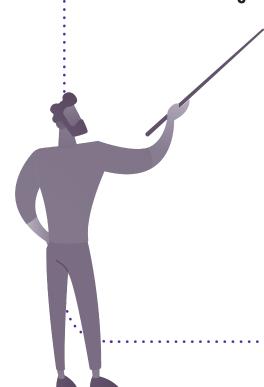
CHAPTER 4

SHOW WHAT YOU KNOW

Bringing Stories to Life



As Sir Ken Robinson said, "You can't just give someone a creativity injection. You have to create an environment for curiosity and a way to encourage people and get the best out of them" (n.d.). In this chapter, we will address how you can create just such an environment, as well as the importance of giving students options for showing their learning and becoming creators in the classroom. Along the way, you'll explore the benefits of using emerging technologies and ideas to get started. In this chapter, you will learn:

- How to promote student voice through digital storytelling
- How digital tools can positively impact and help form peer relationships
- How to create immersive and engaging learning journeys for students
- How to promote student-driven learning through app smashing and lesson flows



Promoting Learning Through Digital Storytelling

Storytelling is a great way for students to build communication and collaboration skills and to apply their learning in personal, meaningful ways. In my classroom, using a variety of digital tools with my students for storytelling activities has served as a catalyst for increasing student engagement and empowering student voice as students can share their learning using the tool or style that meets their own interests. Enabling students to make their own decisions, engage in self-directed learning, and explore new tools and technologies leads to positive and more personalized learning experiences for them (Gerstein, 2013). Not only can we increase students' confidence in learning, but we can also promote more social-emotional learning skills, such as collaboration and relationship building. (See Chapter 2 for more discussion of SEL.)

Digital storytelling offers a way for students to make something unique and authentic to represent their understanding of the content material. Empowering today's learners to make decisions about the means to communicate this information back to us is important for them in developing critical future-ready skills. Relatedly, digital storytelling provides opportunities to address such ISTE Standards for Students as Creative Communicator, Computational Thinker, and Innovative Designer.

educator stories

KATIE MCNAMARA is a teacher and librarian at North High School, as well as an associate director at Fresno Pacific University in Bakersfield, CA.

The awesome thing about digital storytelling is that it helps honor various learning styles. Sometimes we need to start with the image before we can start with words. It helps to flip the old-school thinking that design and images and creation are the bonus after writing. Creating can and sometimes should be the beginning bit, and it allows the writing to flow. Digital storytelling enables us to share our stories with more people quicker. It empowers all and helps level the playing field.

Think about some lessons that you teach in which students would benefit from additional time or a different format beyond the class period to reflect, share ideas, or engage with the content in a more authentic way. This is where digital tools can be leveraged to open up more time for students to share their thoughts and to work independently beyond the school day. Through audio and video options or using interactive lessons, we can expand the opportunities for our students. One of the biggest benefits of using technology is that students can participate wherever they are and whenever it is most convenient for their schedule—learning on the go!

Through online platforms, students can reach a wider audience with their projects as well. It's important for students to get feedback on their work not just from us but also from other students in the classroom and even members of the larger school community. By sharing their voice through tools to record podcasts; to running a school news program; or to creating a movie, a comic strip, or an animation, students can share what they're doing and thinking, and how they're creating, learning, and growing in our classrooms. This is how we can share what education looks like to the school at large.

What are some unique activities and tools you can use to have students tell a story, present information, share learning experiences, and build vital skills for their future? The sections that follow detail some of my favorites. As you consider each activity or tool, stay informed of any technology or age requirements and be sure to communicate these with your students' families. Although many of the strategies in this book can be used in the lower grades as well as in higher education, it's always important to consider the students' ages and, of course, the access needed for the resources.

Animations and Cartoons

By creating animations and cartoons through formats such as comics or stop-motion video, students can represent what they are learning in a class, summarize concepts, and think critically about how to convey the most important information. This can promote student engagement and lead to an increase in motivation for learning, while enabling students to apply their knowledge in more personalized ways. Some digital tools to choose from are Blabberize (blabberize.com), Chatterpix (duckduckmoose.com), Powtoon (powtoon.com), Pixton (pixton.com), and MakeBeliefsComix (makebeliefscomix.com). These tools can also be used to hook students into a lesson (FIGURES 4.1 and 4.2).



