

## **Megan**

Hi everyone, thank you for tuning in to our professional development webinar, Tips, Tricks & Best Practices for Distance Learning. My name is Megan and I'm the marketing assistant here at PCS Edventures. Today I'm gonna kick us off with a brief introduction of who PCS Edventures is, and then I'm gonna hand the presentation off to our hosts and STEM development teachers: Tyler and Erika.

So who is PCS Edventures? PCS Edventures is a curriculum development company based in Boise Idaho, and we've been around since the 1980s. Originally known as Pat's Computer School, or PCS for short, our company started off as an after-school computer program that grew to a network of learning centers.

Today we offer solutions for learners and grades K - 12 at more than 7,000 sites around the world. Our learners are involved with hands-on projects that really help them fuel that passion for learning and a lifelong love of STEM.

Our products. We have four distinct lines of learning solutions: BrickLAB collection, our Enrichment Programs, the Discover Series and Drones collections. These are turnkey kits, great makerspace materials. Our drones can be used for STEM education and career exploration, and we have curriculum that really sparks that interest in STEM and STEAM. As always, we do provide training support for educators as well.

Our customers. So we do serve a variety of learning environments, from classrooms and after-school programs to makerspaces, libraries, robotics clubs and everything in between. We're here to provide students with learning solutions.

So our hosts today, guiding you through this professional development webinar is going to be our stem development teachers Tyler and Erika. I'm now going to hand off the presentation so they can introduce themselves and give you folks a rundown of our agenda.

## **Tyler**

Hello everybody, my name is Tyler Downey. I am the training coordinator here at PCS Edventures. My job revolves around training people on how to use our products.

Prior to working at PCS I was an educator for 18 years. I spent 11 of those years working in private schools and charter schools, and 7 of those years working in the public schools, mostly in upper elementary to middle school. I spent a few years as a K-8 librarian and computer teacher, and now I create curriculum when I'm not training people on how to use it.

So I'm really happy to be here and excited to guide you through the webinar today, along with my colleague Erika.

## **Erika**

So, hi, my name is Erika Liebel, and I am the curriculum coordinator here at PCS. This is my first year out of the classroom, for the last 10 plus years I've been teaching Dual Immersion Spanish using STEM and STEAM techniques. I also like to focus on the use of ed tech tools in my classes and have really enjoyed being able to support teachers on a larger scale through the creation of curriculum here at PCS Edventures.

And we would like to welcome you and just say how much we empathize with educators, with all of you out there right now. We can imagine ourselves in the same situation and for that reason we wanted to be here to support you with some kind of tips and ideas, now that you've started your distance or remote learning program.

### **Tyler**

Alright so, today we're going to be talking about a variety of things related to making your distance learning experience better. We're gonna start off with discussing the importance of establishing and maintaining strong connections with your students during this time. We're going to then discuss strategies for both synchronous and asynchronous communication. After discussing strategies for the communication, we're going to look at student choice as a means of motivation. We're gonna discuss a little bit of the reasoning behind why offering students choice, both in what they study as well as in how to interact with the objectives that you set out for them, is important and how that connects to keeping them engaged. And then we're going to show you a variety of tools which can also be found on the landing page for this website, for student choice and assessments. And at the end, we'll have a quick wrap-up and review basically of what we just talked about.

### **Erika**

So, the first item that we'd like to touch base on, is kind of why is human connection so important right now? We know that this has been a tremendous and rapid transition to remote learning. Tyler, can you tell us a little bit about what you've been reading about?

### **Tyler**

Well sure, one of the things, you know, it's not gonna come as any surprise and it's not new information for teachers, that maintaining and establishing positive relationships with your students improves both performance and engagement. And so you know, at a time where we are experiencing teaching in this context for the first time, where we have pretty much zero personal face-to-face time, that doesn't negate the importance or the effectiveness of maintaining and developing those relationships with your students.

So you know, every teacher spends approximately a thousand hours a year of face time with students when students are attending school, right? And so we can't--there's no way to make up for that gap, I guess is what I'm trying to say, in distance learning. But we can try to mitigate some of that absence by coming up with strong practices and routines for engagements.

### **Erika**

I think that from what I've been seeing in my own network of colleagues and former co-workers, you know, everyone's just been kind of doing that initial triage and reconnecting with their students to find out those initial needs. You know, how the family is doing, and technology needs. But just really reconnecting and regaining that sense of community. I know that many teachers are just trying to get that relationship back, trying to bring that peer-to-peer and kind of sense of safety back again, albeit remotely.

### **Tyler**

Exactly, you know, and so teachers at this point you know, by the time you're viewing webinar, most teachers have already been engaging with their students for several weeks remotely. So you know, you may be at different points in this process than some of your colleagues. Maybe you have a strong online presence and remote teaching presence already, maybe you're brand new to this.

