

WEBVTT

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00:00:04.980 --> 00:00:15.570

Scott Warren: Good afternoon, everyone, thank you for joining us today for the second in s3 be in the National Geographic Society theory focusing on.

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00:00:16.680 --> 00:00:28.890

Scott Warren: Quality instruction, this one is on exploring science phenomena with national geographic and the session, as you obviously know will be recorded made available to all.

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00:00:30.060 --> 00:00:44.520

Scott Warren: Registered click on the webinar will send that link out this evening, or tomorrow, at some point in time, but this time i'll turn it over to one of our presenters yesterday live on your boat get this started.

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00:00:45.840 --> 00:00:57.210

LaTonya Bolden- SREB: Right greetings everyone happy Monday to all of you happy Monday afternoon, and we welcome you to the exploring science phenomena and with National Geographic webinar.

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00:00:58.050 --> 00:01:08.550

LaTonya Bolden- SREB: My name is tanya bolden and I am an instructional coach with Sri ED and my co host on this afternoon, my wonderful co host.

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00:01:09.090 --> 00:01:21.990

LaTonya Bolden- SREB: We have don kirkwood also from Sri ED we have Tyson brown who's from National Geographic as well as a money Morris, who is from fulton county schools.

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00:01:22.650 --> 00:01:35.520

LaTonya Bolden- SREB: We are extremely excited about this dynamic partnership with national geographic and how it will positively impact students, teachers and schools, so I would like my co presenters just to.

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00:01:36.810 --> 00:01:40.050

LaTonya Bolden- SREB: Do you want to say something to our participants, so our audience here.

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00:01:41.910 --> 00:01:54.480

Donn Kirkwood: Hello everyone i'm happy to be a part of this presentation i'm also a instructional coach so i'm just excited to share what we have with our partnership with science today.

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00:01:57.150 --> 00:01:57.540

LaTonya Bolden- SREB: Great.

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00:01:57.960 --> 00:02:17.070

Tyson Brown: Thank you tanya Thank you done my name is Tyson brown I lead the team at National Geographic that

creates educational materials for our resource library utilizing the work of our explorers and we're excited to work with sorry be on this project great.

12

00:02:20.910 --> 00:02:21.960

LaTonya Bolden- SREB: And miss Mars.

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00:02:23.760 --> 00:02:40.260

Imani Morris: Happy Monday everyone i'm in Miami Morris, I am an educator with fulton county schools and Atlanta Georgia, so I am elated and honored to be here with you guys to share some of my classroom experiences with National Geographic.

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00:02:42.180 --> 00:02:44.850

LaTonya Bolden- SREB: All right, wonderful wonderful great.

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00:02:46.200 --> 00:02:55.860

LaTonya Bolden- SREB: OK, so the objectives for this webinar is that we are going to showcase how National Geographic on how its resource library develops the explore mindset.

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00:02:56.220 --> 00:03:02.160

LaTonya Bolden- SREB: So we're going to look at how teachers can take the resources and actively use them.

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00:03:02.610 --> 00:03:11.400

LaTonya Bolden- SREB: In their classroom to engage students and to be explores and exploration process and in the investigation of phenomena.

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00:03:11.760 --> 00:03:26.760

LaTonya Bolden- SREB: And we're going to show how these resources aligned directly with Sri these powerful science i'm instructional practices and how they guide inquiry and how they basically enhance the students experience as a science.

19

00:03:29.910 --> 00:03:39.750

LaTonya Bolden- SREB: So in the chat will not a few first to introduce yourself introduce yourself in the chat and also tell us to what do you like to explore what would you like to.

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00:03:40.560 --> 00:03:49.710

LaTonya Bolden- SREB: What topic, would you like to explore i'm in your classroom whether you're an educator or if you're an instructional coach if you are a curriculum designer.

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00:03:50.280 --> 00:04:03.870

LaTonya Bolden- SREB: If you're an admin i'm a district leader i'm just what topic, would you like to explore what would you like to see in the library, or what what kind of topic science topic, would you like to embark on with your students.

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00:04:05.820 --> 00:04:07.380

LaTonya Bolden- SREB: They put that in the chat.

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00:04:19.650 --> 00:04:21.810

LaTonya Bolden- SREB: Okay, Tom said global issues.

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00:04:31.980 --> 00:04:39.270

LaTonya Bolden- SREB: Anyone mouth global issues i'd also say shelley Green said careers good good good.

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00:04:41.970 --> 00:04:50.970

LaTonya Bolden- SREB: Engagement activities so ways to engage students Okay, so that is for that's from Deborah first year science teachers.

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00:04:52.140 --> 00:04:58.920

LaTonya Bolden- SREB: Okay don said, have the opportunity to explore invasive species how plants are taking over the world, very good.

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00:05:02.730 --> 00:05:12.060

LaTonya Bolden- SREB: Climate change from Lynn yes, all of these very relevant topics i'm a college and related studies absolutely.

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00:05:13.800 --> 00:05:23.580

LaTonya Bolden- SREB: Okay Juliana sorry visa she would like resources for getting students involved in Problem Solving and that's what we know students, need to be problem solvers.

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00:05:24.720 --> 00:05:28.800

LaTonya Bolden- SREB: Right that's what we're trying to enhance here, yes.

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00:05:31.890 --> 00:05:36.660

LaTonya Bolden- SREB: All right, so yeah so all of these things we're going to be looking at some resources that.

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00:05:38.190 --> 00:05:50.220

LaTonya Bolden- SREB: That that National Geographic has to address some of these topics that you want to explore and using i'm sorry these powerful practices as a framework to explore those.

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00:05:54.510 --> 00:05:59.280

LaTonya Bolden- SREB: Okay i'll give it to Tyson talking about the National Geographic learning framework.

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00:06:00.210 --> 00:06:09.990

Tyson Brown: Yes, speaking of frameworks, the National Geographic learning framework lays out what we believe children and youth should learn from their experiences with the society.

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00:06:10.740 --> 00:06:20.910

Tyson Brown: it communicates national geographics core beliefs and values and has been created to provide guidance for every product resource service and experience that we design.

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00:06:21.630 --> 00:06:39.240

Tyson Brown: The national the learning framework supports educators everyone who teaches and cares for children and youth with resources and tools to meet our mission we teach kids about the world and how it works empowering them to succeed and make it a better place it's good to the next slide.

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00:06:41.340 --> 00:06:50.550

Tyson Brown: start with knowledge young people need to understand how our ever changing and interconnected world works in order to function effectively.

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00:06:51.030 --> 00:07:01.050

Tyson Brown: and act responsibly, we divide that understanding into the national geographics three key subject areas human journey is all about where we've been.

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00:07:01.500 --> 00:07:19.950

Tyson Brown: Where we live now and why and where we are going changing planet encompasses all that it coexists in our planet interconnected through systems that generate and nurture each other and wildlife that inhabit our planet from butterflies in our backyards to the lions and Africa.

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00:07:21.900 --> 00:07:22.680

To the next slide.

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00:07:27.900 --> 00:07:36.990

Tyson Brown: The National Geographic kids have a set of skills required for exploration and discovery, they can observe and document the world around them.

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00:07:37.440 --> 00:07:45.210

Tyson Brown: And they can make sense of those observations, they can communicate experiences and ideas effectively through language and media.

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00:07:45.900 --> 00:07:58.350

Tyson Brown: As the geographic kids are storytellers they have literacy skills that in which they interpret and create new understanding from spoken language, writing and a wide variety of visual and audio media.

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00:07:59.070 --> 00:08:15.030

Tyson Brown: They collaborate with others to achieve their goals and they solve problems they're able to generate evaluate and implement solutions to problems they're capable decision makers able to identify alternatives and way trade offs to make well reasoned decisions.

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00:08:17.820 --> 00:08:18.690

Tyson Brown: let's go to the next slide.

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00:08:20.010 --> 00:08:29.130

Tyson Brown: Key attitudes and compass the mindset of an explorer National Geographic kids are curious and adventurous curious about how the world works.

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00:08:29.970 --> 00:08:41.220

Tyson Brown: and seeking out new and challenging experiences throughout their lives they're responsible with a concern for the welfare of other people cultural resources and the natural world.

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00:08:41.700 --> 00:08:56.880

Tyson Brown: they're respectful considering multiple perspectives and honoring others, regardless of differences, they are empowered to make a difference, they act on curiosity respect responsibility and adventurous, and they persist in the face of challenges.

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00:09:00.300 --> 00:09:01.380

Tyson Brown: Down I think we're going to you.