FIGURE 4.1 A student project created using Pixton for a medical vocabulary unit

Remember, however, that technology is only one means to your goal of having students extend their learning and build skills at a pace that's comfortable for them and in a way that meets their interests and specific needs. Some students might be hesitant to use technology, and I've had several students who simply preferred traditional paper and other materials. Let them hand-draw their cartoons, but then take the project to another level by having them share their work as a public product using one of the digital tools available to communicate, collaborate, create, innovate, and demonstrate their learning. Regardless of which options students choose, they will be applying skills at a higher level than traditional projects and assessments might offer.



FIGURE 4.2 Creating with Chatterpix

Sketchnoting

Sketchnoting, or visual note-taking, can be applied in many ways for learning. Even students who are not fans of drawing might enjoy the opportunity to engage in something that is fun and different and to see what their classmates create. Encourage students to represent a concept, summarize a chapter,

explain an idea, or express who they are using sketchnotes (FIGURE 4.3). It will not take long for students to make connections with their peers and learn more about each other. With this activity, again, suit the tool to the student: There are digital drawing apps available, such as Paper (paper.by-wetransfer.com) or students can sketchnote by hand with paper, pens, and pencils and then convert their product into a digital format for posting and sharing (Rohde, 2013).

Presentations

Creating presentations using Google Slides or Microsoft PowerPoint is a good way to help students build basic technology skills and more. Students can collaborate on projects and experience the power of learning anywhere at any time. For example, try having students collaborate on a review presentation in preparation for an assessment or as a way to introduce themselves to classmates. Rather than creating a review packet at a unit's end, I have my students each pick topics and create a slide with a variety of text, images, and videos. Not only does the resulting class slideshow provide a shared resource for review, but the project also promotes



FIGURE 4.3 Student-created sketchnotes to inform about digital wellness and digital literacy

 $\ digital\ citizenship\ skills, collaboration, communication, and\ creativity.$

Storyboarding

Storyboarding is beneficial for having students narrate a story, explain a process, or organize thoughts around a topic or theme. It promotes critical thinking, communication, and creativity, and it fosters innovation in designing and empowers students in the learning process. They take control of how they show what they have learned and can demonstrate what they can do with the material in their own personal way.

Many web-based tools, such as Storyboard That (storyboardthat.com) and MakeBeliefsComix, make it easy to get started. Storyboard That also provides lesson plans and templates for you to use. When students create, they can present to the class as a slideshow or download the comic with the text below (FIGURE 4.4). Using Book Creator (bookcreator.com), students can write and publish a digital book that includes text, images, audio, and video. With Storybird (storybird.com), students can create a book full of artwork and choose from hundreds of themes to match their story. These Storybird books can also be purchased in softcover or hardcover formats. I have many student-created books in my classroom and use them to provide more authentic reading opportunities for their fellow students each year.

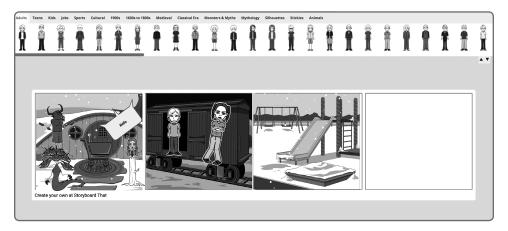


FIGURE 4.4 Student view of panels and options when creating in StoryboardThat

Infographics

Infographics offer a lot of options for students to create any type of presentation for any content area and grade level. Highly beneficial for students who are visual learners, the use of infographics as representations of student learning and also as a means to deliver instruction promotes more collaborative learning. There are many uses for infographics: sharing results for project-based learning, creating a timeline, designing a family tree, explaining a process, providing instructions, and more. When they create a presentation, students also develop other vital skills such as learning about design. You can also address each of

the ISTE Standards for Students with the use and creation of infographics. As students create, they must decide which tool will enable them to represent data, display information, show ideas, explain concepts, and present to a variety of audiences while building digital citizenship skills through respectful and responsible use of digital tools. Students can work collaboratively with peers or on a global scale to create infographics and share their learning.

Using infographic tools, students can design graphics that are creative, individualized, and demonstrative of their learning. The variety of fonts, themes, images, and other features within the creation tools enhance visual thinking skills and spark curiosity for learning. In my classroom, we have used several tools for creating infographics, including Adobe Spark (spark.adobe.com), Buncee (app.edu.buncee.com), Canva (canva.com), Piktochart (piktochart.com), Smore (smore.com), and Visme (visme.co). Depending on the purpose of the infographic, each of these has uniquely useful features (FIGURE 4.5). Getting started with any of the tools is easy, and students enjoy creating something personal to them and their interests. See additional examples of how students used these tools for their class projects by scanning the QR code at the end of the chapter.



