

**P2 / BRAINPOP NEWS**

You can differentiate with built-in BrainPOP tools.

**P2 / SOCIAL-EMOTIONAL**

Take a look at Peekapak, a platform for social-emotional learning.

**P3 / STEM CALENDAR**

See what is going on in the world of STEM education.

**P3-4 / HANDS-ON CS**

Teach 21st century skills through hands on electronics

District 75 STEMConnect

Announcing the 2019 Innovator Program Dates and Locations

- Sydney, Australia
- London, UK
- Tokyo, Japan
- Singapore
- New York, New York
- Stockholm, Sweden
- São Paulo, Brazil



Certified
Innovator
Program

If you haven't yet, don't forget to
INPUT security questions for
your DOE account



EdTech Leader Opportunities

District 75 is made up of many amazing tech liaisons and teachers using technology to meaningfully impact their students. These efforts are worth shining a spotlight on. Yes, that is why we have the STEM fair, LEGO League, and other events. Some efforts though deserve individual attention. Here are chances for you to recognize

your coworkers (or yourself) for those efforts.

STEM Student of the Month: Any D75 teacher/student wanting to show off their work is welcome. Submit the form or [email](#) the info.

Apple Distinguished Educator: This is a group of exceptional teachers using Apple to enhance learning. There are 4 already in D75.

Google Innovator: Google's highest level of teacher recognition is having a session in NYC this year.

ISTE is accepting nominations for its varied awards including one for inclusive learning.

We also ask that you vote for the [ISTE People's Choice Session](#) being proposed by multiple D75 teachers.

Skill of the Month

BrainPOP Differentiation

We have shared in the past how [BrainPOP is much more than a movie site](#) and is great for providing a broad range of learning opportunities. Now we can focus on the way it allows teachers to differentiate learning opportunities for students. [My BrainPOP](#) allows for that kind of choice and flexibility.

BrainPOP allows choice

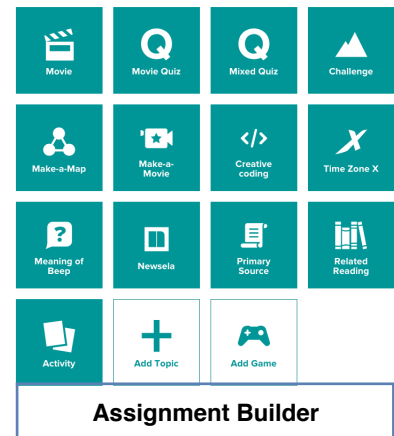


in the selection of topics, level of activity, and in how students can demonstrate their mastery on a given topic through quizzes, games, or digital projects. Here are the steps for how you can make that available for your students.

- **Use [My BrainPOP](#)**- This won't work with a school account so make sure you set up a

personalized account. Email us for info how.

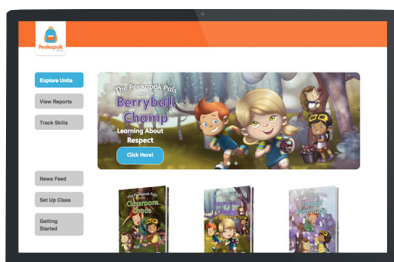
- **Set Up My Classes** - This can be done by sharing a class code.
- **Find a Topic** - What do you want students to learn about? This shouldn't be hard. BrainPOP offers a wide range of topics to choose from.
- **Select Assign** - Underneath the video are buttons for lesson ideas, unique quizzes, and assignments. Select the assign button for more options.
- **Select Assignment Builder** - Instead of just assigning the movie, choose Assignment Builder at the bottom to select features.
- **Choose Learning Path** - Now begin selecting which activities and in which order you want students to complete them. Consider whether they learn best through play, projects,



visual maps, additional reading, or a personalized quiz.

- **Set the Details** - Give the learning path a title and instructions. Then decide which class and which group of students learn best through the path you created.
- **Repeat for Other Groups** - Now you can go through the same process choosing other features and select a different group of students to receive it

See a [BrainPOP Kernel](#) video or the [blog post](#) for more insight on how to differentiate in BrainPOP. You can explore more about methods of [differentiation](#) also



App of the Month

[Social emotional learning](#) is about helping children become successful, compassionate, caring, and empathetic citizens of the world. [Peekapak](#) seeks to guide early childhood learners on that path.



They have an engaging curriculum that integrates literacy with SEL which, research shows, improves both. That way teaching the whole child doesn't have to compromise academic standards. They offer a

few ways for students to learn language and character.

- **Story-Based Learning:** Available in 4 reading levels, in English and Spanish, and with recorded narration.
- **80+ Classroom Lesson Plans per grade level**
- **My Peekaville:** - In this literacy game students gain agency and customize their experience through multiple quest and mini-games all relating to a specific SEL skill.



Hands-On CS

Equipment offers a number of hands-on computer science learning opportunities. Here are some the tech liaisons had the opportunity to sample including robots, modular electronics, and circuit boards. You can find [more information](#) on all of these in the full post.

ROBOTICS

KIBO

The Kibo is all about block-based coding with actual physical wooden blocks you scan with the built-in bar-code reader to program it. The durability and lack of requirement for other devices make Kibo a great robot for the early childhood set. There are several [extensions](#) and larger kits available and large scannable cards for visually impaired students. See their [curriculum](#) for ideas.



