P2 / DIFFERENTIATION
Use tech to help make personalizing learning easier.

P3 / TRAINING RESOURCES
Check out some new opportunities for training that we haven't shared before.
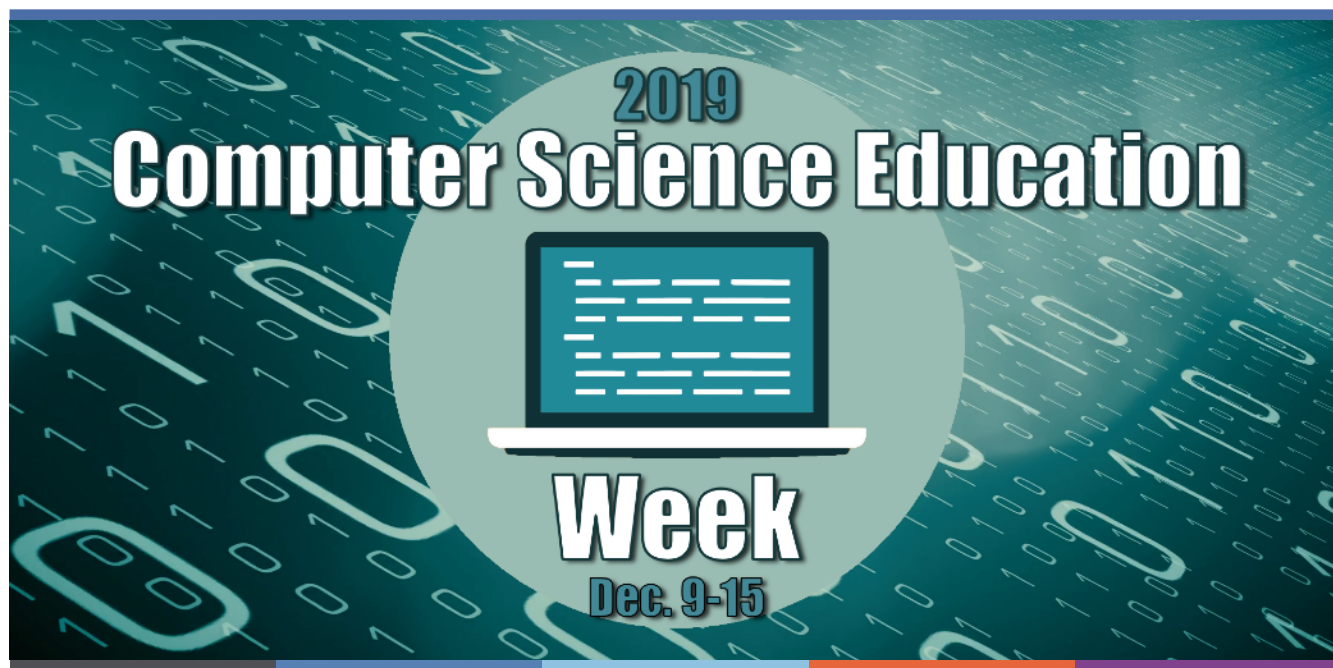
P3 / STEM CALENDAR
See what is going on in the world of STEM education.

P4-6 / ASSESSMENTS
So many ways to assess... which is best?

District 75 STEMConnect

2019 Computer Science Education Week
Dec. 9-15

Computer Science Education Week

Computer Science Education Week is coming up in December and it's time to think about how you can celebrate the Hour of Code with your students. Here are 7 ways to celebrate CS ED Week. If you want further insight you can get PD with D75 staff during Adapted Coding on Digital GBL which includes game creation. More learning opportunities are available through the Computer Science for All office and CODE Studio. Codesters & micro:bit are teaming for some lessons and Google CS First has new Hour of Code activities.

Large School Event–Code Studio provides a toolkit and videos to help you host.

Family Code Night Event–Invite families in for a night of computer science fun with a free event kit.

Ongoing CS Instruction–There are the Code.org curriculums, Apple's Everyone Can Code, Codesters programming, and more.

Class Fun–Engage students with CS games like Minecraft EDU, Gamestar Mechanic, or Codespark Academy.