So that's kind of what we're here to discuss today, what are some of those strategies that you can use, what are some of the resources you can use, to establish a strong connection with your students. Again, right, to kind of pull them back in and let them know that they're important, you know.

One of the things that, you know, is pretty conclusive in the research about teacher-student relationships, is that if you can make your students feel cared for and you can let them know that they're, you know, their safety and their well-being is a real and valid concern for you, that's going to increase their buy-in. That's going to increase their engagement.

And so, in order to do that we have, you know, teaching remotely you have to establish means of communication. And there are a number of tools out there to look at to do that.

Alright so, using traditional means that we used before the shutdown came, and before the quarantine happened, reaching out your students and families via phone, via email, via text... those are all ways to establish initial contact.

But not all students are going to be able to be reached, right. We have a variety of students across the spectrum that have different levels of technology available to them, and so the first thing we need to do as educators is to really assess the tech that our students have access to and are able to use.

So most of you have already probably done that by this point, but determining which tools work best for your students individually as well as what students are going--excuse me--which tools are going to work best collectively for class instruction, is really the first step towards really coming up with a solid plan for engagement. And pulling the largest number of students in that you possibly can starts with figuring out which tools they have available and then which ones you want to use.

Along with that assessment, something that you're going to want to do, is to figure out which students are missing. You may have students that don't have technology available to them, you may have students that just are not responding to the normal channels of communication that you've used. There could be a variety of reasons that students are missing, but figuring out which ones are not responding and which ones have not--that you just haven't been able to reach, is very important.

And trying to establish contact with those students. Reaching out via conventional means first, you know phones, letters, visits are not recommended right now depending on where you're at with the quarantine, but those traditional means of reaching your students are where you should start. Because those are the means that the students and families are already familiar with. Those would be ones that they expect, you know, the channels they expect you to use.

When you identify the students that are missing, that haven't responded, then making a plan for those students will probably depend on what's mandated at your, you know, at your building or your district level. But you can't make the plan until you know who's not there.

And you also want to be mindful of your limitations as an instructor, you know, there's only so much that you can do. There's only so much time you have as a teacher. There's only so much emotional capacity you have to really take on students that are non-responsive. And so just keep that in mind as you work your way through trying to figure out which which students haven't responded, what their situations are.

And then I also want to make sure that we address multiple times in this webinar the contingency plans that you should have in place for students that have absolutely no access to digital or online resources. You will likely have a couple that don't have internet connections, that don't have access to a smartphone or cell phone, so having plans for those students. You know, it's something that's probably being mandated from the top down, but even if it's not, it's something that you want to have available so that you can reach those students who want to participate, who want to engage and want to learn, but just don't have the digital means to do so.

### **Erika**

I'm so glad that you mentioned that, Tyler, and just to remind our listeners that we will give specific options for learning and at home for students that do have access to technology or are much more limited and may not have internet or a device to use.

### **Tyler**

Alright so once you have that list of your students, the ones that are able to engage, then you need to figure out your method and your timeline for engagement. Okay so, setting clear routines and realistic expectations for both your students as well as yourself in terms of time management and technology being used is huge.

First, looking at when you plan on meeting. Chances are you're using a platform like Google Meetup or Zoom or some other video conferencing platform for group interaction. If you are a teacher who does not have access to that, then be thinking about what collective way are you able to reach your students. You might not have the ability to do that synchronously, or like live face-to-face, and we'll talk a bit about some of the tools here in a few minutes for teachers that don't have or students that don't have the ability to participate in that online live interaction.

But for those students, the majority of whom have that ability, you really need to be thinking about setting a solid schedule and letting them know exactly what you expect them to participate in, as well as what the behaviors you expect around participation are. How are they supposed to behave during class meetings, you know, what is what isn't acceptable, how they behave when they're on camera, how they behave when they're interacting with other students. As well as how they behave while they're interacting with you. And for those students who can't attend on any given day for some reason, how are they expected to notify you they're going to be absent, and will you require make up time.

So those are just some foundational places from which to start to give your students a very clear idea of when they're expected to show up, how they're expected to behave when they do show up, and what to do in the event that they can't.

### **Erika**

So, something I think is important to touch on with maintaining these daily or weekly communications, is also bringing in the social-emotional health component. You may be used to, you know, checking in with your students at the door. Maybe you do the kind of the password technique, or you have just a little chat, or you can just kind of see the general mood that the student is in when they come into your class. Or a kind of a warm-up, or, you know, how did your weekend go?

So something that we would like to focus on as kind of a pro tip, is still maintaining some form of those morning meetings. And that will help to gain momentum and buy-in for the rest of your learning activities. But we definitely want to cover the social-emotional health aspect. Tyler, would you like to talk a little bit more about that?

