In this episode I share technology resources and ideas for your next science experiment. You'll hear how to use EdTech tools to conduct, capture and prepare for science experiments in your classroom this year, with plenty of cross-curricular connections!

Hello there! My name is Monica Burns, I'm a former classroom teacher and now I spend my time sharing tips, strategies and activity ideas to make easy EdTech integration a possibility in your classroom. You may be familiar with my books, like Tasks Before Apps or my blog ClassTechTips.com. Whether we've met at a conference or special event, you've followed along with my EdTech tips for years, or simply joining in for the first time today, I'm so glad you're here!

Each week I share popular content from my blog. I read aloud a blog post, add a few extra things, and try my best to bring the content to life for you — all in audio format.

In this bite-sized podcast you'll get some quick info and actionable tips to energize and elevate teaching and learning!

You can head to my website classtechtips.com/podcast for all of the show notes. That's where you'll find the transcript for each episode, links to resources, and any of the free downloads I mention.

This week's podcast is titled Technology Resources for Science Experiments, if you're not teaching science this year, or cover other subject areas, there is something here for you too. You can use many of the tools and strategies I share in other content areas. For example the moviemaking tool I tell you about could also be used for book trailers, and the interactive presentation tool I discuss would be perfect for PreK students learning letter sounds and high school students discussing social justice. So what are we waiting for? Let's dive in!

Can an iPad help out with a science experiment? What role does a Chromebook

play in the science classroom? Well, not that long ago I hosted a webinar for that tackled these questions. And I wanted to share all of the favorites from the webinar with you too! In this podcast episode we'll cover lots of favorites. If you're driving or jogging don't worry -- you can find the entire list on the show notes for the episode at classtechtips.com/podcast

So regular readers of my blog and listeners of this podcast are familiar with my "tasks before apps" mindset. We still want students to have hands-on experience with science – and not replace any of these critical moments. But technology tools, including the resources on this list, can help extend, energize and elevate science experiments in your classroom.

If we've met at a conference before, you might have heard me tell the story of the worms. STORY

Let's talk about how technology can help you and students exploring Science Content!

Digital tools can help you set the stage for a science experiment, by providing context and background knowledge to students. You can leverage the power of digital tools before diving into a science experiment, during a short- or long-term science project, or even as an extension activity. This activity could include an interactive teacher-led lesson, independent or partner exploration of mobile apps, and more!

First on the list are the Nearpod Science Lessons!

Nearpod is a favorite interactive presentation tool with embedded formative assessment and virtual reality capability. I've shared ways to use this dynamic tool in the reading classroom and even with early learners. If you listened to episode four of the podcast then you heard me mention it as a tool for backchannels too.

Bottom line: you can use Nearpod in lots of different ways, for all ages, and all subject areas.

Before starting a science experiment with your class, take a look at the Nearpod marketplace. There are lots of ready-to-use lessons on science concepts and the ability to make your own.

With a quick search of the Nearpod marketplace this past spring, I found a great lesson on the life cycle of a frog. I added the lesson to my Nearpod library and made a few changes. Then I shared this lesson with a group of excited Pre-K students to help introduce this new science concept. It gave them a chance to explore this information with visuals, virtual reality, and discussion. There are lessons for elementary, middle and high school too. Some are free and some are paid and you can use the search filters and key word search to find lessons.

Next on the list is the Tinybop Science Apps

The folks at Tinybop have a series of fantastic apps related to science concepts. You might introduce these apps before starting a science experiment or to extend students experiences. Four of my favorites are The Human Body, Plants, The Earth, and Simple Machines. Instead of downloading these apps on every device in your classroom, you might add these to a few tablets and use them in stations for

students to explore with a partner.

Another collection on the list is Avokiddo Science Apps

If you're a regular follower of my blog, then you may have seen my feature of Fitoons earlier this year. Remember, you can sign up at classtechtips.com/signup

Students exploring healthy eating in the science classroom can combine foods, cook them in different ways, and experiment virtually using their app Fitoons.

Another great app from Avokiddo is DNA Play. Students can use this app to simulate a DNA experiment that might be hard to replicate in your classroom.

So we just took a look at some apps and websites for setting up students with information before a science experiment. Now let's take a look and a few apps with Science Experiments.

