Video 3: How to Use STEAM to Empower Young Learners

Here we are in video three of our training series. And in this video we're going to talk about how to use steam to empower young learners in learning. Now, if you're watching this video, I'm going to go ahead and assume you have already watched video one and video two, where we have built the foundation of our preschool steam experience, in that this is our three pillar approach into incorporating steam for young learners, where you are steam savvy, creating curious explorations and extending the experience. Now in our first two videos, we talked about why creating when we start to shift our mindset and look at creating steam experiences, that it helps us step into being a successful steam educator. That we step off the hamster wheel that is keeping us teacher tired, and really step into being confident and empowered, that we know the right strategies to bring in to help our young learners. Not only so they can build knowledge and build their skills, but also to spark curiosity. Now, in our first two videos, we have talked a lot about encouraging our young learners to be curious and ask questions.

Let's take a little deeper look as to why I talk about this so much. So we're going to travel back in time.

So we're getting in our time machine, we're traveling back to the year 1919. Now, in the year 1919, this was the most popular automobile, it was the Model T. And this the Model T, as you know, was Henry Ford. And it really made automobiles more affordable for the everyday person to travel around. Now, let's fast forward to 2019. And that this is a Tesla. And for those of you that are familiar, Tesla's are I, I'm not really a car person, so bear with me, but it is pretty fancy automobile in the fact that it can even drive itself. So yes, there is a self driving feature in the Tesla. Now, as I said, I'm not really a car person. So I can't speak to all the details and everything about it.

But my own sister actually has one. And so I have seen this in action that the car can drive itself. So if we compare the innovation between the Model T car and the two 2019 Tesla, we can see that there is a lot of innovation, that the car has gone from just, you know, four wheels and can can hold two people to be able to drive itself to pick you up. Now, if we compare the automobile industry to education, here's what a classroom looked like in 1919. And this is, I believe, elementary age. So not necessarily preschool or early childhood, because at this time, there really wasn't those programs. But this is more elementary school. And so here we have a picture of 1919.

And then let's compare it to keep it even to a picture of 2019. So pre COVID. So not taking 20 out of the picture, but just compare a side by side of 1919 versus 2019. team.

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And you can see there is a lot of similarities.

We have the desk, we have, even the bulletin boards, if you notice are the same. And yes, there may be more technology in the 2019 photo, like there looks like a smart monitor or white like a smart board. And if you compare that in 1919, it was a chalkboard. So we do have innovation like that. But overall, the classrooms really have the same features in them.

And when we compare the automobile to the education industry, here in the automobiles, we have gone from driving ourselves to self driving cars, but in the classroom, what innovation has really changed? Yes, we have upgraded the chalkboard to the whiteboard but

It's the same type of tool. So, really when we start to think, with everything that's happening in education right now, in 2020. This is what I see as an opportunity, an opportunity to advance to innovate our educational field. Because if we look for the last 100 years, education has looked the same. We are working from an old broken educational model.

The education, or the way schools are set up, is they were actually created to create factory workers. factory owners wanted workers that could compute basic math that could do basic literacy. And but they didn't really necessarily want them to be creative thinkers or think outside of the box. And so schools were designed to create factory workers.

Now, this is nothing against factory workers, we need factory workers to keep our factories going.

But if you look in the past, and if we even go back to the car example, many factories are many workers are being replaced with robotics. So if we continue down that path, what are factory workers going to look like? Is it going to be more robotic type workers.

And if that's the case, then people are going to need that higher level thinking. Because when the robots break down on the factory line, we're going to need people that can fix the problem that can solve think critically think creatively. So more important than ever, we are going to need these creative, innovative thinkers. But we are no longer living in this Industrial Age. We are no longer living in the information age. But rather, we are living in an innovation age. And more so than ever. I think this past year in 2020 has really shown this. And I think this upcoming school year is going to show us even more and more

how there is opportunities to grow, how there is opportunities to change how there are opportunities to innovate the educational experience for our students. Let me share an example of how these changes have taken place. So let me ask you, what is the tallest building in the world right now? Now if you wanted to know the answer, you could grab your phone or tablet or hop on the computer and find the answer out in under 30 seconds. So let me just tell you that the tallest building right now is Burj Khalifa. And I apologize if I said that incorrectly. But this is the tallest building in the world at this moment. at 2722 feet. It's three times as tall as the Eiffel Tower. And it is twice as tall as the Empire State Building. So we can find out all the facts we want about this building, in literally under 30 seconds. Thanks to web searches like Google and technology like our smartphones, it is real easy to find this information. Now one interesting fact about this building is that the architect was inspired by a flower.