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00:09:03.060 --> 00:09:16.650

Donn Kirkwood: Alright, so so a B has really five focus areas for making schools work just to kind of look at how we help schools to raise that student achievement.

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00:09:17.550 --> 00:09:26.070

Donn Kirkwood: What we have found with our partnership with national geographics that the materials that they supplied definitely.

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00:09:26.940 --> 00:09:32.760

Donn Kirkwood: enhance the instruction within the classroom so we, we have a deep focus in.

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00:09:33.630 --> 00:09:44.400

Donn Kirkwood: Support in schools in creating quality instruction, on the other thing, especially within the science is that National Geographic provides a lot of.

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00:09:44.820 --> 00:09:50.490

Donn Kirkwood: curriculum that that is directly aligned to the standards and it really gives that.

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00:09:50.910 --> 00:10:01.260

Donn Kirkwood: That real world application that it's it's the cutting edge it's what's happening right now, so allowing students to really to explore.

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00:10:01.680 --> 00:10:09.660

Donn Kirkwood: Like Tyson just said with those with that framework um, but I think the biggest connection is is often that when we have.

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00:10:10.200 --> 00:10:18.240

Donn Kirkwood: programs and different curriculums and textbooks and different things like that is that sometimes we lack that direct connection to the careers.

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00:10:18.930 --> 00:10:27.690

Donn Kirkwood: And I think the partnership with National Geographic really creates that bridge that gives the opportunities for not just teachers.

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00:10:28.230 --> 00:10:37.890

Donn Kirkwood: To really look at the different careers within science on, but the students through the exploration of the different events and lessons and stories i'm.

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00:10:38.580 --> 00:10:47.760

Donn Kirkwood: i'm just gonna pass it back to tie some for a second to let him talk a little bit about the careers and how he sees that connection in this partnership.

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00:10:48.540 --> 00:10:55.830

Tyson Brown: Absolutely thanks don are explorers demonstrate a range of careers and this by no means encyclopedic but.

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00:10:56.520 --> 00:11:07.500

Tyson Brown: They they can be filmmakers and photographers to technologists and all of the sciences and some combine multiple interests like photographer Paul Nick when.

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00:11:08.100 --> 00:11:16.530

Tyson Brown: Who, in addition to be one of the world's most acclaimed nature photographers is also an acclaimed polar specialist speaker author conservationists.

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00:11:16.890 --> 00:11:29.490

Tyson Brown: And National Geographic fell on a regular contributor to National Geographic magazine, with over 28 completed stories to date down I shared a link with you earlier, if you want to show that video, we will take a look at.

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00:11:31.260 --> 00:11:33.780

Tyson Brown: an experience that Paul describes.

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00:11:39.060 --> 00:11:43.110

Since the time of Shackleton these seals have had a bad reputation.

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00:11:43.590 --> 00:11:51.720

Shackleton in fact use, so the stories go he used to use a man as bait he'd put them on the ice and the leopard seal had lunch or the water Adam.

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00:11:51.900 --> 00:12:03.720

And shoot it and another guy would shoot it, and then they would keep it for dog food, and I was like no these seals aren't that vicious and and and you hear all these stories and tragically a scientist, was killed by a by a leopard seal and.

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00:12:06.060 --> 00:12:11.700

very, very sad situation, but I still wanted to give this animal a fair shake I wanted to go down to Antarctica.

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00:12:11.940 --> 00:12:19.230

and get in the water, with as many leopard seals, as I could just to try and understand them, and so I worked with my friend Goran elma from Sweden.

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00:12:19.440 --> 00:12:29.640

Who, who has a lot of experience with leopard seals and together we were going to go on this little journey to try and solve the mystery of the seals, to see if they were misunderstood if they really were vicious bees.

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00:12:31.380 --> 00:12:37.710

And they also need happy feet, you know it's we know we're very emotional species, you know we.

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00:12:38.730 --> 00:12:46.980

We think penguins are cute and we think leopard seals are ugly therefore leopard shoes are bad penguins are good it doesn't work like that the seal doesn't know he's cute or ugly.

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00:12:47.190 --> 00:12:52.980

leopard seal I mean the penguin doesn't know he's cute I mean this is just how the ecosystem unfolds, this is just all part of the food chain.

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00:12:54.390 --> 00:13:04.800

And leopard seals are also big I mean you're thinking ring seals right you're thinking 100 pounds seal these guys over 1000 pounds, and this was a massive female leopard seal that girl runs in the water with.

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00:13:05.970 --> 00:13:14.610

Tyson Brown: So we arrived in Antarctica and and I was so stressed about a stressed out where we going to find leopard seals to photograph and yet I was like you know relax relax.

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00:13:14.970 --> 00:13:20.910

Tyson Brown: And so, our first day there we come around the corner, we lost we anchor the sailboat get on our Danny.

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00:13:21.120 --> 00:13:33.450

Tyson Brown: We go around the corner and there's this massive female leopard seal and she's ripping the head off this penguin shaking up from side to side, these are the feet here trailing behind she whips it back and forth to turn it inside out so she can eat the meat and.

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00:13:33.930 --> 00:13:42.900

Tyson Brown: It was pretty horrific there is a chunk there chunks of meat in the water, she came up underneath the boat she ran the penguin underneath the whole of the boat almost knocked us in the water, we had to sit down.

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00:13:43.170 --> 00:13:51.990

Tyson Brown: She was longer than our 12 foot long zodiac boat and that's when you add on my guide said it's time for you to get in the water yeah and I said.

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00:13:53.100 --> 00:14:02.940

Tyson Brown: And I and he's just big strong burly sweet and very strong guy and you know he's authoritative individual and I was like you know forget that except they probably use a different word.

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00:14:03.480 --> 00:14:04.770

Tyson Brown: Starting with the letter F.

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00:14:05.520 --> 00:14:14.400

Tyson Brown: And he's like look at you complain about your budget you complain about not enough time blah blah blah now you shut up and get in the water, I present you a bloody big beautiful leopards you know get in the water.

83

00:14:14.730 --> 00:14:26.010

Tyson Brown: And so I looked at him I look at the leopard seal i'm trembling like a dry mouth and I part my lips, with my snorkel and roll over the side of the zodiac into the water with this seal terrified I mean this is a big big animal.

84

00:14:26.550 --> 00:14:32.040

Tyson Brown: And then he does she comes on shooting right over to me, and she engulfs my camera and inside.

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00:14:33.840 --> 00:14:37.980

Tyson Brown: I only say that because we could probably go on for the entire video but.

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00:14:38.670 --> 00:14:50.760

Tyson Brown: You also check it out check out Paul Nicholas and his experience with this, the leopard seal because she adopt him and tries to feed him so that becomes an important part of his story, you know hand it back to you with donnie.

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00:14:51.630 --> 00:15:05.550

Donn Kirkwood: Ah, thank you Tyson um so i'm looking at the different pathways that within explorers that really highlight what what students can do within the field of science.

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00:15:06.330 --> 00:15:21.690

Donn Kirkwood: And, of course, the other focus areas which are not as relevant with our partnership with the National Geographic is looking at the system supports and then, of course, working with the leadership at the district, and the school level.

89

00:15:23.820 --> 00:15:45.420

Donn Kirkwood: um so what i'll do now is when we look at our powerful science practices we have eight areas instead of just reading the eight areas, I want to give everyone the opportunity to kind of look at these in whichever one which one really stands out to that you really connect with.

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00:15:46.560 --> 00:15:59.250

Donn Kirkwood: we're going to use the annotation So if you go to the top, you should see a task bar, where it says more on if it's not there might be on the taskbar itself, but you should see annotate once you click on annotate.

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00:16:00.270 --> 00:16:07.410

Donn Kirkwood: We go past the mouse all the way over to where it says damn should be the fifth.

92

00:16:07.950 --> 00:16:20.970

Donn Kirkwood: From the left, if you could just put a heart next to the one that you really like or star on and i'm just giving you just a minute to read through these and see which one really.

93

00:16:21.510 --> 00:16:41.700

Donn Kirkwood: stands out to you, for example, let me go ahead and put a heart next to the engaging in academic discourse that's one of the key things that I really strive supporting is really getting students to to share with the discoveries are within science.

94

00:16:50.040 --> 00:16:52.140

LaTonya Bolden- SREB: This and when saying how to annotate.

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00:16:54.780 --> 00:17:06.330

LaTonya Bolden- SREB: Because it may be another view options at the top of your screen and then you scroll down to annotate and you know you should get the option to do your to do your stamp.

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00:17:09.090 --> 00:17:09.750

Donn Kirkwood: Excellent.

