

OBSERVER RATING SHEET

Date of Observation:I I/5_/ _2015
Site/Location Name: Central Decatur, South Elementary Cardinal Muscle
Observer Name: Sarah Derry
Co-Observer Name:
STEM Focus (science, technology, engineering, or mathematics program?): Science
Curriculum/Module Name (e.g., Building Bridges, Lego Robotics, Fun with Food): The EYE
Activity Name/Description (e.g., students are racing their Lego cars on a track): Talk about the eye, 5 senses game
Facilitator/Activity Leader/Teacher Name (First, Last): Sara Le Fleur
Context/Background of Lesson:
-What happened last time? Start of a new lesson, but students have been talking about the body
-Where does this lesson fall in the overall unit (beginning, middle, end)? Beginning
Description of Setting: Small classroom. Two large tables, white board, sink window, some carpet some tile
Description of Program Participants:
How many participants? 6

FIELD NOTES

(type your field notes here, scroll down to enter ratings/evidence):

3:15

Studnets enter as "spies" (crawl under windows, hold stone still when a teacher walks by in the hall, etc) and see books about sight, a model eyeball, the classroom dragon is wearing eyeglasses. Sara (educator - S) asks every student what they think they are going to learn about today. Every student predicts.

"Every student used their context clues"

6 students, 4 boys, 2 girls.

Ist graders

"I'm going to go around the room and ask what do you know about eyes?"

You can see

"Umm...you can see....."

S "You want me to come back? Ok"

They are one of your 5 senses

Student A has special needs – Student A speaks

S "Student A, what do you know about eyes?"

Student A (can not be understood, but speaks"

S "uh huh!"

Eyes can see 9 miles away

S Student B, are you ready to tell us what you know about eyes? (Student B – not yet)

Um, I have a question "How do they work? Why do we blink?

S writes question on board

S Student B – you ready now?

Student B: "Um..."

Student C: "He wants to say..."

S Student C, its Student Bs turn now

I can see 9 miles

S that's from here to Davis city. Can you see to Davis city?

Student B's hand is up.

Student D: Why do we have those black things in our eyes?

That's calld a pimple!

S It's called a pupil

Hey Student B, are you ready to share?

H – why do you have to wear glasses? – Student A, put your shirt down buddy – I can tell you why I need to wear glasses, b/c I have a hard time seeing without them

We have a lot of questions!

(Student B) Student C, put your hand under the table

Student D, is asking her question

S can we be quiet, because Student D is trying to ask me a question

Student B sits at a table alone.

S

I'm going to pass out two models for you to look at. This is what the insdie of your eye looks like

Student B goes back to the table

If you look inside your eyeball, you have things called a lens – this is what helps to you see with (holds lens on model). This is why I need glasses, my lens isn't shaped correctly, so I have lenses in my glasses to help me see.

S My dad had surgery where they took the old ones out and put new ones in, its called...

Contacts?

S No, lasik

Student A - hey! (he wants to see it)

S – to other table – hey, are you guys done looking at your model? Can we pass it to Student A so he can see it? (Student A's table has 4 students, the table with 2 students pass the model over)

Student A holds lens from model up to his own eye.

Does that lens feel like an actual lens?

Students are perched on chairs so they can see models.

You are eyes are attached to your brain by special cords (pointing to model)

Can we make real eyes?

Maybe when you grow up and become adult scientists, you can make a real eyeball.

Student B, you have a choice, you can either stand up and push your chair away, or sit in it properly.

Student A, you have a choice, you can either stand up and push your chair away, or sit in it properly.

Now has model of a head to show how the eye connects to the brain. Ear falls out, students rush to pick it up, S accidentially steps on students hand. She tells her quietly (I'm sorry sweetheart, I didn't mean do to that)

Studens pepper her with questions "Woah, you gyys have some great questions. I don't know the answer to them all right now, but I can look them up and tell you later"

Read a book about seeing. We've looked at our models.

Student C is trying to arm wrestle – S moves him to the other table.

Reads: How do you see? Interrupts – Hey, that's one of our questions! (Points to board with their questions written). Reads on.

Hey, that's something we didn't talk about, what do you know about the eyelid?

What do you think your eyelashes are for?

To keep your eyes in!

Your eyelashes? Those are the little hairs at the end of your eyelids.

Reads: To keep the dirt out of your eyes. Did you guys get any dirt in your eyes at recess today? It was windy today?

Students tell story about when they got woodships/sand in their eyes -

S- woah did it hurt?

Student A – l'ts cold outside

S yes, it is cold outside, but Dylan is sharing right now

Student C talks about pixles – your eyes don't actually see it, but it sends a message to your brain that you see as a picture.