Outside of Class-This can be a major Hack-a-Thon or a smaller local one. You can also start a CS club with Google CS First or other coding club organizations.

Make Something–You can turn to more hands-on projects in a Makerspace environment using Arduino, littleBits, or other circuits.

Get Offline/Unplugged–Some of the resources available include Mozilla's offline icebreakers, CS Unplugged, or links to Hour of Code offline and device-free activities.

Skill of the Month

EdTech Differentiation

Differentiation is giving students material sorted by skill and interest to maximize growth. Adjusting skill level puts the student in the Zone of Proximity — that place where they have enough background knowledge to do the work but productively struggle. There are ed-tech tools that make it easier for teachers.

NEWSELA

While teachers use Newsela everyday to differentiate in their classroom with standards-aligned content at 5 different reading levels, differentiated learning on Newsela doesn't end there. Many unique features empower teachers to support every learner.

Customized Instructions: Teachers can tailor instructions for students at different reading levels, or provide multiple methods for showing mastery and understanding.

Text Sets: Create a Text Set for a specific unit, theme, interests,

cultural backgrounds, and confidence in the material. Check out more examples.

Teacher/Student Annotations: Use annotations within the text to provide scaffolded questions with customized notes and instructions for students.

Presentation Mode: Home in on the text and facilitate whole class read-aloud that helps students with fluent reading, sentence structure, and tone.
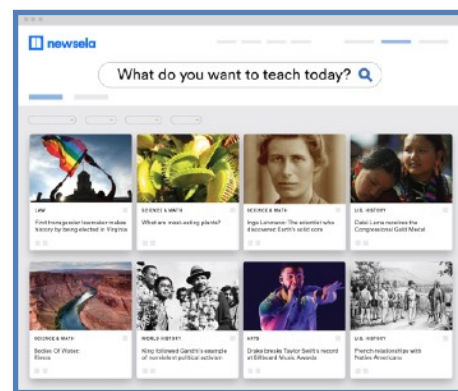
Write Prompts: They adapt with every reading level and can be customized.

Power Words: Find different Tier 2 vocabulary words at every reading level.

Spanish Articles: Newsela's Spanish translated articles can help some ELLs to follow along.
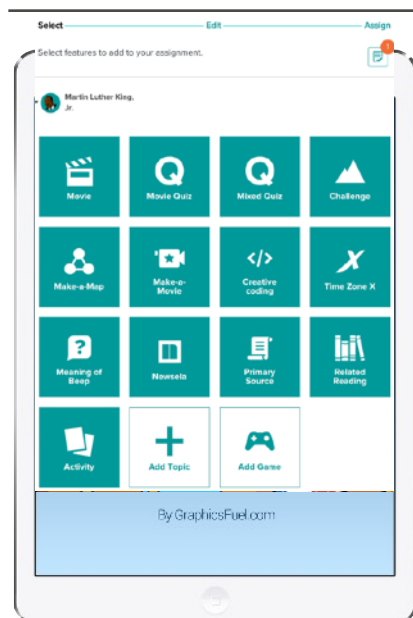
PARTNERSHIPS

To improve the level of student access to information, Newsela has connected with other platforms.

One of those included a connection to BrainPOP and its related videos. While those links are no longer directly viewable in student accounts, you can still fairly easily connect to the related reading.

Another valuable partnership involves Pear Deck. We'll do a deeper dive into Pear Deck next month, but for now know Newsela and Pear Deck teamed up to create Daily Decks. These free slide decks with built-in activities and assessments feature an adaptive news article with interactive prompts. Find out more and explore the most recent Daily Decks below.

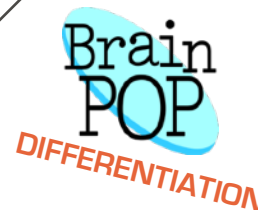Head to their Education Center to get more tips and training.

App of the Month

BrainPOP differentiation goes beyond a variety of topics to the wide range of tools accessible through the Activity Builder. Here are the steps.