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00:17:12.240 --> 00:17:35.250

Donn Kirkwood: definitely see a soul hearts around presenting evidence of learning and also the the gathering of data information us in developing evidence what we're going to do now is take the opportunity to unpack our powerful science practices so i'll go ahead and clear our annotations.

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00:17:36.420 --> 00:17:47.310

Donn Kirkwood: And i'm going to pass it back to low tanya and let her start us out with these wonderful powerful science practices.

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00:17:48.540 --> 00:17:56.370

LaTonya Bolden- SREB: Thank you don what is so unique about the structure is what have you so unique about the practices period really is the structure.

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00:17:56.760 --> 00:18:06.480

LaTonya Bolden- SREB: Of the practices, and you know, usually you know we get standards and they have what the teacher should teach and all of that, but what the practices does is that it provides.

101

00:18:07.290 --> 00:18:12.750

LaTonya Bolden- SREB: Three points three things to look at within them so they have we have teacher behaviors.

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00:18:13.410 --> 00:18:23.190

LaTonya Bolden- SREB: So basically, what is the teacher doing, how is the teacher presenting the information presenting the content to the student, how is the teacher presenting the.

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00:18:23.910 --> 00:18:37.620

LaTonya Bolden- SREB: The content, so the students are looking at it making sense of phenomena, then we have student behavior so what our students doing so as a teacher is presenting what is the students supposed to be doing.

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00:18:38.220 --> 00:18:46.110

LaTonya Bolden- SREB: In this and then there's the artifact so the artifacts and the list of artifacts that we have are not exhaustive, but it's just.

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00:18:46.500 --> 00:18:54.540

LaTonya Bolden- SREB: A way that you can say Okay, how do I know that students has that brash this particular practice, how do I know that the students are actually.

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00:18:54.810 --> 00:19:07.710

LaTonya Bolden- SREB: Doing this and doing this work, and so I love that and that's to me what is so unique about the practices is that it has a teacher component as a student component, as well as artifacts.

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00:19:10.470 --> 00:19:13.050

LaTonya Bolden- SREB: So, looking at the first on three practices.

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00:19:14.250 --> 00:19:23.040

LaTonya Bolden- SREB: We have where students are making sense of phenomena and then developing questions designing solutions and also gathering data.

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00:19:23.520 --> 00:19:28.890

LaTonya Bolden- SREB: So this is what makes the partnership with National Geographic so exciting and so dynamic.

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00:19:29.220 --> 00:19:39.900

LaTonya Bolden- SREB: because it gives us as teachers as educators, it gives us resources and avenues for students to explore phenomena, whether it's natural weather is human design.

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00:19:40.500 --> 00:19:50.700

LaTonya Bolden- SREB: So, through this exploration of phenomena, they are questioning, we know that that's the heart

of it questions right constantly asking questions they are gathering data.

112

00:19:51.060 --> 00:19:55.680

LaTonya Bolden- SREB: They are designing solution that we're talking about students doing this, this work.

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00:19:56.130 --> 00:20:10.440

LaTonya Bolden- SREB: And then they're also making iterations you know constantly making integrations through this process, we know of course that is a benchmark of being a scientist, so they are actually in essence doing the work of a science.

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00:20:11.160 --> 00:20:16.530

LaTonya Bolden- SREB: And so that's what's so great about this too is that they're using data tables they're using models.

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00:20:17.100 --> 00:20:27.810

LaTonya Bolden- SREB: they're using charts to synthesize the information that they're gathering from the questions that they post and so Lucas are learning how to use evidence.

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00:20:28.500 --> 00:20:39.060

LaTonya Bolden- SREB: To actually support or refute scientific claims and when we know that sign making scientific claims and testing planes is also a foundational piece.

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00:20:39.510 --> 00:20:52.230

LaTonya Bolden- SREB: To science because Carl Sagan once said that claims that cannot be tested assertions that can that are immune to disprove are worthless, no matter how much they inspire us or how much they.

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00:20:52.710 --> 00:21:01.710

LaTonya Bolden- SREB: tickle our imagination, it has to be able to be tested all claims have to be tested so testing claims the foundation of everything that is science.

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00:21:02.070 --> 00:21:18.510

LaTonya Bolden- SREB: So Sri these powerful practices and National Geographic provides a framework for students to embark on that work and for them to be critical thinkers was what we want and then, of course, with them to be true seekers using evidence.

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00:21:20.550 --> 00:21:21.360

LaTonya Bolden- SREB: Actually you've done.

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00:21:22.590 --> 00:21:32.130

Donn Kirkwood: All right, thank you so i'm going to look at the next couple of practices on moving on from that crushing the next is really kind of like.

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00:21:32.580 --> 00:21:53.280

Donn Kirkwood: A scientist, I was looking at the claim evidence reasoning so willing, creating that claim, but not just creating the claim but find the evidence to support that claim looks at our next practice which is really looking at using evidence to explain the causes of a phenomena.

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00:21:54.420 --> 00:22:04.740

Donn Kirkwood: And when we start looking at the evidence, a lot of that will be done through arguments graphs or models on being able to really communicate that.

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00:22:05.040 --> 00:22:28.920

Donn Kirkwood: But as we move on beyond the evidence the next critical thing is is really helping students to be able to communicate to use that discourse to explain the reasoning behind their evidence in really connecting that reasoning, to the phenomena using those arguments graphs or models.

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00:22:31.080 --> 00:22:43.470

Donn Kirkwood: So, really, we can add causes and then moving into that discourse to really argue the relevance of the information on the next two practices, once they have that evidence.

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00:22:43.830 --> 00:22:51.240

Donn Kirkwood: And really looking at their discourse through that logical reasoning on using those models to explain that phenomena.

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00:22:51.510 --> 00:23:01.710

Donn Kirkwood: is then having the opportunity through collaboration and feedback and reflection to start sharing those ideas with others to really work on the soft skills.

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00:23:02.070 --> 00:23:08.430

Donn Kirkwood: of presentation and leadership and collaboration, but at the same time getting those feedback.

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00:23:09.210 --> 00:23:18.810

Donn Kirkwood: from each other from the teacher, which also, if you look at the teachers behaviors this is really those four on formative assessments when you're constantly.

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00:23:19.050 --> 00:23:30.120

Donn Kirkwood: Looking at that visible learning from others on the next one is really looking at, not just a one layer just doing the lab report, but having multiple layers.

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00:23:30.450 --> 00:23:40.500

Donn Kirkwood: on which we call the three dimensional performance where not only do they have the written product, but then they have the the models are the arguments that debate.

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00:23:41.100 --> 00:23:59.340

Donn Kirkwood: Taking that information in using it in an authentic way to discuss that scientific reasoning and then, of course, you know, being able to present it to others in to be able to can keep that reasoning i'm going to pass it back over to.

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00:24:00.840 --> 00:24:01.500

Donn Kirkwood: over time.

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00:24:03.090 --> 00:24:08.940

LaTonya Bolden- SREB: Yes, so the last one is about, of course, applying science learning beyond the classroom to make sense.

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00:24:09.870 --> 00:24:21.300

LaTonya Bolden- SREB: So basically being able to take it outside of the four walls of the classroom and, of course, we know that National Geographic has been known for us for known for doing that, but that is an important piece.

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00:24:21.840 --> 00:24:33.270

LaTonya Bolden- SREB: To you know engaging students and student learning is that it has to be relevant to students it's imperative that students are able to connect what they learn in the classroom to relevant.

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00:24:33.570 --> 00:24:41.790

LaTonya Bolden- SREB: outside of the classroom experiences so doing so i'm really helps to address the whole why we learned this piece.

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00:24:42.600 --> 00:24:54.360

LaTonya Bolden- SREB: That really helps students when they are able to connect and share what they are experiencing what they're seeing in the phenomena making sense of it and then relating it to something in the real world.

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00:24:58.440 --> 00:25:09.750

LaTonya Bolden- SREB: So with that pace we have a very special guest with us today, we have miss Amani Morris I miss a mighty Morris is she has the honor of being a.

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00:25:10.110 --> 00:25:18.150

LaTonya Bolden- SREB: teacher in fulton county schools at langston Hughes high school as a science lead teacher she has been teaching.

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00:25:18.660 --> 00:25:25.080

LaTonya Bolden- SREB: High School science for over 10 years and and i've had the distinct pleasure of seeing.

142

00:25:25.620 --> 00:25:35.790

LaTonya Bolden- SREB: This moore's in action and she is phenomenal and so she has been she's taught all areas of science and she's taught everything from biology.