### **Tyler**

Absolutely, I just wanted to reiterate what you're saying you know, that right now especially in the early days of this change in the way that we're interacting with our students, in teaching remotely, you know, multiple experts have pretty much established the fact that being concerned about your students well-being, their emotional states, their health... those concerns really supersede learning objectives at this point.

And that, you know, teachers who are able to really engage with their students on that level of recognizing that their well-being is important, you know, recognizing who they are, where they come from, and that they might not, you know.

For a lot of those students, school was a safe space, for example, right, and if they don't have that feeling of safety, you know. It is the most effective teaching strategy to help students feel safe, right, because we care about our students. We want our students to know that, and sometimes that can get lost in this remote environment. They don't get to see you face to face every day. So these morning meetings are an excellent opportunity to just kind of check in with your students as human beings before we start looking at them as learners, right? Acknowledging kind of the fullness of a person.

And there's a variety of tools out there to do that. We're going to look at one here in just a minute that is a great option for just that you know that emotional social emotional well-being check in.

### **Erika**

So when speaking about supporting student social emotional health, a strategy that we like and have seen widely is this virtual check-in. And there's a variety of ways to get to do that. And that's kind of in place of having that kind of getting to chat and see your students at the door when you first start class.

So we'll be talking about a variety of tools, such as Remind, Talking Points, or maybe your LMS. You can ask your students to respond with how they're feeling with just a simple emoji. It isn't as intimidating, you know, it's universal. Another thing that you can do is sometimes what we do in class, if they're on camera on Zoom or Google Hangouts, use a quick thumbs up, a thumbs-sideways for "meh", or down.

But we really like this use of Google Forms, because that way you can kind of have these snapshots of how your student is doing from day to day or week to week. So you'll see on the right, this is just a little screenshot of a portion of one that we'll be providing to you and our resources. So it's kind of fun, a bit of pop culture, you have baby Yoda, and the students can select how they're feeling that day based on those GIFs.

### **Tyler**

One of the things I like about the Google Form as well is that, you know, you may have students that don't feel comfortable sharing, for example, a thumbs up sideways or down if they're on video. But the form allows you to be, you know, to get some individual feedback from all of your students at a time where they're all meeting together in a wide meet up, for example.

And as Erica said, there are a lot of possibilities out there. There are also an enormous amount of free resources. As we were preparing for this webinar, we came across lots and lots of resources that teachers have created and shared freely. The one that we're using as our example here, that will be in the landing page resources, is very well developed. It has both options for students to click if they, you know, are not ones that want to write, as well as ones where they can type into a field and share a little bit more detail.

So if you don't like this particular form, there are multiple options out there, but all the same basic structure where you provide the survey to students they can fill it in in real time, and then you get real-time feedback.

### **Erika**

So again, we thought this one was cute, it does a lot to cover the social-emotional health of your students, and it is free and easily reproducible.

And something that I think is also useful, is that based on that form you get a spreadsheet with the student responses. So you can track over time, you know, how they're feeling, how are they doing, you know. What are, you know, possible ways that their their learning is being blocked, or how can you intervene if necessary with additional resources for that student or that particular family. So it is really nice to be able to track this over time.

### **Tyler**

Definitely, it goes back to the idea that, you know, establishing that relationship and doing what you can to support your students' overall safety and well-being is paramount. And so, you know, if you have students that are trying and day after day that they're sad or they're stressed, you know, just the fact they're showing up to even click underneath one of those emojis says a lot about their motivation to be there.

And so, being able to look at that data over time will let you know which students you might want to reach out to in other ways, or look for other ways to support those students.

Right, so, once you've established that connection with your students, you've identified the best tools for interacting with your class, both as a whole as well as best tools for communicating with the individual students, the next thing we're gonna take a look at it now is ways to interact with your students collectively and individually, both synchronously and asynchronously, right.

And so the graphic in the slideshow here is a pretty good introduction to the differences between synchronous and asynchronous learning. And we're going to take a look at the different kinds of tools that we can use to communicate in both of these both ways, as well as looking at how these different tools can impact differentiation and issues of equity.

So your synchronous options, there are a variety of tools out there. Again, most of you probably get this point, three or four weeks into quarantine and remote learning, probably have established some favorites for one-on-one communication as well as for group and class instruction. But if you haven't, or even if you have, just some things to consider and to reflect on, to look at your best practices.

Again, establish what the expectations are for communication. For example, if you have it set up with your students that you want daily communication via check-in. You know, what does that

look like? They're using Whatsapp, maybe they send you a, you know, a pretty good morning type text. Or if they have questions throughout the day as they're working on whatever assignments they have, you know, when are those students supposed to reach out to you? Establishing those procedures. Do you have office hours, do you have specific time devoted to each student, or you kind of leave it open-ended.