What about when you blink fast and you still see something because you blink so fast? (Back to book)

You guys can see color, right?

Student C - I am color blind!

Some people are color blind

Keep reading

Educator opens door to take kids to next activity.

S wraps up lesson while kids line up with high school helper.

Before they go: Next Monday, we'll talk about this more. Student B I need you to stick around so I can talk to you more.

Pull up a chair (Other students leave)...sit down, and take a breath. Whew, you are busy today, arent' you. DI d you know that sometimes being super busy is distracting to others...

3:45pm

Dimension	Evidence	Overall
Organization Materials available Transitions Time management Flexibility	All materials within reach of educator at beginning of lesson. Ready to pass out when appropriate. Adjusts materials distribution to allow better student access in the moment. Student A – hey! (he wants to see it) S – to other table – hey, are you guys done looking at your model? Can we pass it to Student A so he can see it? (Student A's table has 4 students, the table with 2 students pass the model over) Student A holds lens from model up to his own eye.	4
Materials Appropriate, appealing For intended learning goal	Materials are appealing — students scramble to be first to access. Visual materials around the room are catalysts for learning goal discovery and discussion. Reading materials link back to student generated questions. Students enter to see: books about sight, a model eyeball, the classroom dragon is wearing eyeglasses. Sara (educator — S) asks every student what they think they are going to learn about today. Every student predicts. "Every student used their context clues" I'm going to pass out two models for you to look at. This is what the insdie of your eye looks like Students are perched on chairs so they can see models. Now has model of a head to show how the eye connects to the brain. Ear falls out, students rush to pick it up Reads: How do you see? Interrupts — Hey, that's one of our	4

	anneal (Daines et la 1911 de la 1	
	questions! (Points to board with their questions written).	
	Reads on.	
SStudent C	Teacher at front of classroom, students sit around two	3
Utilization	tables.	3
Informal	Books, models, eyeglasses on class dragon – eye-related	
arrangement	material all around the room 360 degrees.	
Appropriate Minimal activities		
Participation	All students participate, some require prompting. Take	3
Participation, and	turns to ensure all students have access to limited	
access, not	materials (2 models shared with 6 students)	
necessarily engagement.	Sara (educator – S) asks every student what they think they	
engagement.	are going to learn about today. Every student predicts.	
	We have a lot of questions!	
	(Student B) Student C, put your hand under the table	
	Student D, is asking her question	
	S can we be quiet, because Student D is trying to ask me a	
	question	
	S Student B, are you ready to tell us what you know about	
	eyes? (Student B – not yet)	
	Um, I have a question "How do they work? Why do we blink?	
	S writes question on board	
	S Student B — you ready now?	
	Student B: "Um"	
	Student C: "He wants to say"	
	S Student C, its Student Bs turn now	
	I can see 9 miles	
	S that's from here to Davis city. Can you see to Davis city?	
	Student B's hand is up.	
	Student D: Why do we have those black things in our eyes?	
		1

That's calld a pimple!

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Hey Student B, are you ready to share?

H – why do you have to wear glasses?

Student A - hey! (he wants to see it)

S – to other table – hey, are you guys done looking at your model? Can we pass it to Student A so he can see it? (Student A's table has 4 students, the table with 2 students pass the model over)

Student A holds lens from model up to his own eye.

Purposeful Activities

Activity supports STEM learning goals

Activities: Eye visuals around the room, exploring models, discussion, and book all relate to the eye form and function. Facilitator maximizes opportunities to guide students towards STEM learning goal while responding to student comments and questions.

Read a book about seeing. We've looked at our models.

Reads: How do you see? Interrupts — Hey, that's one of our questions! (Points to board with their questions written).

Reads on.

Hey, that's something we didn't talk about, what do you know about the eyelid?

What do you think your eyelashes are for ?

To keep your eyes in!

Your eyelashes? Those are the little hairs at the end of your eyelids.

Reads: To keep the dirt out of your eyes. Did you guys get any dirt in your eyes at recess today? It was windy today?