143

00:25:36.240 --> 00:25:48.030

LaTonya Bolden- SREB: To ap physics and so she's had array of students and array of experiences, she is a meteorologist by training, she has a bachelor's in meteorology and her master's in.

144

00:25:48.480 --> 00:26:00.780

LaTonya Bolden- SREB: Physical on geography and so she is a science right and and has a love for education and a love for students and so um I would pass it on to the source.

145

00:26:01.560 --> 00:26:19.800

Imani Morris: All right again afternoon everyone and again, it is my honor to share with you guys, so in my classroom experiences with not only the National Geographic classroom library, but i'm showing you guys how it does definitely aligned with I like to call them peace tips if you don't mind.

146

00:26:21.180 --> 00:26:32.580

Imani Morris: Though powerful science instructional practices, but showing you guys how they align to them and just you know some of the ways that I actually just use them in my classroom so the way that I.

147

00:26:33.750 --> 00:26:40.290

Imani Morris: wanted to present this information to you guys is just to focus on the first three pieces that were mentioned.

148

00:26:41.370 --> 00:26:58.680

Imani Morris: Simply put, observing phenomena and making sense of natural phenomena developing those testable questions and coming up with their claims and also gathering their data, and you know, using that as evidence to support their claim and answer their overall guiding question.

149

00:27:00.300 --> 00:27:03.540

Imani Morris: So, for the first piece that or just so that you know, in the background.

150

00:27:04.530 --> 00:27:13.770

Imani Morris: This year i'm teaching or systems general physics in ap physics one these artifacts and experiences come from my earth systems class.

151

00:27:14.400 --> 00:27:33.600

Imani Morris: Which is a team top class, so I have an array of different learners at different levels and anyone who is educated, especially in this time knows that a team top class is quite a heavy load but National Geographic is a rock star, and this is saving my life and making my life easier.

152

00:27:34.860 --> 00:27:45.360

Imani Morris: So the unit that we were on for this particular these artifacts was the plate tectonics unit, so we had already gone over plate interaction.

153

00:27:46.050 --> 00:27:57.450

Imani Morris: plate boundaries how geologic features form from those from plate interaction and then we were going, we were digging a little bit deeper into the geologic hazards.

154

00:27:57.720 --> 00:28:05.640

Imani Morris: Their farm from plate interaction and we were just introducing you know volcanism and we had just gone over the types of volcanoes.

155

00:28:06.540 --> 00:28:17.850

Imani Morris: So we needed to next go into the different types of volcanic eruptions and essentially figuring out what causes each type of volcanoes erupting the way that it does.

156

00:28:18.630 --> 00:28:25.920

Imani Morris: So my do now for that day, so to speak, I showed two videos one of a shield volcano erupting and one of a.

157

00:28:26.460 --> 00:28:40.740

Imani Morris: composite volcano erupting and I just simply told them to make note of what they observed with a notice and i'm you know in my classroom is foot foot for these types of assignments is really freestyle that i'm trying to just go for it so.

158

00:28:41.910 --> 00:28:52.740

Imani Morris: You know, there were things there was shouted out about the color of the magma the way you know so on and so forth, but the number one thing that they mentioned was you know the the.

159

00:28:53.070 --> 00:28:59.610

Imani Morris: How the shield volcano have more of a calm, like they like to say type of eruption versus the composite volcano.

160

00:28:59.940 --> 00:29:07.230

Imani Morris: which was born explosive and dramatic and I said, you know what you got it boom that's exactly what we're going to talk about today and.

161

00:29:07.680 --> 00:29:18.360

Imani Morris: From there, as you can see National Geographic had a wonderful resource for me to use as like you know, an intro into learning about the different types of volcanic eruptions so.

162

00:29:19.380 --> 00:29:27.780

Imani Morris: This specific resource was a video, it was a type of volcanic eruptions, and the great thing about their resources that it already came coupled.

163

00:29:28.140 --> 00:29:42.180

Imani Morris: On within that resource of venn diagram and just so you know, one of the things, one of the instructional focuses at my particular school is focused note taking so Simply put, making sure that the types of notes that they are writing.

164

00:29:43.620 --> 00:29:52.890

Imani Morris: course correlate with what they want, what we want them to learn, so if I wanted them to know how to differentiate between each of the different types of volcanic eruptions.

165

00:29:53.190 --> 00:30:12.120

Imani Morris: Of course, one of the best ways to take notes on data is to do a venn diagram and do a compare and contrast so national geographics resource library already had that embedded within this activity, which was awesome so as you can see, after we did a do now, they were able to go into the.

166

00:30:13.530 --> 00:30:23.040

Imani Morris: The resource that I provided with them in teams and they watch the video they were able to do a venn diagram, as you can see my student even put some notes in the.

167

00:30:23.370 --> 00:30:30.060

Imani Morris: In the corner about what volcanoes work in general and in terms of another artifact what I.

168

00:30:30.420 --> 00:30:37.530

Imani Morris: test them to do was to come up with a preliminary explanation as to why these volcanoes they had different types of eruption.

169

00:30:37.770 --> 00:30:55.320

Imani Morris: So, of course, the hardest part about this was to give them not to do, Google research to you know kind of come up with their own guests, as to why that Europeans were the way to the word and the picture on the right hand side is one of my students write ups so they're preliminary explanation.

170

00:30:56.490 --> 00:30:59.700

Imani Morris: In terms of the types, the different types of volcanic eruptions.

171

00:31:00.930 --> 00:31:02.370

Imani Morris: Can we go to the next slide please.

172

00:31:04.320 --> 00:31:06.570

Imani Morris: Okay now this, to be honest, was the most.

173

00:31:08.430 --> 00:31:13.710

Imani Morris: exciting part of my experience with this particular unit on the developing.

174

00:31:14.520 --> 00:31:26.340

Imani Morris: Questions to plan and carry out investigations and the thing about it is, of course, like I said, I have to talk classes, so this was where I was able to focus on another instructional focus.

175

00:31:26.580 --> 00:31:34.290

Imani Morris: At my school, which is gradual release you know the whole I do we do you do kind of thing, but to get them.

176

00:31:36.810 --> 00:31:40.320

Imani Morris: You know comfortable with a tool that they were going to be using.

177

00:31:41.250 --> 00:31:53.970

Imani Morris: For this particular assignment I made them use the map, making to which is a phenomenal resource is really just fun in general to kind of play with it and see the types of layers that you can add to the map and how you can.

178

00:31:54.600 --> 00:32:01.350

Imani Morris: You know, to be honest, create you know testable questions and let them kind of go from from there, which will be discussed a little bit later.

179

00:32:02.310 --> 00:32:07.620

Imani Morris: But to get them actually to learn about the mapmaking basics, in general, I made them.

180

00:32:08.010 --> 00:32:16.170

Imani Morris: Completing intro to mapmaking assignment, which is general they just learned how to make a map in general and actually I got questions on.

181

00:32:16.530 --> 00:32:32.880

Imani Morris: um okay well how do you do this as a profession is Morris, because this is easy, and that was my segue to go into Okay, do you know what cartography is and the science of mapmaking and you know how they actually get the data to create these layers so that led to a good discussion.

182

00:32:34.620 --> 00:32:42.090

Imani Morris: But after that, then the real test came and they were tasked to develop a question to carry out an investment investigation.

183

00:32:42.480 --> 00:32:48.750

Imani Morris: And I kind of free started to be honest, I had the map maker interactive projected on my friend screen.

184

00:32:49.200 --> 00:32:56.580

Imani Morris: And I modeled my thinking process on how will come up with a testable question, so I said okay i'm going to add, you know.

185

00:32:57.000 --> 00:33:04.590

Imani Morris: i'm going to add these two layers i'm going to add layers of you know, the ocean currents layer and the hurricane tracks layer

186

00:33:04.980 --> 00:33:14.550

Imani Morris: Then you know I started to talk about well you know, I wonder if there is a relationship between the ocean current that's you know, President and the amount of hurricanes that pass over that particular area.

187

00:33:14.910 --> 00:33:24.450

Imani Morris: So that kind of gave them a you know that kind of helped to model, you know their thought process on how they were to develop their own testable question.

188

00:33:26.010 --> 00:33:27.540

Imani Morris: So with that.

189

00:33:28.980 --> 00:33:39.510

Imani Morris: Some of the example questions that they came up with which to be honest, they all had to come up with their own individual question, there may have been repeats but their task was to come up with their own question to.

190

00:33:40.530 --> 00:33:52.530

Imani Morris: To test, so to speak, some of the examples, is there a relationship between plate boundaries and volcanic activity in what areas will humans be impacted the least or most by volcanoes.