OZOBOTS

The tiny [Ozobots](#) are simple and can be 'programmed' just by drawing with some markers on paper. There are more advanced skills that students can master by programming in [Ozoblockly](#), their block-based coding software, that allows students to take full advantage of the [Ozobot Evo's](#) proximity sensors. They sell premade [color-code stickers](#) if drawing is too much of a challenge. Check out Ozobot's full [lesson library](#) for more ways information to integrate it.



New Notebook licenses will be available soon. Don't forget that you can always specially contact help at d75@teq.com.

WONDER WORKSHOP

[Dash](#) and [Dot](#) are really cute bots for the elementary set, and now, [Wonder Workshop](#) also offers [Cue](#) who is a sassy bot (or another personality you input) for an older crowd. The [Make Wonder web-based coding controls](#) offer more complex skills. They offer a [curriculum](#) that includes creative writing, game design, and advanced innovation thinking.



SPHERO

[Sphero](#) makes some of great classroom robots, but their [educational resources](#) are what really set them apart. They have full lessons, example programs, a thriving community of contributing educators, and [professional learning](#). You can use the Sphero to [tell an interactive story](#), to [study the planets](#), or [solve Pythagorean problems](#). Their app gives you all the sensor data from the Sphero that you could use for science or math-related lessons and we've used them for skills as basic as [early childhood stories](#) and [color/animal identification](#). The [Sphero Edu](#) site (along with the [app](#)) allows you to set up classes, assign student projects, create programs, and join in [Thursday Learn Day](#).



District 75 STEM Calendar

January 22nd
[Filmmaker @ D75 Productions](#)

January 23rd
[AR You Ready For This?](#)

January 24th & February 28th
[Designing Urban Transportation](#)

January 25th
[Modern Classroom Display Tech](#)

January 25th
[Deploying iOS and Mac](#)

January 25th
[Modern Classroom Display Tech](#)

January 30th
[Modern Classroom Display Tech](#)

February 1st
[The Science of Monsters](#)

February 1st
[The Art of Mathematics - Day 2](#)

February 6th
[iMovie for the Computer](#)

February 6th
[Everyone Can Create](#)

February 8th
[Music In the Key of Digital](#)

February 11th
[Smartboard Refresher](#)

February 11th
[G Suite 201](#)

February 12th
[SPOC Meet-Up Queens](#)



ROBOTIS & JIMU

These are fairly new robots and offer several options for various student

levels. [Robotis](#) is similar in some ways to LEGO robotics and the [Robotis Play](#) kits are at a level similar to the WeDo. [Jimu](#) has some fun robotics kits to create a dog, dinosaur, and various animal and machine creations.



MODULAR ELECTRONICS

LITTLEBITS



Part of why we use [littleBits](#) is because it makes working with electronics accessible and kids can focus on what they want to do with the tools rather than getting bogged down in the complexity of the tools themselves. They are easy-to-use color-coded magnetic electronics components that can be put together to create more complex creations. Now they offer even more complexity with their [Code Kit](#). Check out their [lessons](#) for more ideas or delve into their [STEAM and Coding curriculum](#).

SAM LABS

These are similar to littleBits, but they offer the benefits of mobility without being tied to a power source. Each component is individually charged and also uses Bluetooth. In addition, they have a fun app, [Curious Cars](#), that begins students with game-based learning to aid students in learning about the components.



They've recently expanded their [teaching materials](#) to include several projects and lesson plans.

CUBELETS

These programmable blocks serve as a robot construction system. There are 17 types of Cubelets and each has a special ability and they connect magnetically. Students can mix and match them and combine them with LEGO bricks to fashion a robot of their own. You can also create challenges with the blocks themselves. They are programmable, but that requires the [Bluetooth Cubelet](#). They have a series of engineering and exploration "for K-12."



LAB DISC



This portable all-in-one sensor system could be useful for inquiry-based science. They have a [lesson library](#) that covers all grade levels.

CIRCUIT BOARDS

SPARKFUN

The [Makey Makey](#) is great because you just plug it in and it works. It allows you to turn any conductive object into a functioning keyboard. You can create controllers for your computer using tinfoil, fruit, or another person.

If you're ready for the next level of circuitry you can try the [Digital Sandbox](#) which offers more

District 75 Next Issue STEM

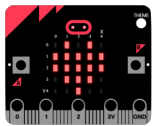
APP/SKILL OF THE MONTH

We'll give an overview of an app and teach you about a basic tech skill.

PECS

Find a number of alternative means to integrate PECS resources.

options with each sensor visually reminding users of its purpose. You can program it through [Ardublock](#) and begin with their [experiments guide](#).



There's also the [micro:bit](#), an easier portable circuit board. Microsoft's [MakeCode](#) offers block-based programming and the [SparkFun micro:arcade kit](#) takes it to the next level.

RASPBERRY PI

[Kano](#) is not for beginners, but if you're up for the challenge you can essentially build your own computer. Kano provides all the parts in an easy kit.



First, you build the computer then you program the computer.

[Pi-Top](#) is similar to Kano in that it is a Raspberry Pi computer kit, but it is costlier and more complicated. Kano offer [lessons and curriculum packets](#) as well that mostly cover different computer science topics. PiTop has their [PiTop OS](#) and games like [CEEDuniverse](#) along with their [coding curriculum](#).