- Use My BrainPOP which requires a personalized account
- Set Up My Classes through class codes, G Suite, or Clever
- Find a topic, elect assign, & select assignment builder
- Choose the learning path and select which activities and in which order you want students to complete them
- Set the details and decide which class and which group of students learn best through the path you created & repeat for other groups

Check out further details, watch the explanation video or view other options for differentiating with BrainPOP.

Professional Learning

In previous newsletters we've discussed the many technology and other STEM trainings the DOE offers. Of course, there's the common ones we've shared below:

- District 75 PD
- DIIT Training
- Tech Partner Certification
- NYCDOE STEM

There are many more available as well though if you want to further your professional learning. And you can find nearly all of them above and below at the D75 STEM Site along resources from our PDs.

Borough Field Offices

In case you were unaware there are eight field offices that provide guidance and professional learning for educational staff across the city. You can find training for your respective geographic district.

- **Affinity Schools**: special education focused training like The GLOBE Program or Developing Scientific Literacy
- **Bronx**: Passport to Soc. Stud.
- **Brooklyn North**: variety of PL for Math Liaisons, Living Environments, and Geometry
- **Brooklyn South**: explore Monday Math for specific grade levels, NGLS for Math, or any of the Culturally Responsive sessions
- **Manhattan**: a number of bias, crisis intervention and special education sessions

- **Queens North**: take Beginner, Intermediate, or Advanced CS or Web Accessibility
- **Queens South**: try out 3-D Science Learning, Instructional Math, or Core Math
- **Staten Island**: find PL for Math Leaders, Google Level 2, or JAMF Training

iTeachNYC

iTeachNYC shares the latest leadership and career development opportunities for teachers. This includes grants for a sustainability project, a Math for America Master Teacher Fellowship, or PL for digital citizenship and web accessibility.

STEMTeachersNYC

STEMTeachersNYC, a nonprofit organization, has a variety of free and paid PD offerings open to educators across the city. Check out their many upcoming workshops including Fun with Evolution, Living Environment Labs, or Computational Modeling with JavaScript.

Online Learning

There are many ways to continue learning online as we have shared through Microsoft's Educator Community, Google's Teacher Center, Apple Teacher, and BrainPOP 101. There are other options for broad instructional learning like the EdTechTeam Online Trainings or Teq's new online platform OTIS. There are a many ways for educators to keep growing.

District 75 STEM Calendar

Nov. 18th, 20th, Dec. 17th, 18th
DigIn Camps
_____

November 19th
Designing Accessible Websites
_____

November 20th & December 6th
Ready Player One: Digital GBL
_____

November 20th
G Suite Admin
_____

November 22nd
Sustainability Coordinator Meeting
_____

November 26th
Adapting Science Instruction for K-5
_____

November 27th
GEG Meetup
_____

December 2nd
Adapted Coding and Robotics
_____

December 4th
Get Going With G Suite 101
_____

December 6th
Planning Engaging STEM K-5
_____

December 9th
An iPad is Not an iPhone
_____

December 10th
Math Liaisons Workshops
_____

December 11th
Engaging ELLs with iPad
_____

December 13th
Sustainability In Society
_____

December 13th
Google's Be Internet Awesome
_____

December 16th
Adapting Science for MS & HS
_____

Digital Assessment

In previous newsletters, we've discussed the keys to effective assessment and some tools that can be used to make that happen (see Google Forms & Game-Based Learning, The Right Way to Quiz Is..., & Quizlet Updates) There are a number of other resources though that can be used to facilitate formative and summative assessments in multiple formats. Check out the complete list and overviews online.
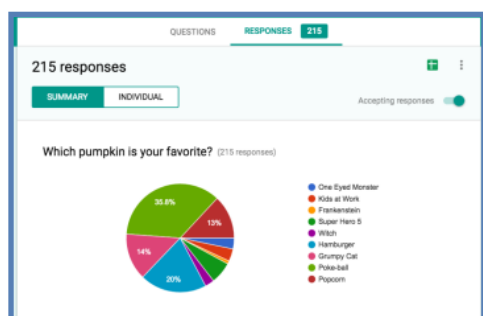
> " On assessment: measure what you value instead of valuing only what you can measure. "
> - Andy Hargreaves

SRS

If you're looking to give a quiz or just a quick response to a question, these student response systems (SRS) can help you automate and incentivize the process.