191

00:33:53.610 --> 00:34:00.120

Imani Morris: Some of them want to even talk or focus more on seismic activity and earthquakes which I say that's totally fine.

192

00:34:00.990 --> 00:34:06.480

Imani Morris: But is there a relationship between the strength of the earthquake and a type of plate boundary it sits on so.

193

00:34:07.230 --> 00:34:18.780

Imani Morris: Through that particular activity, they were able to literally become scientists and now use the map maker to and develop a question that they want us to actually investigate and test.

194

00:34:20.190 --> 00:34:28.260

Imani Morris: And just before you go Those are two pictures of my babies working hard on the left hand side of that is one of my students he's.

195

00:34:28.800 --> 00:34:38.190

Imani Morris: Working on the first task, where they had to just do the math making intro assignment, in general, and the second image this on the right hand side, this one of my baby says she's.

196

00:34:39.150 --> 00:34:45.480

Imani Morris: You know, putting together some of the layers and kind of coming up with her testable question next slide please.

197

00:34:46.620 --> 00:34:57.120

Imani Morris: So these last two slides goes with that third piece of that I was talking about gathering data and information and developing evidence now, this was.

198

00:34:58.230 --> 00:35:03.990

Imani Morris: Very like rewarding from a teacher standpoint, so to speak, this is where I kind of let them had it but.

199

00:35:04.410 --> 00:35:13.500

Imani Morris: The thing about this is, I love the wording in the piece of his work collaboratively to gather data and information because, with a team top players.

200

00:35:13.740 --> 00:35:28.770

Imani Morris: Sometimes we just can't expect them to necessarily just know how to do it on their own, of course, they need some support, and in my class I definitely encourage collaboration there's no stupid question and those students stupid answers, so to speak.

201

00:35:29.910 --> 00:35:37.200

Imani Morris: Action nail on your neighboring partners, you know you guys work together to figure out what you need to figure out so.

202

00:35:38.370 --> 00:35:47.340

Imani Morris: They were able to collaborate and figure out a way to create a map, there were answered their own individual questions so they're literally in groups.

203

00:35:47.580 --> 00:36:00.360

Imani Morris: As each other, like okay well my question that I came up with was so on and so forth i'm thinking i'm going to add this layer and that lean away you think that makes sense or am I doing something wrong so on and so forth, so.

204

00:36:01.320 --> 00:36:09.570

Imani Morris: That was just that was to be honest, one of those days, where i'm just walking around and kind of just listening to some of the the the interactions which, like I said was.

205

00:36:09.960 --> 00:36:16.920

Imani Morris: very rewarding so those to be honest, so just some pictures of the students um you know actually.

206

00:36:17.490 --> 00:36:30.720

Imani Morris: coming up with their maps and collaborating and figuring out the way that they're going to actually answer and their testable question and making sure that they respond to their claims speak next slide please.

207

00:36:32.010 --> 00:36:37.500

Imani Morris: And this goes with the same piece that, but this is some of the artifacts that they came up with.

208

00:36:38.220 --> 00:36:54.300

Imani Morris: The screen is a little bit small, so I can't read exactly it's just small on my end, but this is from one of my students and if i'm not mistaken Steve okay yep um she decided to investigate the third example question that I mentioned about.

209

00:36:55.980 --> 00:37:14.580

Imani Morris: phenomena say no, it was like the second sorry, is there a relationship between um or or in what areas are humans most or least impacted by volcanic activity so she created her map as her evidence, and you know, to help to support her claim, where she felt like.

210

00:37:16.290 --> 00:37:25.380

Imani Morris: People who lived near volcanoes will be you know impacted the most so on so forth, she even added a layer for population density.

211

00:37:25.740 --> 00:37:30.900

Imani Morris: which I didn't even tell her about that type of social it's like Okay, well, I can put population density on here.

212

00:37:31.140 --> 00:37:43.590

Imani Morris: And I can just show how certain areas on the globe, they have a greater population density will probably be more impacted by the volcanoes that are situated near them will say hey that's perfect.

213

00:37:44.370 --> 00:37:58.920

Imani Morris: So that was her map i'm her you know her artifact her evidence and she even did a writeup to kind of to show how you know PR map is used as evidence to support her claim.

214

00:38:00.240 --> 00:38:18.060

Imani Morris: great experience I am so excited to hear about you guys learn more about the matchmaking tool, it is phenomenal I, to be honest i've kind of gone over it several times and just play with the layers and seen other things that I can do in my class that's it.

215

00:38:20.670 --> 00:38:22.380

LaTonya Bolden- SREB: Thank you so much, Miss Morris.

216

00:38:22.470 --> 00:38:23.460

Imani Morris: you're welcome.

217

00:38:28.980 --> 00:38:44.280

Tyson Brown: That was great thanks Morris, I appreciate the shout out to our many resources and i'm just going to give a quick survey of what we feature Just to give you an idea of what you can find at the resource library, because it features a range of resources.

218

00:38:45.660 --> 00:38:54.540

Tyson Brown: From lessons like this one about symbiotic relationships in the marine ecosystems in which students analyze videos.

219

00:38:54.990 --> 00:39:14.160

Tyson Brown: To make observations about species populations and communities of organisms and discuss their symbiotic relationships, then they create a hypothetical marine ecosystem and describe the adaptive trophy and

symbiotic relationships between the biotic and a biotic components of the ecosystem.

220

00:39:15.390 --> 00:39:31.650

Tyson Brown: let's go on to the next one, the resource library also includes shorter activities like this one called exploring how robots move in which students experiment with semantics and hydraulics and apply these systems to produce movement in their own robots.

221

00:39:32.820 --> 00:39:33.750

Tyson Brown: let's go to the next one.

222

00:39:35.370 --> 00:39:54.720

Tyson Brown: The library features a large number of articles, like this one about GMOs and chocolate and how genetic engineering may be used to stave off an impending chocolate shortage brought about by climate change, and this particular article also is level so that there are variety of readings.

223

00:39:55.740 --> 00:40:08.100

Tyson Brown: skill levels available to your students, so if you need a resource that is a little easier to access, then there is a version of it in that collection.

224

00:40:09.240 --> 00:40:11.430

Tyson Brown: And then the final resource.

225

00:40:12.870 --> 00:40:18.900

Tyson Brown: That we have is another one we're connected to genetic engineering, this one is a infographic.

226

00:40:19.650 --> 00:40:35.820

Tyson Brown: which shows how scientists use crispr technology to edit genes for different characteristics note that this infographic is supported by a series of ideas to guide at a discussion about hypotheses and experimentation, so, in addition to the infographic we've we've.

227

00:40:36.840 --> 00:40:43.800

Tyson Brown: elaborated on it to give teachers, a quick quick glimpse into how they could use it in the classroom.

228

00:40:45.120 --> 00:40:46.230

Tyson Brown: let's go to the next slide.

229

00:40:49.530 --> 00:40:59.910

Tyson Brown: All right, alright so as I showed earlier National Geographic is, among other things, known for its videography and I wanted to.

230

00:41:00.720 --> 00:41:13.650

Tyson Brown: show this video of explorer toe for white who uses recycled cell phones to find solutions to the problem of illegal logging in remote roof rain forest to stop deforestation.

231

00:41:15.030 --> 00:41:17.850

Tyson Brown: done if we could cab over the next.

232

00:41:19.920 --> 00:41:21.480

Tyson Brown: Video and take a look at that.

233

00:41:24.720 --> 00:41:25.470

Tyson Brown: If you still have it.

234

00:41:34.770 --> 00:41:35.220

Tyson Brown: There you go.

235

00:41:42.240 --> 00:41:47.340

I think if we have one central challenge of our generation right now is to make sure the forest themselves can survive.

236

00:41:48.660 --> 00:41:51.780

But 13 forest is one of the fastest cheapest ways justify climate change.

237

00:41:53.160 --> 00:42:00.720

These forests are born, the greatest resources that we could possibly hope for in the history of the planet, and I think the world when faced with the consequences would love to keep them.

238

00:42:02.070 --> 00:42:12.420

My mission is to make sure that we can build a system come with plans complex techniques come up with strategies, whereby the entire forest to the world, all these natural ecosystems be protected.

239

00:42:14.790 --> 00:42:25.890

My name is Joe for white National Geographic explorer and the founder reinforce connection during force connection is this organization that said that I run this largely about trying to stop illegal logging in the rain forest.

240

00:42:27.600 --> 00:42:30.480

Where do you live in a city or a lot of coastline on a mountaintop.

241

00:42:30.960 --> 00:42:37.200

Everywhere you are a climate change will affect you in some way but it's such a big global problem that a lot of people struggle with ways that they can have an effect.

