram?
S: Because, it actually shows us

T: If you almost keep repeating it in your head, that will really help you when you're trying to remember what you're writing.
S: CAPTION: Resource 1 – shows you how far it moves.
T: Tells you how far it's moving. Keep saying it in your head, and if you want to say it out loud, that works as well.

T: So in your opinion, which gives you a better idea of how hot lightning can be, the one that just says it can set fire to something, or the one that says it's hotter than the sun?
S: CAPTION: Hotter than the sun.
T: Why?
S: CAPTION: Because if you get hit by lightning _____
T: Right. You're exactly right. If you're going to know that this lightning is going to strike something and heat something up, I want to know how hot it is, and if you say hotter than the sun, I know that's really what
S: It's going to catch on fire.
T: That's really what?
S: Hot.
T: Hot.
S: CAPTION: I mean the sun's on fire.
T: It is, it's like a big ball of fire, you're exactly right. Can we ever go to the sun?
S: CAPTION: No. Because it would burn you.
T: So how is this information related but different? What did resource one tell you?
S: CAPTION: That it burns stuff up.
T: That it heats objects that it hits. And this one tells you that lightning
S: CAPTION: Is hotter than the sun.
S: So we could say –
T: She's getting her thoughts
S: CAPTION if you can hear: Lightning can _____
T: Which resource said that, though, because it's important to know which resource said that, so resource
S: 1
T: 1 said – just look at me, like we're having a conversation and tell me
S: CAPTION: Lightning can burn stuff
T: If it what?
S: CAPTION: Catches on fire
T: If it hits an object, you're exactly right, and what did resource 2 say?

S: CAPTION: That lightning is hotter than the sun.

T: Hmm. So I would write that down as your difference, because it's different, isn't it? It's talking about the same concept, but it's giving you a different picture in your head about what exactly that means and how hot it is.

SHARE

T: Let's sit criss-cross applesauce, and let's put our paper right in front of us, because we're going to take some time and share the information that your group found. Now, I want your eyes on me, When we're sharing with one another, we're having a conversation aren't we. So when we're having a conversation, what are some things you want to keep in mind, when you're telling some information. What would you like to see your friends do if it's your turn to talk? AJ? What would you like to see them doing?

S: Paying attention.

T: Paying attention to you. So do you want to see them playing with their pencil? Playing with their shoe? Going like this?

S: No.

T: No.

S: No way.

T: No way. Because you're trying to have a conversation with them.

S: We did tornadoes, and one of our differences was in Resource 1 it says there are about 1000 tornadoes and in Resource 2 it says there are about 1500 tornadoes.

T: And tell us, a day, a year, a month?

S: A year.

T: Oh, a year. So resource 1 told you 1000 and resource 2 told you 1500. Why would that be an issue for them when they're trying to become experts at tornadoes? Why is that a problem. Tell them, R.

S: Because you don't know which one to choose, so like 100

T: 1000 or 1500. Yes, that's a big discrepancy, isn't it. So R, tell them what your suggestion would be for them if they want to figure it out.

S: CAPTION: They could look it up and research more about it.

S: (P) Floods can move strong things, we found it here and also here. It can push strong things, and also it can push cars, trees and even buildings, and they're very strong.

T: Anybody have any questions or comments?

S: How can they be that strong? It's only just lots of water coming together.

S: Probably it's how fast the water moves, like it jerks it up out of the concrete, or the ground, and it all just floats away.

S: Like, how much water does it take to push all that stuff around?

S: It could just be lots of water, because it's from dams, lakes, oceans, or something like that.

S: But how much water does it take from the ocean.

S: Like about – I don't know.

T: Do you know that for a fact, or are you just making that up in your head?

S: I don't know.

T: So what do researchers do? You would turn to him and say,

S: I don't know

T: I don't know yet. But would that be a good question to look up?

S: How deep is the water?

S: If you're on a hill, do you get flood water?

T: If you're on top of the hill, do you mean? Ask them?

S: Maybe not, because water could leak down a hill, but we don't know yet. S: I think it wouldn't, because if it is like a mountain hill, like where mountain goats are, and you're at the very top, you might not because you're on a mountain, and mountains are very, very big.

S: Once you have a flood, does the water just stay there or does it keep moving to other states or does it just stay there and dries up or do you have to like –

T: Does somebody have to come in and remove it?

S: One time I had a flood at my house and somebody had to come and fix it because the toilet broke.

T: Do you think somebody could come and clean up the water in a community or do you think they would just let it dry out?

S: I think they would let it dry out.

T: Why do you say they would let it dry out even though you know in your head, when I had a flood in my house, somebody had to come clean it up.

S: Because that was just like the bathroom and it wasn't like as deep as it would be. It would probably just go up to here at my house, but in a community it would probably go up to here.

S: What if there was a drain in the house, though.

T: Did you have a drain in your house?

T: Interesting. So you guys were able to answer a lot of their questions, but you also realized that you still have what

S: Some questions

T: Some research that you've got to do.

S: These are all really good questions and even you guys could go look up something about floods if you wanted to.

T: Absolutely. Cause you guys were the experts for floods but that doesn't mean they're never allowed to look up questions.

S: It's not a law that only flood people that know about floods can look up stuff.

S: (inaudible)

T: You guys learned so much about severe weather, didn't you. And I really liked how you were able to talk to one another and share what you learned, because that's what researchers do. Do they just keep all this information in their brains and not talk to anybody about it?

S: No.

T: What did you realize about why it's important to have more than one resource?

T: R, go ahead.

S: Because like if the book is about this big, there's not going to be everything about tornadoes. There's 100 things about tornadoes but you can't just get it from one book. You have to research more and more.

T: And you guys realized that a lot of the information that you found, it talked about the same topic, but it might have had different information. Like the tornado group, they had one book that said there are 1000 tornadoes a year, and another resource that said there's 1500. That's a big difference.

S: CAPTION: That's because they were estimating.

T: Maybe they were estimating, and one actually counted and one estimated. But is it important to see that information before you can get a true, accurate picture of what's real? What's true and what's not true anymore, maybe it's dated information? Absolutely. 1:36:21 So when you're researching, are we only going to pick up one resource and say "I'm good."?

S: No.

T: No. You want several, because that will give you a more accurate understanding of what your topic is all about.