These are all things we want to consider before you set out your routines and procedures for your students. Or if you need to amend routines and procedures that you already have because they're not working as well, thinking about how are you going to balance the one-on-one communication with your students at set times with one-on-one communication as students need arises for contacting you.

So once you've established your means of communication your expectations around that, taking a look at how you expect the group and class instruction to go during those live interactions, making sure that you've established what your shared platform is going to be. Again, you know, Zoom and Google Hangouts or two of the most common. They aren't necessarily the only ones.

But once you have established what you're going to use, then setting a schedule for students to show up, right. Is your schedule going to be a daily meet, is it going to be weekly, what time of day, etc. Those are all considerations that you want to have hammered out before you set those expectations on your students.

And then once you have the expectations in terms of time and place, going over procedures and routines for your students as far as you know their attendance, their behavior while interacting online, with you as well as with other students. So setting those expectations ahead of time, again, is going to set the stage for, you know, how the experience is going to go overall.

So you want to make sure you have solid expectations and solid procedures laid out for your students. And then they know what they're accountable for.

### **Erika**

We've referenced quite a few of these already but when needing to communicate with students or families more individually, it's been really interesting to see which apps or means of communication the teachers have been choosing.

Many of you might be familiar with Remind, you can add family phone number information, it maintains the privacy of your own phone number, but depending on if you have multiple classes or just one that you need to contact, it shoots out the messages to everyone on your roster. So very quick and effective for communication. Families can also reach you with their own messages and concerns. So that could be another way that students even answer you with that quick social-emotional check-in with just an emoji or checking in for the day.

For many younger students, Class Dojo is very popular for communicating with students and families. Talking Points, Tyler and I were very excited to find and hear more about that. Being a Dual Immersion teacher myself, you know, I am able to interact with my students and their parents in the Spanish language, but many teachers are unable to speak the same language as a lot of the parents. Especially if you have very diverse populations and languages. So this platform functions similarly to Remind, but what's very nice is that it will translate the message back and forth between the two of you in the necessary target language.

So I think that was very exciting to find, and we did test that out between the two of us in Spanish and I was very pleasantly surprised at its accuracy.

### **Tyler**

Well one of the great things about Talking Points too is that they offer services in over 100 languages. So if you're a teacher who works in a place that has a diverse student body with many different languages spoken, Talking Points can really streamline that communication process. And it's free which, you know, every teacher loves having those free resources so. If you have students who speak a different language in the home and you haven't discovered Talking Points, you should do yourself a favor and check it out. It's a really amazing tool that works really well.

### **Erika**

I was surprised to see a lot of teachers are actually using Slack with older students, which I think has a nice application to the workplace. You can create new channels based on topic, and you can either use it to communicate individually with students or with a group. And it naturally archives those conversations. So that can be both a useful individual and group communication tool.

So many of you already have expectations from your district, and maybe you are a Google Suite school, so you're going to be using Google Hangouts. Some of the expectation may be to you Zoom. Other schools are using Microsoft Teams. On the positive side of this, students are getting to use, you know, real remote tools that you know companies are using today while we're all safely social distancing at home.

But as Tyler mentioned before, the big thing here is to follow your district's expectation. If your students are familiar with Google classroom, Google Suite tools, then definitely use Google Hangouts, keep things as consistent as you can.

### **Tyler**

Alright so, we talked about some of the tools for synchronous communication for live interactions both with individual students as well as with classes, but a good portion of instruction and just of the learning is going to happen asynchronously. Your students are going to be working at a time when they don't have direct access in live-time to you.

And so, some of the asynchronous communication options that we're looking at, again, we kind of divide these into two categories. Asynchronous communication one-on-one, those tools that you'll use to talk to individual students, and then asynchronous options for teaching and passing on information to your class as a whole.

So for the one-on-one communication, again, if you have students who have limited or no technology available, but they have responded. You know these students want to engage. The best practice is to establish an acceptable form of communication that they can rely on. And so, you know, for some students that might be a phone call. For some students it might be a text message, you know. If there's zero communication digitally from the home, as Erika mentioned in a previous slide, it might be that point of contact where students are, you know, picking up materials at, like, a lunch pickup or drop-off. So just establishing the way that you're gonna communicate with those students who can't do live communication digitally is really important.

And then once you have that method of communication down, again, identifying the procedures and conveying the expectations for students to engage with you. So how and when are they going to ask for help, for example, what is the expected turnaround time like.