242

00:42:37.770 --> 00:42:40.320

there's a lot of great ways we can do that when it comes to consuming energy.

243

00:42:41.100 --> 00:42:50.760

But, most people don't realize that deforestation is the second largest contributor climate change trees, we know they take carbon dioxide atmosphere, but the thing is a trio live it'll die.

244

00:42:51.090 --> 00:43:00.270

decompose and so you have this huge carbon sink, and when you cut a tree down, especially if you burn it that stuff gets exposed to the air and if you can post it and all that carbon gets released like a carbon bomb.

245

00:43:02.760 --> 00:43:06.000

Tyson Brown: 90% of all the logging taking place in the rain forest.

246

00:43:08.040 --> 00:43:13.410

Tyson Brown: So that's an example of one of what one of ours explores to do is another great example of how.

247

00:43:14.730 --> 00:43:30.420

Tyson Brown: explorer has used a variety of experiences and skill sets to carve out a career and even create his own nonprofit to support his career in protecting the rainforest let's go to the next slide.

248

00:43:31.620 --> 00:43:36.150

Tyson Brown: The next portion of this slide that's going to be a feature of a mapmaker resource.

249

00:43:37.890 --> 00:43:46.950

Tyson Brown: And that is part of our award winning mapping tool mapmaker interactive this map layer that we're going to show you in just a second.

250

00:43:47.340 --> 00:43:59.700

Tyson Brown: incorporates a data set that helps students, develop a better understanding of how much water is available to local populations globally and you're going to I think it'll be tapped over and your tabs up above.

251

00:44:03.150 --> 00:44:14.520

Tyson Brown: Its kindle left I think it's one of the first ones yeah there you go that drinking there you go and if you could just open up the mapmaker layer it'll take us into mapmaker.

252

00:44:21.240 --> 00:44:30.870

Tyson Brown: So if you go yeah there you go you're in the lair perfect all right, let me pull up my description of that because I wanted to share what this mapmaker layer is.

253

00:44:31.290 --> 00:44:44.220

Tyson Brown: It features or shows a percentage of the population in the world that access is there, drinking water from unprotected sources such as dug wells springs rivers, lakes ponds are canals.

254

00:44:44.940 --> 00:44:56.550

Tyson Brown: The data comes from the world resources Institute and it's an index, which means that it prizes data and

illustrated 13 different types of water related risks, such as the amount.

255

00:44:57.000 --> 00:45:06.600

Tyson Brown: Water quality local regulations, etc, some areas of the Sahara have little water, but there are so few people that the risk to water as a result as low.

256

00:45:07.050 --> 00:45:17.490

Tyson Brown: and other places have high populations with low water availability or safe instruct infrastructure to access water and those will show as read, so one of the things that I wanted to call your attention to.

257

00:45:18.150 --> 00:45:24.780

Tyson Brown: As you go into the data if you could hit the plus market though right bottom corner of this map.

258

00:45:25.860 --> 00:45:29.550

Tyson Brown: You can zoom in on it see that plus just above there.

259

00:45:32.640 --> 00:45:36.480

Tyson Brown: there's a plus minus that will zoom in or zoom out there you go.

260

00:45:37.410 --> 00:45:53.490

Tyson Brown: So zoom in in the United States you'll see that we have relatively low risk across this country low or low to medium risk depending on where you are, if you use the if you just tap on the map and drag it upward you can show.

261

00:45:55.020 --> 00:45:56.010

Tyson Brown: Central America.

262

00:45:57.150 --> 00:45:59.910

Tyson Brown: which has a very different risk profile.

263

00:46:01.350 --> 00:46:21.330

Tyson Brown: It will show that from Guatemala to Nicaragua it's it's almost entirely in bright red and that's because the the access to clean water is is a lot more affected by both infrastructure and population density there and is one of the driving forces for immigration.

264

00:46:22.530 --> 00:46:39.000

Tyson Brown: into the United States, in addition to a lot of other factors, so this is something that's only going to get worse as climate change, worse, and the map itself is so data driven it does take a while to render but I encourage you to check this out, this is built on.

265

00:46:40.170 --> 00:46:45.810

Tyson Brown: Technology called our GIs this particular company that uses it is called Ezra.

266

00:46:47.070 --> 00:47:02.100

Tyson Brown: And we have created a version of those maps that is accessible to your learners and easier for you to implement in the classroom so I encourage you to check that out, and if you want.

267

00:47:04.350 --> 00:47:07.410

Tyson Brown: done let's go back to the slide the opening slide.

268

00:47:10.560 --> 00:47:21.090

Tyson Brown: In the slideshow and there will show the third component that I wanted to share with you, which is a proof ppl unit, so if you're.

269

00:47:21.870 --> 00:47:26.910

Tyson Brown: One of the if you're searching for a fully fledged project based learning unit.

270

00:47:27.630 --> 00:47:37.290

Tyson Brown: We have this one that explores the risks of climate change, in which students examine key causes and impacts of climate change on the earth's atmosphere and oceans.

271

00:47:37.680 --> 00:47:46.020

Tyson Brown: As well as mitigation and adaptation strategies students will analyze data from long term observations of climate in the air and underwater.

272

00:47:46.470 --> 00:47:59.640

Tyson Brown: Using graphs to convince Community Members to sign a climate change challenge pledge of their own design and let's go ahead and open the unit, so if you go to the tab over to that particular one and.

273

00:48:00.900 --> 00:48:12.960

Tyson Brown: scroll down just a little bit and you'll see that unit at a glance the right next to the image exactly and let's yeah I think that's probably big enough for folks to read.

274

00:48:13.980 --> 00:48:19.110

Tyson Brown: And you'll see that this unit offers four weeks or 19 hours of instruction.

275

00:48:20.040 --> 00:48:29.820

Tyson Brown: With up to 20 activities exploring the unit driven driving question, how can we communicate evidence of climate change, to convince our Community to act.

276

00:48:30.780 --> 00:48:38.190

Tyson Brown: As a product to call an ad unit students analyze the data and use it to create a climate change is a climate pet pledge, as I mentioned before.

277

00:48:38.820 --> 00:48:48.060

Tyson Brown: With three relevant strategies to mitigate climate change, they present their work to school, the school

community to convince others to help them address climate change.

278

00:48:49.050 --> 00:48:59.940

Tyson Brown: Among the strategies that you can employ in as as I read this one we scroll down into the lesson six sections so just a little bit further there you go.

279

00:49:03.030 --> 00:49:09.450

Tyson Brown: We can activate prior knowledge of climate change and its causes and consequences, where the gallery walk so students will.

280

00:49:10.590 --> 00:49:19.650

Tyson Brown: discuss a video while they're doing this lesson video that shows current climate change effects and now read encyclopedic articles articles.

281

00:49:19.950 --> 00:49:31.890

Tyson Brown: To define and distinguished the terms, climate change and global warming and finally students will record their pre existing knowledge and question in result response to the unit challenge.

282

00:49:32.370 --> 00:49:39.210

Tyson Brown: In less than two students will examine the causes and effects of extreme weather events and read.

283

00:49:39.900 --> 00:49:49.500

Tyson Brown: and read to contrast weather and climate an Expo create in revived models of extreme weather events using knowledge of weather variables and finally students will link.

284

00:49:49.890 --> 00:49:58.860

Tyson Brown: extreme weather events and climate change students use an interactive graph and long term data sets as well as they create their own graphical representations of weather data.

285

00:49:59.520 --> 00:50:06.810

Tyson Brown: And, in less than three students make and evaluate predictions related to climate changes effects on the oceans.

286

00:50:07.260 --> 00:50:14.820

Tyson Brown: Using evidence from videos articles and demonstrations next little exam analyze and graph data on ocean acidification.

287

00:50:15.180 --> 00:50:25.320

Tyson Brown: Sea surface temperature and changes and sea level and finally students will use the data and their visualizations to make evidence based predictions and examine adaptation technologies.

288

00:50:25.890 --> 00:50:32.790

Tyson Brown: And then the final lesson students will explore the human effects of climate change and global strategies

for mitigation at that station.

289

00:50:33.240 --> 00:50:40.110

Tyson Brown: Next they'll track their own carbon footprint and interview the school Community members to identify key carbon admitting behaviors.

290

00:50:40.590 --> 00:50:50.010

Tyson Brown: Finally, students will design and present a climate change challenge pledge to others in the school community to commit to reducing their climate impact.

291

00:50:50.730 --> 00:51:04.830

Tyson Brown: So it's a range a whole arc of activity that the students engage in both learning about climate change and the ways that that the world contributes to it and how they individually and collectively can address this.