So they use nature to inspire the design of the building.

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So let me ask you, how can you design a building inspired by a flower. So this is my example. Now, you don't actually have to design a building here. But this is my example of how our industries have changed how we have gone from an industrialized Information Age into an innovation age. So 100 years ago to find out the tallest building in the world and exactly how many feet it was, it was not as easy as it is.

So it's not really about memorizing facts, that's important. But rather, it's what we do with the information that matters. So let me go back here. by challenging our students, it's not so much of what is the tallest building in the world, but it's allowing them to build that knowledge and then synthesizing, innovating and coming up with their own unique solution. That is what Being in an innovative age is about it's about coming up with new creative solutions, ideas and methods.

Now, why is this important because 65% of today's students will be working in jobs that don't exist today. So think about that of all your students that you have 65% of them are going to be working in some type of job or industry that doesn't even exist today. I love this quote from Franklin D. Roosevelt. I share it in the live our trainings, but it says we cannot always build the future for our youth, but we can build our youth for the future. And that is what we are doing. We are preparing our students for an on known future world. We don't know what they're going to grow up to be. They could grow up to be a doctor, a teacher, a small business owner, or something that we don't even know about.

So how do we prepare our students? Well, this is where it begins with you. Right now, you as the early childhood educator, you are building the foundation. If we want to transform education, if we want to innovate our education industry, it's gonna start with you. It's going to start with you as the early childhood educator, because it's going to ripple out to your students. It's going to ripple out to the other adults. It could be co workers who work with the your administrators, it will ripple out to your students families, which then it ripples out to community and through technology of social media. It can reach people globally. So if we want to innovate our education system, it's gunness Start with you. And that is where we have developed our steam experience approach. Keeping this in mind that once you are steam savvy, you know what steam strategies are going to work for your students, that you create curious explorations that encourage your students to be curious and ask questions.

And then we extend the learning experience. Learning is a journey. There's not one final outcome. There isn't one just Oh, we've we've learned the whole book. And we, when we stop learning now, learning is a journey. It's a process. It's an experience.

So let's bring it back down into your classroom and I want to share and real classroom experience of how this can look in how you can do this. So we start with exploration.

Now this is a group of people Case students, and we use materials that they already had experience with. So I use their classroom blocks that they already had time to explore in a building center. So students were already familiar with how the materials work.

So that allowed me the opportunity to come in and extend the experience for them. So I introduced the challenge. And this particular group they had been working with nursery rhymes and then moving into fairy tales. So we took Humpty Dumpty and each student had a plastic egg that was Humpty Dumpty. So the challenge was to build a better wall for Humpty Dumpty. So each child got time to explore with

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the materials and and create their own solution to the problem. Now, I worked with the classroom teacher and one of her goals. So this is a part of being steam savvy that one of her goals was to help collaboration and teamwork in within her classroom. So we extended the challenge that once they did the challenge individually, we then introduced the same challenge. But now they had to work as a group and build a new wall for Humpty Dumpty, using bigger blocks. Now, because each child had already solved the solution independently, they now had ideas working together as a group.

And this is where as the educator, you can help guide how we listen, how we listen to our teammates and how we work together to come up with a new solution. So extending the experience doesn't always mean you have to bring in a brand new lesson. Sometimes it's just adding To the experience of what you're already doing, and then to share with you, then we extended it into fairy tales. And this group really loved building. So we kept using the building materials and that we then built. This is inspired by jack in the beanstalk and it became another challenge. So you can see here with our same experience approach wasn't about one lesson, but rather it was the overall experience of working with Humpty Dumpty. So let me ask you, which Humpty Dumpty lesson do you think is more meaningful, where you are actually building a new wall for Humpty Dumpty, or where you are just cutting out and modeling and following the teachers model of Humpty Dumpty.

So something to think about there.