GOOGLE FORMS

In addition to pre-made templates for worksheets, quizzes, and exit tickets, Forms provides instant data with built-in grading for multiple choice and text responses. There are also helpful charts to visualize data and you can create differentiated and remediated assessments.

QUIZIZZ

This is a favorite game-based response system for special needs students since it allows for read-aloud questions, easier 1 to 1 correspondence of questions and answers, built-in image responses, and other modifications. It's also synced with Google Classroom.

KAHOOT

This is the fun assessment that many teachers already know about. The app now has built-in read-aloud accessibility and the student-paced mode fixes the correspondence issue. It also has a far greater selection of pre-made assessments including higher-order questioning through the new jumble sorting game, discussions, and surveys.

GIMKIT

This new game-based learning tools brings so many amazing gasified features from in-game power ups to Thanos Mode. That means even students who have fallen behind don't have to feel like they're out of the running. It works even better with a Quizlet account as you can link your Quizlet content directly.

QUIZLET LIVE

We'll discuss Quizlet more in the content and assessment section since it is more of a study platform, but the new live portion is very similar to Quizizz except that it has the nice feature that requires students to work as collaborative teams.

NEARPOD TIME TO CLIMB

There will be more on Nearpod too, but their new Time to Climb game allows students to be assessed through a fun race to the top environment.

FORMATIVE

This site could fit into the content portion as you can post videos, whiteboards, and web content, but it is known for its student response capabilities where you can create all of the assessments similar to Google Forms as well as higher order questions that allow students to sequence, graph, categorize, show their work, and respond with audio.

SOCRATIVE

This is another multi-device system that can be used live or as a homework assignment. The types of questions are limited to multiple choice, true/false, or short answer. The space race option creates a fun game-based assessment similar to those seen in others.

PLICKERS

This is a great tool for classrooms that don't have a 1:1 device environment. It only requires one mobile device and a display screen. It uses printable answer cards that look a lot like QR codes. Students hold up their card to represent their selection and the teacher quickly scans the room with their phone.

Discussion Zones

Another way to gauge student learning is through general discussion. Digital platforms can make that process more engaging for students and easier to assess.

PADLET

This popular collaboration space makes it easy to share text, pictures, videos, and a number of other file types. That means it can be used with students at a variety of levels. It also allows for various privacy options for security.

BACKCHANNEL CHATS

There are a few sites that give you room for digital discussions. Amongst these are Todays Meet and Chatzy which can function as a companion to classroom discussion. You can also create exit tickets or set up student conversations for after class. Backchannel Chat functions like a teacher-moderated version of Twitter which allows for tagged and searchable chats.

GOSOAPBOX

This site sets up an event page for quizzes, polls, and discussions. The confusion meter is a nice way for students to keep you updated on their understanding.

VIDEO CHAT

While there are others like Recap, we've explored before the powerful ways Flipgrid empowers student voices. Extra features like video stickers, automatic video transcription, and embedding documents, recordable whiteboards make it a teacher favorite.

Content & Assessment

There are a many sites that offer educational content along with multiple assessment formats. Here are a few that are noteworthy.

NEARPOD

This is the go-to site for shared display in a 1:1 device environment. In addition to easily pushing curriculum through importing your own lessons from a number of compatible resources, you can also access their large library of professionally made content. They are also partnered with many other ed-tech companies that make it easy to share content across platforms using Google Classroom, Remind, or Canvas. Share content using some of the new display tools like Sway, VR, & 3D. They also have a large variety of assessment tools including multiple choice, polls, open-ended questions, matching, fill in the blanks, drawing tools, and a shared space for collaborating.

SMART LAB

The dominant display software fo has created several tools for assessment also. SMART Response 2 is their basic tool for quizzes, polls and short responses built into SMART LAB. It also offers other fun game-based assessment tools that give you a variety of options like jeopardy-style trivia, sorting, matching, diagrams, a collaborative space, and more.

