Video 1:

How to Add STEAM to Your Preschool Curriculum

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All right, here we are in our first video in our new training series, how to get started with steam in early childhood. Now, if you are here watching this training, then you're probably already a little familiar with STEM or Steam, and you're looking to either add it to your current curriculum, or you're just looking to do more steam or sem inside your early childhood classroom. But you may have questions such as how do I add steam in our already busy schedule? Or how do I incorporate steam with no budget? Or how do you make seem appropriate for young learners?

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And with the current school year, you may even have more questions such as how do I incorporate steam while teaching virtually, how do we incorporate more steam? Well, social social distancing with our Students, and how do we do this in the COVID environment? Well, we throughout this training series are going to be covering these questions you may have about incorporating more steam into your classroom, even with the current circumstances that you may be facing. Now, one of the questions I get a lot is about the different acronyms. So I want to address this right away, that there are many different acronyms that different programs use some use stem, some use steam, some new stream, there are many different ways it could be used. And it could be it could have you feeling confused and stressed. And I mean, really, what is the difference between all of them? Well, just so you know, that in our preschool steam philosophy, it is Doesn't matter if you're saying, Sam, it doesn't matter if you're saying steam, it doesn't matter if you're saying stream, we're all talking about the same thing. So no matter what acronym you use, if you have parents and administrators that like the word stem, then use the word stem, if you really want to use the word stream, if that fits for you, now I've seen stream used in two different ways. Some religious preschools use it to stand for religion, but I've also seen it used for reading to emphasize literacy. And of course, I use steam because and I'll talk about this in a minute, but my background is in art education.

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So I like to advocate for the arts.That is personally why I use steam. So it really is up to you to decide what acronym you wish to use for your program. But what I want To understand is no matter what acronym you choose, we are talking about the same thing. And we'll get to what that is in this training.

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But with all of these questions about steam, as I said, you're probably feeling tired, you're feeling overwhelmed, and you're feeling stressed. But what if you could add steam to what you already are doing, using the materials you already have? What if you could engage your students in your lessons and through our learning? And then not just talking about hands on engagement, but engagement that sparks curiosity and wonder or inquiry? And what if you were confident in integrating the scene strategies throughout your existing curriculum? Well, this is what we're going to show you Throughout this training, so, if this sounds like a good fit for you keep on watching.

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If this doesn't resonate with you, then go ahead and click off this video. I don't want to waste your time throughout this training. But if you are interested in how we can use steam to create these dynamic experiences that encourage inquiry, wonder and curiosity, then you'll definitely want to be checking out the rest of this training. Now, for those of you who don't know who I am, my name is Jamie Hand. I'm creator here at preschool steam. I'm one of the authors of the best selling Amazon bookstein kids. And as I mentioned earlier, I'm a certified art teacher. So my background may be a little different than yours. But I do have experience teaching ages three through adult and I have taught both inside the classroom as well as on Online, which really has, the online experience has really come into play, and helpful for this school year too. So I'll be sharing some more of that later on in our training series. Okay, so as we dive into this first video, let's take a look at the current stem or seam teaching model.

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And this is throughout my time of working with different educators across the world. This is typically a generalization of how teachers find different stem or steam lessons. So first, the teacher picks a theme. And the theme is it can either be decided by you the teacher, or it may be decided by your curriculum, or it could be decided by your state or standards. So you have a theme, and then you search for a lesson. A steam light To go with the theme, and typically teachers may look on the site like Pinterest or Teachers Pay Teachers or just simply google.

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Once you find the lesson, now you have to gather up the supplies. So you either have to find them in your classroom, borrow them from another teacher, put in an order with your administrator, or maybe even go purchase the materials yourself. Then once you have the materials, you then can introduce the lesson to your students. The students do the lesson, and then we repeat the cycle. And if you look at our picture, our picture here of our tired teacher, it's no wonder that you feel so tired. If you look here on the slide. It's Teacher, Teacher, teacher. I have that all highlighted in red, and then look at what the students are doing. Now in students, I have them highlighted in green, they are only doing one tiny part of the whole cycle. And so we get caught in what I call the hamster wheel of lesson of lesson planning. Where this cycle just keeps going and repeating, where you're doing all the work of picking a theme, finding the lesson, gathering the supplies, engaging your students in the lesson as you introduce it and making it exciting.

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And then the students just do it. But then the cycle keeps going and going and going. It's no wonder that you feel so tired. You are doing all the doing. But what if there was a better way? What if there was a way we could integrate steam throughout the entire day? And it's you and you seem to support student play? So here is an example of a pre k program that I was working with. And we were simply doing a using blocks to build different structures. And then we were recording our structures by drawing them and see you notice that they have the triangle block on top. And notice down in the bottom left corner, there's a red cup with pencils. Well, this group of students discovered that the pencils could roll down the incline. And then they were using the material buckets to cat to to catch the pencils. So the pencils would roll down the inclined plane, and they would catch them into the bucket.