Okay, let's look at another example of how this can look. Because this is going to look different for each classroom. And each experience is going to look different. And this is where you been seem savvy, you know, you are the expert, you know what's gonna work best for your students. So here we have our winter Tinker tub, and a Tinker tub.

As I've talked about this before. It's just a few simple materials. But the main point is the students have the freedom to build what they want. So even though we have the prompt cards, they're the creative prompts. They don't have to build a log cabin. Those are just simply what I like to think of as a creative prompt to get them going if they had ideas.

So the students this was set up as a center so they rotated through and in the COVID environment. Just to touch on we talked about how you can make these individually for students as well. Now What I observed as they were going through and building is many of the students really got into the snowflakes. So they saw the snowflake prompt, and they really got into building their own snowflakes.

So then we used the same materials, same materials that they use in the Tinker tub, then we introduce the challenge. Can you build a snowflake? And we talked about how a snowflake has six points on it. And so does their snowflake, have the six points? And what do they notice about their snowflake? Do you observe any patterns? So all of that could be brought into this one challenge using materials that they already had experience using. Then we extended it further because they were still interested in snow and snowflakes. So we created an art mural using snowflakes, which led to creating another exploit using fake snow. So the discussion of snowflakes turned into snow and how we play in snow, and then it really became about animals in snow. And so we use our art mural to create an Arctic mural. So here you can see a big overall picture that we started with the winter Tinker tub, it led into building snowflakes, which led into plane and snow, which we brought it all together with our celebration of our Arctic and art mural.

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So you can see as the steam savvy educator, you are bringing in the challenges the Explorations that support student learning, it's not about just doing one stem challenge. It is about the experience of the learning for your students. So ask yourself, what do you want for your students do you want engage students that are excited to learn. Do you want to innovate your current curriculum and create these five star steam experiences?

Do you want to rise up and be a successful steam educator? Well, you have two choices. You can do it slow using what we have taught you. We have taught you the three steps of being seen savvy, creating curious explorations and extending the learning experience. So you can do that. But you can do it. But you can save time and get started quickly by joining our member lab. Our member lab is an online subscription service to help you create the same experiences that are kid tested, teacher approved and designed for young thinkers. So inside our member lab, you get everything you need. To create steam experiences, we're going to give you access to all our lessons. We have steam training, plus online support to help you get started.

So let's take a look at what you're going to get. Inside we have over 200 steam lessons designed specifically for young learners. Our steam lessons are organized by popular unit themes, making it easy to integrate into your existing curriculum. So we have everything grouped by theme. So if you do weekly themes, you can easily find lessons are going to support what you want.

If you use child led themes. A lot of our themes are popular child led interests, so you can use the unit to help support that as well. Now inside each unit are a variety of lessons. We share explorations, we share challenges, we share investigations, we share what we like to call celebrations, which is more our collaborative type of lessons. So you can find all of this inside each unit. And then the lessons are broken down into our lesson format, making it easy for you as the educator to implement. So who does this work for? Well, it works really well for those educators that are looking to get started with steam. And it works well for those that are just looking for inspiring ideas to create steam experiences. If you're looking to innovate your current curriculum, then our seam experiences help support that. You might be thinking, this is crazy, but I already have a curriculum or I've bought lessons from teachers pay teacher's or I'm just going to search on Pinterest. So what makes a priestess Steam number lab different? Well, one of my favorite parts is in our steam lessons. We have guided questions, and steam integrations already included in the lesson plan. So if you want to add more math or you want to add more science to it, you have a suggestion on what to focus on to help extend that experience. We also have all learned lessons available in a one page format, where you can download them print, making it easy. If you are lesson planning at home, you can take it to school. So we provide this convenience for you so that you can save time because we want you to be able to implement these same experiences. We want you to be out there engaging your students, encouraging them to be curious and ask questions instead of being stressed and frazzled, like our little scientist friend.