> " Assessment is today's means of modifying tomorrow's instruction.
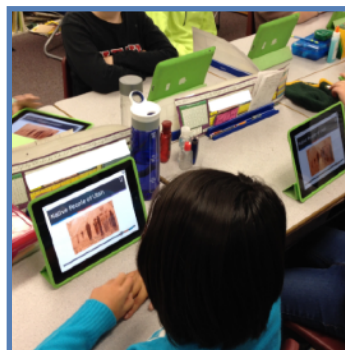> - Carol Ann Tomlinson

CLASSFLOW

This is Promethean's entry into the fray that pairs many of the features of whiteboard software with Nearpod like sharing and assessment tools. One of it's best features is its ability to create student groups and differentiate your instruction so that you can simultaneously display general information on the board, advanced work on one group's devices, and more remedial work on a second (or third or fourth…) group's devices.

PEAR DECK

We'll dig into more on this next month, but this is another shared device presentation software (like Nearpod) with dragging (tracking student touch/ mouse), drawing, extended text, and multiple choice amongst its response options. One of the

bonuses for Pear Deck is that it is conveniently linked to Google Slides and they have a fun Flashcard Factory interactive activity.
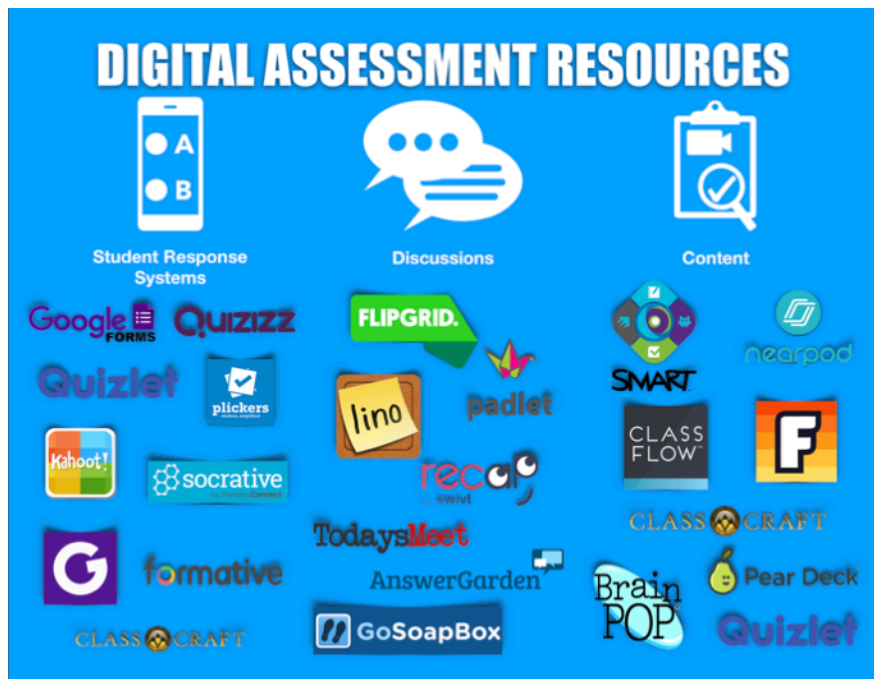
QUIZLET

This is the best site around for studying flashcards since it allows you to study and test terms/ideas in multiple ways from matching to review. There is also a fun gravity game that will take you through your study sets. They now also

have Quizlet Diagrams which help students visualize their study material and review it in a new way. It has many built-in accessibility features.

CLASSCRAFT

This game-based behavior management tool also assesses students. The Boss Battles allow for a class-wide formative review where students battle a foe by answering correctly to land critical strikes

District 75 STEM — Next Issue

APP/SKILL OF THE MONTH

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

•

PEAR DECK

Check out the platform for sharing, assessing, and building vocabulary awareness.

without taking too many hits themselves. If successful they can be showered with gold and experience. Now there are also Classcraft Quests and Story Mode which allow a teacher to gamify all of their content as well.

MORE CONTENT

As we stated before there are many more options as well like the assessment resources available in PBS Learning Media, Flocabulary, or BrainPOP so you can determine what is best for the needs of your classroom. Check out the complete list and overviews online.

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