292

00:51:06.570 --> 00:51:18.690

Tyson Brown: And I think that's it for this slide so let's go on to the next one, which is where you can find information about the resource library.

293

00:51:20.970 --> 00:51:22.770

Tyson Brown: tanya I don't know if you want to lead the group.

294

00:51:23.160 --> 00:51:24.240

Tyson Brown: Yes, over here.

295

00:51:24.720 --> 00:51:43.110

LaTonya Bolden- SREB: Absolutely, so, if you would go in the chat if you someone will all of you, if you can put in topics, you can just tell us topics that you would like to research in the library, so we would like, for you all, just to give us some topics okay chemical reactions.

296

00:51:44.850 --> 00:51:45.540

Tyson Brown: let's try.

297

00:51:46.620 --> 00:51:51.240

Tyson Brown: don if you could just type in chemical reactions in the search by topic.

298

00:51:52.680 --> 00:51:53.970

Tyson Brown: window yeah there you go.

299

00:52:03.540 --> 00:52:09.270

Tyson Brown: There we go we've got an article that encyclopedic entry that talks about bioluminescence.

300

00:52:11.340 --> 00:52:18.750

Tyson Brown: we've got a level article, the conservation of matter during physical and chemical changes so a variety of things.

301

00:52:20.550 --> 00:52:22.110

Tyson Brown: Electricity and magnetism.

302

00:52:23.610 --> 00:52:25.530

Tyson Brown: When you go back up to that the top down.

303

00:52:27.930 --> 00:52:39.210

Tyson Brown: And to start it clear hit the X, to the right of your search box there and that'll clear on everything and take us back to the beginning and was he tried to try, electricity and magnetism.

304

00:52:39.330 --> 00:52:42.660

LaTonya Bolden- SREB: Yes, electricity magnetism so we have there.

305

00:52:55.830 --> 00:52:56.580

Tyson Brown: And you'll see that.

306

00:52:57.960 --> 00:53:02.250

Tyson Brown: As you scroll down in the left, rail, there are.

307

00:53:04.470 --> 00:53:19.320

Tyson Brown: A little parents article numbers after each one of the filters, so there there's number after grade six there's a number after activity, I think it's it may be 44 could be 84.

308

00:53:20.220 --> 00:53:34.680

Tyson Brown: I can't quite read it with my own eyes, but that gives you a sense of the number of resources that happened to feature that topic word in them, and if you were looking for something specific let's say you were just looking for.

309

00:53:35.940 --> 00:53:49.140

Tyson Brown: materials maps that the talked about electricity, you could just click on the box that left of maps and there you'll see that we talked about energy production, here in the United States in other parts of the world.

310

00:53:51.090 --> 00:53:54.600

Tyson Brown: So there are a number of ways to look at this topic.

311

00:53:55.980 --> 00:53:57.180

Tyson Brown: If you clear that.

312

00:53:58.650 --> 00:54:03.510

Tyson Brown: filter just below or yeah cleared their to.

313

00:54:04.710 --> 00:54:06.300

Tyson Brown: That just takes it all the maps.

314

00:54:08.370 --> 00:54:20.670

Tyson Brown: Next to filters and saves you'll see clear and then it says one if you if you click on that it'll eliminate all of the filters, we can go back to another topic battalion you see another topic, you want to look at.

315

00:54:20.700 --> 00:54:23.640

LaTonya Bolden- SREB: Yes, let's do genetics.

316

00:54:29.760 --> 00:54:33.810

Tyson Brown: So there we even have a collection at the top, that has 30 resources in.

317

00:54:34.440 --> 00:54:35.490

Tyson Brown: Our collections.

318

00:54:35.490 --> 00:54:49.590

Tyson Brown: Our materials that we've curated that are particularly germane to the topic, and so, if you want a quick easy way to filter out all of the stuff that might be just sort of a false lead.

319

00:54:50.130 --> 00:54:59.070

Tyson Brown: Go to a collection and we've already done some of the work for you to in this case collect materials about genetics there'll be articles that will be infographics.

320

00:54:59.970 --> 00:55:08.970

Tyson Brown: Maybe some videos maps a whole variety of things, and if you click on the word genetics in that collection done it'll take you to the actual collection.

321

00:55:18.450 --> 00:55:27.330

Tyson Brown: And this is a collection for middle school so it's grades five through eight and there are articles videos infographics lessons photographs and.

322

00:55:28.650 --> 00:55:30.090

Something called a central learn.

323

00:55:37.620 --> 00:55:49.260

Tyson Brown: So that's a quick tour, I encourage you all to check it out yourself, in fact I think Scott, you may have in the comment area or the chat bar the link to the resource library.

324

00:55:57.630 --> 00:56:06.240

LaTonya Bolden- SREB: So the read the link to the right the library is in the chat and the question here is this resource free to our schools.

325

00:56:06.750 --> 00:56:14.850

Tyson Brown: It is, it is absolutely no all of the resource library materials are open access and free for everybody to see us.

326

00:56:16.080 --> 00:56:17.040

Okay.

327

00:56:18.240 --> 00:56:27.720

LaTonya Bolden- SREB: Great so in the chat long life for you just to talk about what upcoming units might you want to pair with materials with National Geographic.

328

00:56:30.240 --> 00:56:31.860

LaTonya Bolden- SREB: And don you have insights on that.

329

00:56:34.140 --> 00:56:41.580

Donn Kirkwood: Yes, um so you know just thinking about as we're wrapping up a fantastic school year that.

330

00:56:42.300 --> 00:56:49.770

Donn Kirkwood: sounds, we have a little bit time to test out some resources on I definitely think this is a great opportunity.

331

00:56:50.520 --> 00:57:11.070

Donn Kirkwood: to sing what's in there and and see how it lines to what you're teaching the last couple months of school and to be able to utilize some of these resources because they definitely have the real world connection and it aligns directly to our framework with making schools work.

332

00:57:13.890 --> 00:57:15.720

Donn Kirkwood: So it looks like we have some comments.

333

00:57:21.450 --> 00:57:29.910

Tyson Brown: Sorry Kevin we have not had an outside evaluator that's something that we are planning to implement in the near future.

334

00:57:39.510 --> 00:57:58.170

LaTonya Bolden- SREB: Your brown talks about acids and bases as a topic that you want to unpack later in the school year and so as a chemistry person I saw that there are lots of activities for acids and bases pH and its relation to.

335

00:57:59.190 --> 00:58:06.150

LaTonya Bolden- SREB: The real world and water quality, as well, so there are tons of resources there for that.

336

00:58:15.990 --> 00:58:19.650

Donn Kirkwood: And we do have some upcoming free webinars.

337

00:58:20.670 --> 00:58:38.610

Donn Kirkwood: That we definitely would like to invite all our participants today on Monday April 25 we will be looking at national geographics and their social status, resources and then on Wednesday may 11 will be looking at the project based learning.

338

00:58:40.260 --> 00:58:53.910

Donn Kirkwood: The same location where you registered for this event, you could also register for other events and they all began at four o'clock and they finish up around 530.

339

00:58:57.840 --> 00:59:09.840

Donn Kirkwood: Are there any questions we're gonna stay on to answer any questions that you might have you can feel free to unmute yourself or ask questions within the chat box.

340

00:59:19.710 --> 00:59:34.440

LaTonya Bolden- SREB: And yes, Kevin I see that are the teacher action student actions for as far as the powerful instructional practices, yes, they are on the Sri be on website and also, I believe that Scott put them in the chat as well.

341

00:59:45.630 --> 00:59:51.120

LaTonya Bolden- SREB: Yes, and Kirsten just posted the link to the powerful instructional practices homepage.

342

00:59:59.730 --> 01:00:00.150

Kevin Gaylor: Hello.

343

01:00:03.750 --> 01:00:05.190

Scott Warren: Go ahead if.

344

01:00:05.220 --> 01:00:10.590

Kevin Gaylor: I just ask a question okay in listening to I think it's miss Harris, I miss Maurice Maurice talk.

345

01:00:11.610 --> 01:00:24.300

Kevin Gaylor: How you doing I was thinking about is there a protocol or a template of a protocol that kind of helps teachers structure, a lesson, such as someone she was talking about like.

346

01:00:25.770 --> 01:00:28.830

Kevin Gaylor: Something that would say okay this this, this would be.

347

01:00:29.940 --> 01:00:36.330

Kevin Gaylor: The resource that you could show as your do now your your bell ringer activity or your phenomenon.