Let them know what they can expect from you if they send you a text message, you know, and you aren't able to reply for a day. They should know what your turnaround time is as well as what is the turnaround time that you expect from them when you send them a piece of communication. And then maintaining and -- establishing and maintaining expectations for students while they're waiting for a response.

So the idea that, like, a student sends you a message, they shouldn't just stop everything until you hear back from me. What are the expectations for how they're going to spend their educational efforts while they're waiting for a response from their teacher.

And then for group and class instruction asynchronously, again, identifying tools that you're going to use and making sure students know how to use the tools. For example, you know, most teachers have some sort of classroom blog or webpage. Many of you have LMSs that the students are already used to engaging with. But if you're starting with a new tool, making sure that the students actually know how to use that tool before expecting them to use it is kind of huge.

And then there are just an abundant amount of resources available to teachers right now out there in terms of presenting lessons. There's lesson plans, there are YouTube videos, there are all kinds of resources.

So as a teacher, we mentioned earlier, you want to try to avoid burnout. Make use of the free resources that are out there. There's no need to reinvent the wheel for every single asynchronous interaction you have with your students.

**Erika**

So another tool that you not may have even considered is actually using content and lessons delivered by certified teachers over public television. So in our state, we're located in Boise, Idaho, teachers have been selected to prepare lessons. And they're offered throughout the morning based on grade level.

This isn't just happening in Idaho, this is happening with PBS affiliates across the United States. So if you do a quick Google search, you can see which affiliates are participating. These are standards-based lessons being delivered by certified teachers.

**Tyler**

And one of the great things about the using the PBS resources, you're using Public Television resources is, for a lot of families that don't have internet, they don't have Wi-Fi, they don't have smart phones... 98% of households in United States have a television. And so, you know, this may be the only tool that some of your students have for viewing lessons at home. So it's definitely worth considering, worth investigating. Particularly if you're working with students who don't have smart phones or Internet.

**Erika**

Yes, in regard to accessibility and equity, this is actually one of the best options. So we're all very appreciative to PBS affiliates and participating teachers in this program.

**Tyler**

Absolutely.

So that kind of you know, brings us around to those students that have, again--non-digital students, students with no technology at home by which to access you or lessons or materials.

So if you do have students that, you know, you have been able to make contact with, that aren't missing, but that are severely limited in their ability to communicate. It can be really tempting to want to give those students an enormous amount of work on those few times when you can contact them. So for example, if you have students that are you know picking work up on a weekly basis, maybe at one of the lunch pick ups or something along those lines, you know, the idea of giving them lots and lots and lots of work so that they have access to everything seems like a good idea, but it can often be overwhelming for those students.

So you want to make sure that you limit the amount of, like, packets and worksheets that you send home if you want to maintain a high level of buy-in from your students. So choosing things to send home in print... go very sparingly on those print items, and whatever you do choose to send home you want to try to make those things more experiential and less passive.

So for example, you know, sending directions on how to do some kind of an activity is going to get a lot more engagement from students than sending home a worksheet to fill out. So sending directions for those activities, having them do things that don't require a lot of exterior resources, like looking for things around the house that they might be able to implement. Like if you're doing math lessons, maybe they could count different colored fruit loops in a cup or something along those lines.

Doing things that students are going to... this can get them out of their seat and not have to just be writing and filling in worksheet after worksheet after worksheet. It's going to, you know, increase their buy-in, it's going to help them maintain some intrinsic motivation when you aren't there to guide them.

### **Erika**

So that's an excellent segue into our next section of the webinar. And so now that you've reestablished your relationship and interaction with your student on an individual level, or your class, and even peer to peer. We want to touch on the importance of student choice as a means of motivation.

So kind of as a next step in thinking about what you can implement online or send home to students, talking about student choice really is important as you lesson-plan. As you can see, it increases motivation, builds confidence, self-awareness, and students are just going to be much more motivated and you'll have that buy-in for them to actually more actively participate in what you send home.

So really think about that as you are planning your instruction. You can see here from--this is a nice little graphic from John Spencer. Thinking about ways to boost student engagement. We really want to give them choice, and that sense of agency, some control in an environment where they really, you know, it's maybe difficult for them to even get a handle on how serious the coronavirus is. So, you know, there's a lot of worry, concern, and not a lot of control in their lives.

So as you plan your instruction, giving them choices, that can really help to build and reinforce that sense of well-being and safety as they go through their learning with you. So we know that there's obviously a lot of distraction, so avoiding packets and making them feel even more overwhelmed will really take you far with your students. And we really want to work a lot with intrinsic motivation. And you'll still be able to monitor your students progress.

So kind of some tools some strategies that we wanted to talk with you about. You know, this is nothing new, but maybe it's kind of something that you've forgotten about. So taking student choice can be broken down into two categories. Students can decide their the way that they choose to respond to content, or if they can actually choose some of the content themselves.