I know many times, especially the school year, we kind of feel like this poor, this poor little guy. But really, we are here to help you so that you can save time, and that you can be able to do those things that you want to do. Because being steam savvy also means you know, you have to take care of you. Before we can take care of everyone else, you have to take care of you. And so enjoying your favorite cup of tea or coffee in being able to watch Netflix at night. You need that downtime, so you can be the best team educator for your students. And that's where we help you find that time. We also include training such as our steam experience masterclass, where we give you our exact steps on understanding what being steam savvy means what those disciplines look like. We help you curate

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those curious explorations. And we help you extend the experience, we walk you through our steps on how you can do this easily and efficiently for your students. Plus, we have additional bite sized trainings, such as how to integrate steam into centers. So we share other ways that you can add steam into your preschool day. So once again, our focus is on being able to keep our students being curious and asking those questions. Now you as the educator may have questions yourself, and so we also have online support in our community where you can ask questions and get the help that you need. And one of our most popular features that members enjoy is our bonus experience guide where we Have a monthly guide that gives you a suggestion based on popular seasonal themes. And we give a suggestion of what you could do for an exploration what you could do for a challenge or investigation or celebration, and how an experience may look, here are what some of our member lab members are saying. I signed up it is awesome. So many great ideas. Thanks so much. Thanks for helping me feel that joy in teaching again. I really love your site. The modules are wonderful. Those could be worth the monthly charge alone. My teachers are on fire with your lesson plans and ideas. So to sum it all up, here's what you get inside the member lab. You get access to all our seen units and lessons, which if I were to price them out separately on Teachers Pay teacher's it would be over $600 you also have access to our printable lesson plans which is a full $197 value plus of our private community for members. Plus our bonus of the curriculum experience coming if we were to price it all out individually would be $2,494. But that is not your investment. We have our 1999 monthly, or 197 yearly. Now one thing I do want to point out is many of our members actually get their membership paid for by their administrator. So you may be worth asking your administrator if they will cover the yearly charge for you. Now, one thing I want to point out is that this program is not for those that are just looking for printable worksheets. The member lab is to help you encourage hands on learning. So if you're looking for quick printables that you can just download and print them This is not for you. Also, if you're looking for the latest and greatest app or electronic device, this is not for you. We have designed our lessons using basic classroom supplies. Now, if we find a great tool, we will certainly mention it and share it with our members. But the bulk of our lessons are using classroom materials and that are created and that are done in a hands on way. So if you're looking for passive, just what the latest and greatest app is, then the member lab is not for you.

Now, for those of you that are interested and not sure if the member lab is a good fit, we do have our 14 day guarantee. We're from your initial purchase, you have 14 days to log in, check it out, see if it's the right fit for you. If it's not a good fit, then you can simply email our support and we will refund you your initial purchase. So this is a no risk way to see if the member lab is right for you and your students. So let me ask you, where do you predict that your students will be at the end of the school year? Are you going to keep being teacher tired? Or are you going to rise up and be the successful steam educator? member? You are setting the foundation for our future world right now in 2020? Yes, there's a lot of fear about the unknown school year, but there also is a lot of opportunity for growth. And we are very excited to help our members see that opportunity and to really explore how can they provide the best learning experiences for their students. So What do you do next? Well, you can head over to preschool steam comm slash enroll, and you will see our sales page which will give you more information about the member lab. And you can choose your investment. As we said, we have our 1999 monthly or 197 yearly. And you can simply click on which option you want, create your account, and then you get started immediately with access to all our units and lessons. So once again to get started now we have our 1999 monthly or 197 yearly, which includes all our lessons and units, our download and printable lesson plans, access to our trainings, plus our private community and our bonus of our monthly experience guide. As we said a total value of over $2,400 but you can get started today which is 1999 monthly And once again, that website is preschool seeing.com forward slash enroll. If you have any

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more questions about the member lab and if it may be right for you, you can email us at support at preschool steam comm and my team will be standing by to answer your questions, we want to make sure that the member lab is useful to you as well. So we really want to make sure it's a great fit for you. So if you have questions, once again, you can email CT at preschool steam.com and I will put that in the links below as well. Okay, so this wraps up our training.

Now, I know you may have one last question

that if you can get a certificate

of attendance for this training, you can click the link below and fill out a short evaluation in order to receive your certificate. And I just want to say thank you so much for listening all the way through Our training series. As I said, this year of 2020 2021, school year is going to be interesting, but I really do see it as opportunity for change. And

as an early childhood educator,

this is our chance to build from the foundation up to give our young learners the learning experiences that are going to set them up for a lifetime of success. All right, I will see you inside the member lab. And until then, happy STEAMing.

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