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And I thought this was an amazing discovery. Here they are already using or making their own discoveries about how in an industry plane can help roll different materials. And then they had pencils. And then they had the little wooden cubes. And so they were trying that, could that slide down the inclined plane? And then there was a conversation about sliding versus rolling and what other materials could go down the inclined plane? And then if once a structure got knocked over, okay, how can we rebuild it so that we could hold or it could support bigger items to go down the inclined plane. So my intention with the original lesson was not about inclined planes, but because it gathered such an interest in the students. We then used it moving forward. And we followed up then by using different materials to build bigger inclined planes and this time using ramps and then we introduce different cars in trucks. So here we used our steam strategies to support the student inquiry. Now I didn't come up with and say, Hey, we're just gonna do ramps today. Our ramp challenge here, it stemmed from their original play with blocks.

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So how do we use seem to support this idea of student inquiry? Well, this is where our three pillar approach to creating seam experiences comes into play. We call it the preschool steam experience. And this is our three step process and how we create these experiences for our students. And throughout this training, we are going to walk you through the three different pillars so that you can begin to create the same experience Inside your classroom as well, because we believe steam is more than just an acronym. That's why it doesn't matter if you call it stem or you call it steam or you call it stream, because it goes beyond just the letters or disciplines that are in that acronym. Can we use social studies? Can we use history? Yes, all of that could be used to support your students inquiry, because steam is more than an activity or one time lesson. It is a learning experience. So how do you get started with this idea of creating a steam experiences? Well, it begins with you. And as we said, it you have to change your mindset, around steam or around stem that we can't look at it. It's just so One time, 15 minute or 20 minute activity, but rather we begin to look at it as the steam experience that engages our students and inspires them to be curious and ask questions. We want steam to support our students questions. What are they curious about? What do they wonder about, and then we bring in the seem lessons to support that inquiry. We observe our students as they're playing and interacting, and has the successful steam educator, you know, you can support or support their play by bringing in the different steam strategies. In the example I shared with you about the income, incline plane and the blocks. That is an example of how I observed the play of what the students were already doing. And then I supported that by bringing in a steam challenge that extended their learning. But it all started from the child it was child LED. It wasn't me just finding a cute ramp lesson on Pinterest and introducing it that way. But rather, I observed what the students were already doing, how they were already interacting with the materials. And I use steam to support that play, and their own discoveries. So our

goal with the steam experience is that we want to encourage our students to ask questions and to be curious, because this is the key to being a lifelong learner. We want to prepare our students for anything that they may encounter, whether it's going on into kindergarten or first grade or high school or college. Or when they grow up.

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And we don't know what kind of jobs are going to be available. But if we can give our students the skills of asking questions, and wondering how things work, then they're going to build up their critical thinking, their creativity. They're going to learn how to communicate and work collaboratively. This is what a steam experience is all about. Because we're integrating learning through out all the disciplines. So science, technology, engineering, art, math. We are using all of the disciplines to support our students play, our students questions, their inquiry, and then we as the educators, we help guide them and we can scaffold the learning, we can help make the connections to bridge and expand our student's learning experiences. So steam supports child led play, instead of replacing it. So many times I see educators trying to add in seeing challenges and, or seeing challenges inside their curriculum. And they're trying to make their students fit to the lesson, when really, we need to flip that. And we need to bring in the lessons that support our students. So our definition of Sam or seem or whatever acronym you wish to use, is we want to encourage learners to build knowledge about the world around them through observing, asking questions, and investigating. Because this is the key to being a scientist, to being the mathematician to being an artist to being if they grow up. To be a small business owner or whatever job that they may have, but if they know how to observe how to ask questions, how to investigate, we are giving them the skills that they will need for an unknown future world. We, if there's one lesson we have learned this year is that we have no idea what the future is. But if we can build up our young learners, and have them have the self confidence, that they're able to take these risks of observing, asking questions, and investigating, and trying things, not every science experiment works the first time and so having that resilience where they can keep trying and keep trying new ways. This is why we bring steam in early childhood. And so we can do this through our as I said, Our steam experience where our thoughts restocks are beasting savvy, cultivate curiosity and extend the experience.

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Now coming up in our next video, we're going to dive deeper into our three steps of this, of creating these steam experiences so that you can become the successful steam educator, we can step off that hamster wheel, we don't need to be the tire teacher, the teacher that stress the teacher that's running around printing and laminating and prepping all the materials, where we are confident in that what we are doing inside the classroom is helping our students expand the learning experience for them. So our goal of SIEM in early childhood is encourage our students to be curious and ask questions. It really comes down to That simple thought of, are we extending our students curiosity? Are they asking questions? Okay, our takeaway thoughts from this first video, one, change your mindset. We're no longer looking at same as a one time lesson or one time activity, but rather it is a learning experience. And our goal of seem is to encourage students to be curious and ask questions.

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And the third takeaway thought is the preschool steam experience is our three pillar approach to help you become the successful steam educator that creates these dynamic steam experiences that engage your students in learning. Now, as I mentioned, coming up in video two, we're going to dive deeper into the three steps of the preschool seem experience

and we'll share the exact steps You need to take in order to start creating these dynamic seam experiences inside your classroom. And we will also be sharing what this could possibly look like in a virtual teaching situation, or even in a COVID learning environment. All right, thank you so much for listening to our first video here. In the comments below. I would love to hear what your big takeaway from this first video until video two happy streaming.