So I'm sure you've heard of choice boards or learning menus, but they are a way to organize your instruction, still fit in your standards and your content, but giving students that that agency and sense of control, or doing what is most interesting to them, or fits kind of their learning style.

### **Tyler**

I just wanted to mention too that, you know, looking at these different categories, one of the things that's great about offering student choice as a teacher is that it looks at, you know, addresses different challenges that teachers commonly have.

One being differentiation. Offering multiple choices for students allows you to put different types of assessments, activities, so you can check in with where your students are in their understanding in a way that best suits their learning style.

And then also looking at apathy. Allowing your students to choose which content they want to study can really kind of break through that student apathy and allow them to engage. So choice is, you know, not just a good tool for students, it's a good tool for the teacher as well. Because it allows you to come back to those most common problems.

### **Erika**

Yes, and to continue on with choice of content, another option is the genius hour. So if you haven't heard of that before, it was based on a practice that Google had as a company for their employees. So employees were allowed 20% of their working time to spend toward pursuing projects that were of their own interest. And that's actually how many of their products were developed. Even something like Google Meet or the Google Chat, was developed through some of that 20% time of choice.

So students will be able to pursue something that they're interested in with scaffolded support. So we'll talk more about both of these.

So the first one that we'll kind of go over, as Tyler mentioned, the choice boards are very adaptable. We thought that these were a great reminder to educators to pull out of their toolboxes once again. Because they are so flexible, they can be adapted for any content area, or can bring learning across content areas to engage something like STEAM learning, we'll see an example of. Tyler, I know that you used these in your classes as well, and you know, even under a different label such as learning contracts.

### **Tyler**

Sure yeah, you know, the choice boards, they can come in a variety of forms and shapes and even under different names. But that, you know, the philosophical underpinning is that you give students multiple options to engage with the content or multiple options for which content to engage with at any given moment.

So when I was teaching full time gifted classes, some of the activities that we did where we

had choice, for example, they would have a spelling contract and then a vocabulary contract with 20 different choices to demonstrate their learning at each time. And so they were responsible for completing three assignments per week.

So students had an opportunity to see what the learning goal was and then choose how to demonstrate their knowledge of, or their mastery of, whatever that learning goal was.

So choice boards, you know, giving student choice goes across all the content areas. And it's very--it's a tool that's very easy to adapt. Allowing students the opportunity to pick their assessments increases that buy-in that we've been talking about throughout the whole webinar. Whether those assessments are formative, they're just kind of demonstrating where they're at in the learning process, or as Erika just mentioned, using them as a tool for their summative assessments to show they've mastered whatever the content is that you're presenting.

### **Erika**

We'll see some other types and, again, there are hundreds of resources out there. And so, we're just kind of showing some overarching categories or uses of these choice boards that you can take advantage of in your own classes.

So you can see the content areas defer, but you can see you can incorporate technology easily, you can almost make this like a hyper document. On the flip side of that, if students don't have access to technology, this rocks and minerals example is still very active. This is something that you could hand off to families at your weekly pick up, and this is something that they could do at home with relatively few material needs.

### **Tyler**

The nice thing about the take home non-tech version, too, is it, you know, in these choices are artifacts that the students can create to demonstrate their learning. So they don't have to log into anywhere, they don't have to find access to the Internet, you know. They get their choice board, they select the things that they're going to do, and then they produce artifacts that they can either return to you the following week, or maybe take pictures of, or you know, there's a variety of ways that they can share those artifacts. But it gives them something concrete that they can use, that they can do to share what it is that they're learning.

### **Erika**

One other example is choice boards organized by standard. So you can see this is a reading response choice board. And at the top it says "learning objective." So they've given you kind of a core set of tools and activities that you can do that are very adaptable depending on what you're wanting your students to get out of this text.

One of the things I like about this particular choice board. When you organize around standards, it gives you an opportunity to mix both digital and non-digital forms. So even though this

particular example is showing all choices that can be done online, you could definitely adapt to have digital choices as well as offline choices.

Something else that can be helpful. Sometimes it's nice just to have, as we mentioned before, a free exploration. So this choice board on the left, the e-learning choice board, it's allowing students to touch on skills from coding with Hour of Code, or Code.org, to even just having movement.

And kind of in the sense of physical education, working on that sense of well-being. On the right we have one that's just a simple one for tools for creation. And so, if you are a technology teacher or you're wanting to pair this with other tasks in your classes for student creation, this can give students kind of an anchoring into learning to use new platforms and apps.

So again, these are all tutorials. Maybe you even want to use this as professional development for colleagues, and we'll show an example of that a little bit later.

