- [Instructor] Hello and welcome. My name is Sesha Woodard and I am a scientist. I am a dancer, and I'm the owner of Dropping Seeds in Motion, where I use the art of dance and movement to get kids excited about learning science. So super glad that you are here today. As teachers and educators, I know that you know it's important to keep your students engaged and to keep them focused, and to also make learning enjoyable. The topic of today is going to be me sharing with you, a strategy that you can use to implement dance and movement in your science lesson. This multi-step approach will allow you to make your science lessons come alive through dance and movement. So before I move forward, I just wanna share with you a couple of benefits in reference to infusing your science lessons with dance and movement. One benefit is that it helps reach all of the learners, whether they're a visual learner, an auditory learner, or a kinesthetic learner. This helps reach all of those learners. Other benefit to including movement in your science lesson is that it helps develop those social skills, which also helps with emotional learning as well. And it's good for the overall well-being and mental health. All right, so we've get those things down, I know it's really, really beneficial for students to move and learn. Now, let's go on to our multi-step approach and strategy. First step is you want to make sure that you have your I can statement or a topic or standard that you want your students to learn. Write that out. Once you do that, I want you to go back and actually circle those words that stand out, that make them pick movements for you. Once you do that, take those words and look up the definition for them, or just think of other words that are synonymous, or synonyms to that word or words that you circled. After you do that, the next step is going to be for you to think about and help your students think about different shapes that they can make according to that word. For example, the sun. What shape is the sun? Encourage your students to make a round shape. I could be with their arms, it could be with their legs, they could do this. That's just an example for the sun. The next step is to think about the sounds that you could potentially create to accompany your movement content with those words that you wrote. Sound is so super important as well when you're infusing your content with movement and dance. The last step you want to do is actually consider the music. Do we want it fast? Do we want it slow? Do we want it to pulsate? To pulsate? So think about that. Pulsating music. When might we use pulsating music? As an example, if you're teaching about the different organs in the body, consider using pulsating music when you're talking about how the heart beats. That's an example as well. Now what I want to do is actually give you an example. I'm gonna do an example for you. We're gonna take the I can statement of, I can name the things that plants need to survive. So the word that I actually circled was need. What does need mean? Need means an essential necessity. I'm gonna use that word for the soil part, because we know that plants need three things to survive. Sunlight, water, and soil. I've got my I can statement. I've circled my word need, which means essential, necessity. What we're gonna do now. Your I can statement is, I can name the things that plants need to survive. So sunlight. I mentioned as an example the sun. So we're gonna come around like this and make a round shape. Come on, get up. Get up, you can do it with me. We're gonna make a round shape with our arms, and we're gonna come up to show the sun rising and the rays exhibiting. Do that

pg.1 - Summer 2020 Arts Integration and STEAM Online Conference

with me again. three, four, five, six, seven eight. Awesome, good job. Now we're also gonna, plants need what? Water. Water. Think of a sound that you can make with water. What about ? Okay, so let's do that far. Ready? Okay, you've got that? Now, what else do we need? We said sunlight, we said water, they need soil. We're going back to that word I circled, need, which means essential, a necessity. I'm gonna just use my hands and show that I'm scooping nutrients from the earth, like you're needing it. Okay, ready? Two, three four. So do that. Now let's put all together, and that's the last thing we're gonna do, that's the last step in strategy. You can watch me first. Five, six, seven. One, two, three, four, five, six, seven, eight. Let's do it again. One, two, three, four, five, six, seven eight. Awesome, awesome. So you can see, hopefully you're smiling by now. You can see, and one of the things I'll also share with you in reference to smiling. There's so much science and girl science that says that even when you smile, there are endorphins that are released to your brain, which is like a feel-good chemical. When you want to purpose a smile, I want you to purpose a smile as a teacher and a educator in your students. One of the things that I also want to reiterate and share is that it's important to reach all the learners as I mentioned. Now what were gonna do, we're gonna use those same movement and we're gonna add the auditory part. We're gonna actually speak those three elements that plants need to survive. So it goes something like this. Five, six, seven, eight. Sun, sun, sun, sun, sun, sun sun. Rain, rain, rain, rain, rain, rain, rain. Soil, soil, soil, soil, soil, soil, soil, soil. Awesome. So look, I hope that that was very, very helpful for you. As I mentioned, it reaches all of those learners, and even if you have students that shy away, and feel like they don't want to participate, they are still learning because they're still seeing it, they're still hearing it, and they're experiencing it. And I bet you they'll smile as well. You don't have to limit the use of a movement in dance in your science lessons. You could use movement in ELA, or even in social studies. Here's a quick thing you can do with your students in ELA. If you are teaching them about different vocabulary words, consider incorporating movement with those words. I have a couple of examples for you. Take the word detach. What do you think about when you hear the word detach? How do you feel? Here's an example of movement you can do to show that word detach, which means to remove. Let's turn up some music a little bit for you. You can even do something with your feet, and your arms. You can incorporate cross lateralization. Say it, say the word. Detach, detach, detach, detach. That will help get your students up, moving, and learning. That will help the visual learner, the kinesthetic learners, and the auditory learners. Here's another word we can use. Found. Found. F-O-U-N-D. Found. To find something. Paint a picture for them. Ask them, how do you feel when you lose something that you really, really, really, really love? At the same time, how do you feel when you find it? That's a also way that you can incorporate emotion and drama as well. Here's an example I'll show you. Have fun with it. Have fun with it. Your kids will be super excited to come to your classroom. All right, here's one more. The word around. And this is really good as it relates to one of the foundations of action-based learning, which is being able to spin. Spinning is really good for the brain at this young age as well. So the word around. We simply have to go around in a circle. And stop and go the opposite way and say, around. Spinning is actually really good for kids and it helps their