348

01:00:37.860 --> 01:00:50.610

Kevin Gaylor: This could be the phenomenon that you were wants to start with, and like she was saying, the students looked at we're looking at the videos and the main thing that they saw was no one volcano had a more.

349

01:00:51.450 --> 01:01:03.390

Kevin Gaylor: Peaceful peaceful, but just a more kind of settled eruption as opposed to the one that was more explosive So is there is there, like a protocol, or something.

350

01:01:03.990 --> 01:01:14.310

Kevin Gaylor: That you all can suggest have or show to help teachers kind of guided listen for those who may not be used to this type of instruction.

351

01:01:15.210 --> 01:01:26.400

Kevin Gaylor: Like you know, this is, this is where you want to start this is where you want to go after you, you know start, and this is how you can incorporate some type of discussion piece.

352

01:01:28.890 --> 01:01:32.400

Kevin Gaylor: You know if you have something like this available.

353

01:01:35.010 --> 01:01:39.030

Imani Morris: Just curious well um i'll just comment on, in a sense of.

354

01:01:39.030 --> 01:01:41.190

Imani Morris: How I went about going.

355

01:01:43.170 --> 01:01:46.410

Imani Morris: That resource that was shared with you guys about.

356

01:01:47.760 --> 01:02:03.870

Imani Morris: What was the acronym it pieces right, so I think that's a great guy i'm not i'll just say in my experience, I am a person that I like to you know play with resources and kind of think about other ways that I can do things, or you know.

357

01:02:04.980 --> 01:02:11.490

Imani Morris: You know, ways that I can use the you know the resources, then my class I definitely rely on my plc.

358

01:02:12.630 --> 01:02:18.270

Imani Morris: You know cuz sometimes you know just doesn't come in your head, but you know if you collaborate with other educators.

359

01:02:19.350 --> 01:02:27.330

Imani Morris: It does help the kind of in these non that you get that flow now, I will say this is well i'm in my

experience.

360

01:02:28.650 --> 01:02:33.480

Imani Morris: Okay i'm one of those people that I like to be totally honest and transparent.

361

01:02:34.530 --> 01:02:35.220

Imani Morris: teacher.

362

01:02:37.110 --> 01:02:49.440

Imani Morris: I work smarter and not harder okay um there are a lot of resources out there that teachers have already come up with that you know, of course I just kind of look and see okay well, maybe I.

363

01:02:50.520 --> 01:03:00.360

Imani Morris: Can partner with that part, especially when it comes to the fact that I have to talk classes and like I said I have different learners that are different levels so sometimes some of the resources that I find maybe a little bit.

364

01:03:01.050 --> 01:03:12.030

Imani Morris: Too out there, or maybe a little bit too low level, so I just tweak them in the middle, but yeah that's what I would definitely do I will rely on my colleagues and my PLC members to kind of help.

365

01:03:13.080 --> 01:03:19.800

Imani Morris: Especially if you're kind of new to it and you want to kind of learn, just like a protocol do this first do that, first, to the other first.

366

01:03:20.130 --> 01:03:28.980

Imani Morris: And I will definitely rely on the pieces that were introduced to you because, to be honest, it does give you a good guy first observed and develop your own.

367

01:03:28.980 --> 01:03:33.030

Imani Morris: coin, you know, then gather your data so on and so forth.

368

01:03:34.260 --> 01:03:42.900

Imani Morris: and rely on some of the resources that you see other educators, have put together and they're readily available on the Internet, some are better than others.

369

01:03:43.170 --> 01:03:53.790

Imani Morris: But, as we know you kind of use your gauge, and you know figure out what kind of works best for you and i'm always just reach out, you know I would definitely.

370

01:03:54.780 --> 01:04:03.510

Imani Morris: You know, make sure that you guys have my contact information if you want to use any of the resources that I have come up with, because I have a couple that I have developed on my own.

371
01:04:03.960 --> 01:04:04.470
um.

372
01:04:05.490 --> 01:04:07.170
Imani Morris: But yeah That would be my approach.

373
01:04:08.490 --> 01:04:08.700
Kevin Gaylor: know.

374
01:04:09.390 --> 01:04:10.470
Kevin Gaylor: Very much miss Mars.

375
01:04:10.530 --> 01:04:11.190
Kevin Gaylor: No problem.

376
01:04:12.870 --> 01:04:13.320
Kevin Gaylor: Yes, ma'am.

377
01:04:13.860 --> 01:04:24.900
LaTonya Bolden- SREB: Yes, and we also have Scott for them to chat on, we have a ppl project baseline webinar that is coming up that will also give you great starter.

378
01:04:25.560 --> 01:04:32.490
LaTonya Bolden- SREB: tips for that using the ppl and inquiry approach to it, and so that would be a great way to.

379
01:04:33.210 --> 01:04:49.680
LaTonya Bolden- SREB: To segue into um how to begin, like that exploration kind of guide and doing all of that in your classes and how would you look on the ground with students, so I think that would be a phenomenal thing for you to tap into as well.

380
01:04:50.970 --> 01:05:05.070
LaTonya Bolden- SREB: So yes, so I mean there's a plethora of resources and we we're here to provide those resources as well, and so yeah there, there are plenty of things that we can help and assist with to help you make your classes engaging as well.

381
01:05:07.050 --> 01:05:07.890
Kevin Gaylor: Thank you all.

382
01:05:09.990 --> 01:05:13.530
Kevin Gaylor: Miss Mars, I would like to get your contact information, I want to pick your brain.

383

01:05:16.350 --> 01:05:17.580

Imani Morris: going away.

384

01:05:20.730 --> 01:05:24.480

Imani Morris: I have this code and put that in the chat because I don't have access to the chat i'm not sure.

385

01:05:25.080 --> 01:05:27.240

Imani Morris: What she'll she'll definitely i'm.

386

01:05:30.210 --> 01:05:31.020

Kevin Gaylor: Definitely isn't.

387

01:05:32.400 --> 01:05:34.320

Kevin Gaylor: I miss about and I would love to speak with you soon.

388

01:05:34.890 --> 01:05:35.970

LaTonya Bolden- SREB: All right, absolutely.

389

01:05:37.860 --> 01:05:39.930

Kevin Gaylor: i'm trying to build i'm trying to build my plc.

390

01:05:43.980 --> 01:05:45.900

LaTonya Bolden- SREB: Sometimes, like that, sometimes, if you.

391

01:05:45.930 --> 01:05:53.730

LaTonya Bolden- SREB: Are you a single time you're single and sometimes you have to kind of do that because i've been in you know that spot to I was the only.

392

01:05:53.730 --> 01:06:06.510

LaTonya Bolden- SREB: person teaching particular topic, and so I kind of had to reach out to get my to get my support and bill my resources So yes, so that's important, so I will send that.

393

01:06:06.660 --> 01:06:10.590

Kevin Gaylor: um Thank you so much, I actually worked with the State Department.

394

01:06:11.100 --> 01:06:21.270

Kevin Gaylor: Okay, and um you know, sometimes I find myself developing resources for developing these ideas trying to put my ideas down.

395

01:06:21.870 --> 01:06:28.080

Kevin Gaylor: And I guess it's just so confirming or just getting the hearing the validation.

396

01:06:28.920 --> 01:06:36.240

Kevin Gaylor: Is that when I when I hear Ms Mars talking about the work that she's done and I, and I think about the work that i'm trying to do here in the state.

397

01:06:36.660 --> 01:06:46.290

Kevin Gaylor: And it's like Okay, you know I hear other educators talking about the same things, and you know, having the same kinds of conversations that i'm having they're having these conversations with each other that i'm having in my head.

398

01:06:48.690 --> 01:06:58.020

Kevin Gaylor: it's like you know i'm feeling like i'm not going crazy, because there are other people out there that are having these conversations and just to be.

399

01:06:58.890 --> 01:07:09.060

Kevin Gaylor: Or to connect with a community of scientists or community of science, educators and shareholders that are you know, having a common language and having that dialogue.

400

01:07:09.570 --> 01:07:23.820

Kevin Gaylor: You know, to create high quality instructional resources and protocols and processes is I guess it's just you know, to know that we have people who are thinking is is it's just an awesome thing to me right yeah.

401

01:07:24.270 --> 01:07:31.710

LaTonya Bolden- SREB: Yes, that is awesome yes we're your Community here, yes, yes.

402

01:07:37.050 --> 01:07:42.900

Scott Warren: And tanya i'm going to stop the recording so people rather ask her questions after the recording.

403

01:07:43.200 --> 01:07:43.650

Okay.

404

01:07:44.790 --> 01:07:45.240

LaTonya Bolden- SREB: Okay.