If you're looking for ideas for your next science experiment, the folks at The Lawrence Hall of Science have you covered. Their Do-It-Yourself apps focus on four science areas popular in K-12 classrooms. Each app includes ideas for your class that you can tailor to different grade levels and learning goals.

The first one on the list is DIY Nano HD which focuses on concepts related to small (or "nano") science topics. DIY Sun Science includes activity ideas related to the sun and solar energy. With DIY Lake Science, you can explore ecosystems with your class. If you're studying the human body with your students, DIY Human Body

is full of ideas to bring to your classroom. These four apps are also great ones to include in a family newsletter if you won't have time to tackle all of the activities during the school year.

When it comes to Tools for the Lab, there are a few more apps to explore.

Although I'm definitely an advocate for the use of technology in the classroom, it's so important to find a balance. Watching a video or simulation of a bean plant growing tall, isn't quite the same as seeing the real thing. As you prepare science experiments for your class or help students work through the scientific method, digital resources may come in handy throughout the process.

Two tools for the lab you may want to explore are the Stage Document Camera and the Lab Timer mobile app. The Stage app can help you model ideas for students through annotation and recording. The Lab Timer is more than just a quick countdown clock. It allows you to run multiple timers at the same time.

Don't forget to head over to the podcast page: classtechtips.com/podcast You'll find the entire list of what I'm sharing here and another free download I think you'll love too.

So let's imagine now that your students are hands-on, in the midst of a science experiment. There are digital tools that can help them document Science Experiments.

Whether students record their hypothesis at the beginning of a science unit, snap pictures throughout the process, or share at the very end, there are lots of ways to document science experiments. These six favorites are open-ended creation and reflection tools. They aren't specific to science or experimenting, but instead, give students a space to share their learning. So you could use these in a science classroom in March or a math class in April -- it's totally up to you.

Explain Everything is a super-popular screencasting tool. If students want to show off the steps to their experiment or create a tutorial, Explain Everything lets them do just that. They can export their final creation as a video.

Another favorite is Adobe Spark. In my book *40 Ways to Inject Creativity in the Classroom with Adobe Spark*, Ben Forta and I share lots of ideas including activities for the science classroom. Students can use Spark Video to create a movie to document their experiment with narration or a Spark Page that combines images and text. If you're looking for a quick reflection activity, students can use Spark Post for virtual exit slips too.

Flipgrid is a favorite I've shared on the blog before and mentioned in episode four of the podcast. It is a powerful, free tool for students. A science experiment might go on for several weeks. Students can use Flipgrid to provide updates to their classmates through a quick video response.

As we keep going down our list, another excellent tool for providing progress updates is Seesaw. With Seesaw, students can snap pictures, share a link, write a sentence or create a video to post to their digital journal. Teachers can use Seesaw to connect with families too.

You might have seen my free ebook of Book Creator ideas for the science classroom I shared on my blog not too long ago -- I'll link to it in the show notes at classtechtips.com/podcast so you can find it there too. In the science classroom, students can use Book Creator as a science journal. They can also create an ebook with an overview of their science experiment. If you create an ebook with your students, you can also embed a Spark Video.

LET'S RECAP

I can't wait to see how you use tech resources for your next science experiment! Share an idea in the comments of this post or share the link on your favorite social media channel.

So let's make this EdTech easy...

1. First, decide on what category you want to focus on (before, during, or after a science experiment)
2. Decide why you want students to interact with a particular EdTech tool (remember, "tasks before apps"
3. Choose how you will introduce the new tool or activity so students can dive in independently or with your support
4. Finally, reflect on what worked and what you might do differently next time

I can’t wait to see what you and your students do with techy science experiments this year ! Make sure to share your experience on social media and tag @classtechtips, leave a comment on the podcast with your feedback, and head over to classtechtips.com/podcast for the free download for this episode!

I love bringing you free resources like this podcast to energize and elevate teaching and learning! Can you do me a favor? If you like the podcast, leave a review on iTunes, Spotify or wherever you’re listening to this... tell a friend about the podcast, or post a link to the episode on your social media. And if you’d like to stay connected follow @classtechtips on Instagram or your favorite social network. I visit schools and conferences all over the world, so if your organization is in need of professional learning -- just send a message my way!

See you next week with more easy EdTech tips!