This is one that I created as an example, and we talked a little bit before about cross-curricular choice boards. So we have here activities, and it cuts off a little bit, but students can choose from three different activities in each column, and they not only consume but they produce a learning artifact--you know, as is consistent across all of these choice boards.

But they're getting to interact with the content. So again, there are many options that give them different types of learning experiences across the content areas. And even as Tyler mentioned before, another type of way to set up a choice board that I love is setting it up by multiple intelligences, so that students can have a variety of experiences, or choose activities that best fit their learning styles.

### **Tyler**

Yeah, one of the things that I like about this particular board, too, is that we have an example objective. In this case, it happens to be a science objective, but you can take objectives from a variety of different content areas. For example, maybe you have a vocabulary objective. And so, you could have students figure out how to work in the vocabulary, whether it's, you know, working with the definitions or doing some piece of writing or whatnot, across these different STEAM categories.

So picking the objective and then leaving it up to the student to demonstrate how they can connect that to these different areas gives them a lot of choice, and really gives them a lot of opportunity to be creative, which -- again, increases engagement. And as we mentioned, family engagement.

### **Erika**

The one on the left, I created, and the one on the right I found online with [learningcolor.com](http://learningcolor.com). But there are many opportunities to engage families and they can be very low-risk sort of activities. Just getting families outside.

One I liked was making a family time capsule to represent what this time together at home has been like. So maybe they want to put in drawings or photos or other significant items.

Okay and here's one for teachers. Just to keep in mind, you know, we're having to do a lot of catch-up, a lot of planning in a relatively short period of time. So there are even choice boards for you.

So if you are needing to get kind of up to speed on tools that your district is expecting you to use or ones that you kind of want to push yourself to learn and implement, there are even tech choice boards for you to explore and to gain new knowledge through tutorials and creating artifacts yourselves so that you can better support your students.

### **Tyler**

Well, one of the things I like about the the idea of you know doing some self-led professional development using choice boards, is A) if you are feeling overwhelmed, as many of us are, you know, that's what we were kind of talking about at the beginning of the webinar is that, we need to place realistic expectations on ourselves. And you know, what we have in this board here is 25--or 24--awesome resources. That's way too many resources for a teacher to realistically try to engage with and master. So using some of the tools that we ourselves are gonna use with students to kind of narrow down our own learning in this new world of remote learning, this is just kind of a fun tool to be able to do that.

You know, but I just wanted to reiterate there, again, trying to avoid the burnout, trying to really refine what it is that we consider our most essential objectives. Having choice boards can really allow for that, because, you know, what it does is it gives we as the teachers, if we're doing this for professional development, and once we have learn how to do it with our students, it takes from a sometimes overwhelming body of really good materials and limits it to a number that is easy to manage.

And so, you know, whether you do that as, like a tic-tac-toe board, we get three in a row, or a bingo where you do five--however you want to organize the number of choices. It's not, you know, there's a lot of ways to do that, but the important thing is putting that limitation on it to make the material manageable.

### **Erika**

Similar to the choice board is something that you can do on kind of a more long-term basis. So we have here the Genius Hour, or maybe you've also heard it be called a passion project.

So we're wanting to allow students to explore a topic of choice, so you're getting that intrinsic motivation and buy-in from your student. You know, this should be something that is a pleasure for them to learn about.

You can see from this image on the left the six steps for Genius Hour. You really want them to have a sense of wonder and generate their own question that they want to pursue in their own research.

So, you know, you can do a shorter term or a longer term project. But what this does is with this question that they generate-- you know, how something works or, how do you do, I've had students do how do you do stage makeup, you know, even for horror films. Or how do you learn to animate a scene using 3D coding and design. How do you use Scratch.

So you know, the questions can be very basic, but it should be something that the student is very motivated to pursue and to learn more about.

### **Tyler**

So one of the things that I wanted to mention here, too, is that student choice is definitely very motivating. And allowing students to pick a project, you know, that--it comes from them it's something they're incredibly interested in is very motivating, especially in the beginning.

But a common stumbling block or challenge can be once students get into the, you know, the project and they start having to find ways to connect their project to different learning objectives and different content areas. It can sometimes be overwhelming.

So scaffolding the process for your students is really key to making that a successful project for your students particularly with younger ages. Those students are going to need a lot of support, and being able to connect the thing that they are excited about to different learning objectives that the teacher is responsible for covering. And so, Erica's going talk a little bit about some strategies for doing that.

### **Erika**

Just in the first place, there are countless resources for guiding a Genius Hour project. There are dedicated books. Teach Master is a website that has a very well developed system for leading younger learners through a Genius Hour project. It's very scaffolded, even just from generating the questions and what they wonder about, what they want to know more about. There's even station activities that could transition into online use.