Students tell story about when they got woodchips/sand in their eyes -Student C talks about pixels S -your eyes don't actually see it, but it sends a message to your brain that you see as a picture. **Engagement** Hands-on opportunity: examine models of eye and head. Some passive observation. Minds are on – full of related with STEM Hands on, Minds questions. Facilitator addresses. on S- I'm going to pass out two models for you to look at. This is what the inside of your eye looks like If you look inside your eyeball, you have things called a lens – this is what helps to you see with (holds lens on model). This is why I need glasses, my lens isn't shaped correctly, so I have lenses in my glasses to help me see. Students pepper her with questions "Woah, you guys have some great questions. I don't know the answer to them all right now, but I can look them up and tell you later" Hey, that's something we didn't talk about, what do you know about the eyelid? What do you think your eyelashes are for? To keep your eyes in! Your eyelashes? Those are the little hairs at the end of your eyelids. Reads: To keep the dirt out of your eyes. Did you guys get any dirt in your eyes at recess today? It was windy today! Students tell story about when they got woodchips/sand in

their eyes -Student C talks about pixels S -your eyes don't actually see it, but it sends a message to your brain that you see as a picture. **STEM** Student comments and questions indicate that the 3 Content activities support their learning of STEM content and students are making connections between ideas. Learning Connection between activities and STEM content is Do no harm strong. Only a few, minor errors in STEM content. Accuracy Connections Can we make real eyes? Apply knowledge Maybe when you grow up and become adult scientists, you can make a real eyeball. Hey, that's something we didn't talk about, what do you know about the eyelid? What do you think your eyelashes are for? To keep your eyes in! Your eyelashes? Those are the little hairs at the end of your eyelids. Reads: To keep the dirt out of your eyes. Did you guys get any dirt in your eyes at recess today? It was windy today? Students tell story about when they got woodships/sand in their eyes -S- woah did it hurt? Student C talks about pixles – your eyes don't actually see it, but it sends a message to your brain that you see as a picture. What about when you blink fast and you still see something because you blink so fast? (Back to book)

	You guys can see color, right?	
	Student C - I am color blind!	
	Some people are color blind	
Inquiry p.20 lists STEM practices	STEM Practices observed: making observations, asking questions Facilitator models while students watch (then explore the models themselves, but are not constructing new explanations. S – to other table – hey, are you guys done looking at your model? Can we pass it to Student A so he can see it?	2
	·	
	(Student A's table has 4 students, the table with 2 students	
	pass the model over)	
	Student A holds lens from model up to his own eye.	
	Does that lens feel like an actual lens?	
	Students are perched on chairs so they can see models. You are eyes are attached to your brain by special cords	
	(pointing to model)	
Poffection	Encilitator prompts for reflection but no custoined	2
Reflection Facilitator prompts All reflect Connect activity with STEM conecpts	Facilitator prompts for reflection, but no sustained reflective activity. Lesson runs out of time and ends without review.	2
	Student C talks about pixles – your eyes don't actually see it,	
	but it sends a message to your brain that you see as a picture.	
	What about when you blink fast and you still see something	
	because you blink so fast?	
	(Back to book)	
	You guys can see color, right?	
ı	Student C - I am color blind!	

	Some people are color blind	
	Keep reading	
	Educator opens door to take kids to next activity.	
	S wraps up lesson while kids line up with high school helper.	
	Before they go: Next Monday, we'll talk about this more.	
Relationships Student/Facilitator Student/Student	Facilitator interactions with students – even when redirecting – are always positive. Students share. Student B I need you to stick around so I can talk to you	4
	more.	
	Pull up a chair (Other students leave)sit down, and take a	
	breath. Whew, you are busy today, arent' you. DI d you	
	know that sometimes being super busy is distracting to	
	others	
	Student A - hey! (he wants to see it)	
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	H – why do you have to wear glasses? – Student A, put your	
	shirt down buddy – I can tell you why I need to wear glasses,	
	b/c I have a hard time seeing without them	
	Student D, is asking her question	
	S can we be quiet, because Student D is trying to ask me a	
	question	

Relevance Connect with real world Students relate it to their lives Student involvement	Both the facilitator and the studens are actively involved in discussing the relevance of the activities in their broader contexts and interests Reads: How do you see? Interrupts — Hey, that's one of our questions! (Points to board with their questions written). Reads on.	4
	Hey, that's something we didn't talk about, what do you know about the eyelid?	
	What do you think your eyelashes are for ?	
	To keep your eyes in!	
	Your eyelashes? Those are the little hairs at the end of your eyelids.	
	Reads: To keep the dirt out of your eyes. Did you guys get	
	any dirt in your eyes at recess today? It was windy today?	
	Students tell story about when they got woodships/sand in	
	their eyes —	
	S- woah did it hurt?	
Youth Voice Student voice Ownership Decision making	Student voice is supported. The facilitator listens to student ideas and opinions. Activities do not allow much ownership or initiative by the students (facilitator chooses models and book in the activity with no alternative). Students make some superficial choices (where they sit). Reads: How do you see? Interrupts — Hey, that's one of our questions! (Points to board with their questions written). Reads on.	2
	Hey, that's something we didn't talk about, what do you know about the eyelid?	
	What do you think your eyelashes are for ?	
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