pg.2 - Summer 2020 Arts Integration and STEAM Online Conference

brain development. How many of you have ever seen kids just spinning, and spinning, and spinning, and spinning, and spinning? Because their bodies know what they need, their brains know what they need. And our job is to supply them with the resources and the platforming environment to give them what they need. As you move forward with this strategy, there are some best practices that I want to share with you in reference to creating your movement content. One of the things that's really important to do is to start with a code word. Before you start your lesson, indicate and specify a code word which will allow your students to just freeze in that moment. Because they wouldn't even be, especially if you're working with elementary age students, and this lesson is more or less for elementary age students, but you can tweak it for older grades. So a code word could be for this particular example, photosynthesis. If they're moving around and they're having a good time, if you say photosynthesis, photosynthesis, photosynthesis, you can instruct them that that is the code word that they need to listen out for, and when they hear that, they need to freeze whatever they're doing. Because one of the things you want to do is make sure that your students stay safe. So code word. Another thing that you can do is actually start with, after you establish your code word, is to start with just a fun movement activity. There is something that you could do implementing cross lateralization, so cross lateralization is having the ability to cross the midline of the body. So imagine if you took your hand and you just cut right down your body, that's the midline of the body. Doing activities that actually cross the midline of the body you could even do things with your feet, lift your foot up and cross it. I do have a video that goes through a demo of cross lateralization, so feel free to check that out. It supports brain development. That's something you can do as well. So again, develop that code word and help them freeze. Also start with a quick movement activity, quick brain charge to get the class molded and meshed together. It's really good for class cohesion and it supports that mental health and brain development. As we move forward, I want to share a little bit about action-based learning. I want to encourage you to incorporate 12 foundations, some of the 12 foundations of learning related to action-based learning. Action-based learning is a pedagogy of teaching that supports the link between movement and learning. Those days of sitting again are over. We have to get our kids up, we have to get them moving. And I want to share a couple other foundations. Balance. Having the ability to balance is good for the brain, it helps with brain development. So you could put on some music, have your students just get up and just say balance. And switch. And switch, and you'll just see them just have such a good time. You'll see the smiles, you will smile, they'll line up and they will be ready and prepared for your lesson. Also mentioned cross lateralization, so you can do that as well. Rhythm. Rhythm is a really great foundation of learning, and just by the fact that you are including movement and dance in your lessons, you are infusing it with the rhythm. So promise to do that, and watch your lesson plans come alive. So amazing. And this is supported by brain-based research in neural science. What I also want to share with you before I go is a couple testimonies that I received from working with teachers. I work with teachers from different grades, from pre-K all the way up to high school, and they always share how how they see it's valuable to infuse their lessons with movement and learning And I'll just share a

pg.3 - Summer 2020 Arts Integration and STEAM Online Conference

couple. The movement definitely helps them make those key connections that are my ultimate goal in a lesson. My students really enjoy getting to move and see how science can be more than just reading it from a piece of paper or watching a video. I really enjoy seeing them have fun and become totally engaged in the lesson. How amazing is that? So I'm super, super excited for you. Hope you are super excited. Let's do a quick review to get you ready to infuse your science lessons with movement. Step one. Create your I can statement or standard or topic that you want your students to learn. Go back and circle those words that depict movement. Try to think of some other words that are synonymous with that word you circled. Now, think out of the box, and think of movement using your body. Create different shapes. Now, don't forget the music. Consider the music. What music are you gonna use to make this to come alive. Fast, slow, pulsating. Be creative. It's fun. You'll have fun and your students will have fun. Now what you want to do is bring all of that together with a sequence of movements. And you can see you could do those sequence of movements as I showed you. You can have your sequence break up into different groups even and have them create the movement. And make sure you have them speak it to reach those auditory learners as well. Now I have somebody that I'd like you to meet. Hi.

- Hi.

- How are you?
- Good.
- Tell everybody your name.
- My name's Dayla.

- All right. Well welcome Dayla. Do you want to share with us what you have been learning about?

- We have been learning about how plants grow.
- How plants grow. So what do they need to grow?
- They need sunlight, they need soil and they need rain.

- They need sunlight, soil and rain. Okay. So you want to show us what you learned through movement?

- Yeah.

- Okay, tell me before that how we do a little activity first. Okay, ready? Balance. Cross. Good. Balance. Cross. Back. We just did cross lateralization. Okay, let's do it one more time. Ready. Five six. Five, six, seven eight. Balance, cross, down. Balance, cross, down. Other foot. Balance, cross, down. Balance, cross, down. Good, Dayla. All right Dayla, now show everybody the movements you learned.

- sunlight, rain goes, rain and soil.

- Awesome. Let's do it one more time together, okay? Seven. Six, seven, eight. Sunlight.

- Rain. And soil.

- Good. Now let's smile. Was that fun to do?

- Yes.

- Awesome. Do you want to learn more movement?

- Yes.

- Bye. Have a good time. I hope this helps. I love to hear from you. I hope you just jump into it, dive into it. Get creative, and have fun with it. Learning science does not have to be boring for you or your students. Thank you.

⁻ Awesome. Thanks Dayla.