But again, don't feel pressured to reinvent the wheel, you know... look for existing guidelines that are already out there. We know that we already have a lot on our plate as it is.

But this is a sheet that I would use initially with my students. And I had many examples of previous projects that other students had done. But I think as a first step to that scaffolding is, once they have a topic, is to set up a SMART goal.

And as educators, were used to having to set up our own, so we know that this is an important life skill for our students to have. So we definitely want to make sure that it is specific, measurable, achievable, reasonable, and timed. And timed, we know, can definitely be the case. So make sure that you are scheduling those check-ins with your students to see how their project is developing and how you can get them over any stumbling blocks.

This is what I would give my students as kind of their project log. They're reminded again of their SMART goal, broken down into each section. And then if you could see the full page, they have these little project logs. So each time they have worked toward their project, they have done research or exploratory learning, they're explaining what did they do that day, what did they learn, what questions do they have to explore, or items that they need to improve.

### **Tyler**

We have, one thing I want to mention too, is that you know, within the Genius Hour projects, they're, you know, there's a lot of structure there for managing a project that extends over multiple days or even weeks as students are investigating.

Also, I don't feel like you have to be limited to following this process exactly or in its entirety, for example you might keep trying, you know, you may want to just create a Google Form that logs what students have done on a daily basis, kind of like what we had with the introductory log. So all of these tools are super flexible and super adaptable just depending on your need and your timeframe and what your students are capable of.

So again, keeping in mind that scaffolding is key to your students' success, once you, you know, establish a platform that you expect your students to use, giving them multiple choices of ways to explore and, like, what kind of an artifact they're going to produce.

Erika came up with a really awesome resource. We had to spread it across three slides here in order to be able to see, to fit everything on the screen so that you can see. So, as Erika's going through and explaining what this particular example is about, keep in mind that this resource is located on this webinars landing page so you can see it all in one shot. We just couldn't fit it all onto the individual screen.

### **Erika**

So what I did was go into the Digital Media Academy's STEAM Learning Lab. And you have a variety of courses that students can take based on interest. And so they call that flex learning pathways. So if students have an interest in digital storytelling, game design, creative design, etc., they can choose from up to between two and four courses, depending on their developmental level.

And as you can see from the image, it will, their learning will explore careers that are associated with these skills. So again, getting that nice STEM or STEAM learning and career exploration in kind of active activities is a nice way to go through this Genius Hour project and this particular learning platform.

So you can see it a little bit more expanded here, there's really a lot of options, it's really cool. And you can finally see more of the courses here.

Okay, now that you have many options for engaging your students in active ways using choice as motivation, you can collect these artifacts based on this learning into digital portfolios.

So many of you have district mandated platforms such as Seesaw for younger learners or Google Classroom and Schoology for older learners. So go ahead and use what you're already implementing in your classes so that students are familiar with that. This just becomes a great way to track your students' learning and to keep them accountable and have something to show parents and administrators as an alternative form of assessment. You know, you're able to see how engaged or not at all your students were.

If you are so inclined, we have some other options that are very interesting: Artsonia and Bulb. And those even offer additional participation from parents and families to be able to see what students are doing, comment. But they're interesting to try. And all of these are free.

And this is just a sample student portfolio from Bulb. What is nice is it's set up almost like an online resume, and this is being used for even younger learners as well as high school students getting ready to go to college.

So, as you can see below, this student has different folders that you can click on that will expand based on the artifacts that she has chosen to put in each category.

Okay so we've talked about so many different topics today. We hope that we've given you many tools to be able to move forward in a realistic way that you can manage, that's healthy for you and your students.

### **Tyler**

We want to remind everybody that paying attention to your, you know, mental health, your social emotional well-being, as well as your students, is paramount. And that those learning objectives really can be best hit by, you know, addressing those social-emotional needs first.

### **Erika**

So don't forget that we've hit, like Tyler said, gaining those relationships and the communication back with your students in order to build that momentum toward student buy-in and getting them to participate in your instructional activities.

We've talked also about strategies for synchronous and asynchronous communication with your students.

We've also talked about how important student choice can be in becoming motivation for student learning. We hope that choice boards and Genius Hour projects have given you some ideas or tools to call on when you are designing your instructional activities.

But overall, we just want to keep this realistic and easy for you to manage and still get very positive results from your students.

**Tyler**

So we at PCS have some solutions for educators that we wanted to share real quickly. At the landing page to this website, you can definitely go and investigate our individual STEM education kits, which are kits that are designed to be sent home during this remote learning period for students to have some -- interactive options. So those are included on the landing page, along with copies of the various resources that we have cited here.

So again, we want to thank you for joining us. Please take a look at those resources, and we will see you next time.

**Erika**

Thank you.