FIGURE 4.5 Two infographics students created using Piktochart and Buncee



Creating Learning Journeys

As a way to help students connect more with content, they are frequently told to simply "imagine:" Imagine what it would be like to live in a different place, have a certain job, visit a famous historical landmark, go to school in Europe, interact with a person from history, or do something adventurous or scary. We

want students to explore more deeply and make connections with the content they are learning in more meaningful ways—and now they can do more than imagine. When we can purposefully leverage such emerging technologies as augmented reality (AR), virtual reality (VR), and artificial intelligence, we can immerse students in a world of memorable and innovative experiences. By immersing students in different worlds through AR or VR, we encourage them to negotiate meaning and develop their own understanding based on their personal interactions. Being able to take students around the world, to bring in learning opportunities that were previously impossible or hard to access, will amplify students' learning potential. The following sections, as well as this chapter's "5 to Try" section, take a closer look at some activity ideas and the tools you can use.

Virtual Field Trips

Students love field trips; just the idea of exploring somewhere beyond the physical classroom space is enough to excite them. With tight budgets and lack of resources, however, frequent field trips may be close to impossible for some schools, especially if the destination is to another part of the world. Regardless of the grade level or content area, apps and online tools now enable students to more fully explore the places they are learning about. Students can go on a virtual tour or adventure right from their classroom or wherever they are. Just think of the possibilities:

- Have students create a scavenger hunt by searching for Google Street View (google.com/streetview) images. Previously unreachable landmarks or faraway countries are now possibilities for explorations.
- Use Google Expeditions (edu.google.com/products/vr-ar/expeditions) to guide students on tours around the world or explore from below the sea into outer space (FIGURE 4.6).
- Create a tour for students based on the content covered or have students
 create their own tour, to tell a story or narrate an event. Google Tour
 Creator (arvr.google.com/tourcreator) is a great, free option, and it places
 students in the lead so they become the creators and not just consumers.

FIGURE 4.6

Guide view of a Google Expeditions tour showing scene and accompanying script with various levels of questions





educator stories

DAVID LOCKETT is an IT, robotics, and STEM facilitator at Edward W. Bok Academy in Lake Wales, FL.

In an era of digital devices, many students have an opportunity to learn with AR and VR technology. Digital technologies can now transform textbooks into interactive ebooks. Virtual-reality-based experiences can instantly transport students across continents, and complex functions and mechanisms can be visualized with interactivity. VR allows students to interact and experience in a dynamic and engaging way. Most students learn by doing. VR provides an experience to anchor instruction paired with new learning modalities. With VR, students are inspired to discover and create for themselves. Students now have an opportunity to learn by creating things, thus transforming the way educational content is delivered and received. The potential and promise of augmented and virtual reality connect students with people, places, and experiences they would typically be unable to access.

Close Explorations with AR and VR

What would it be like to hold a frog in your hand and explore it without actually needing the frog? How about creating a scene from a book or designing a house and being able to hold and manipulate it in your hand? Courses all have some content where students could benefit from actually holding the object and being able to explore on their own. In geometry class, I struggled with figuring out angles, proportions, and working with the different shapes. Now visual and kinesthetic learners like me have access to AR and VR tools for manipulating these 3D objects virtually, which enables students to attach more meaning to what they are learning. There are so many possibilities for creating using these AR and VR tools. Although traditional manipulatives from toothpicks to marshmallows to modeling dough still have benefits for designing a project, students apply more skills when creating something with the emerging technologies available to them.

Rather than simply looking at an object, students can move through the layers of it. Instead of looking at photos of places from around the world or learning about animals by watching videos, students can step into those spaces and explore more closely. AR and VR tools enable us to take students to places previously inaccessible through virtual tours and 360-degree videos. When using these digital age tools, students have more control of how and where they are learning than textbooks, photos, and videos can provide. The level of student engagement will increase when students are given more personalized learning experiences. These tools enable students to make decisions, which leads to a more student-driven classroom and increases student choice, agency, and engagement. As Liz Kolb explains in *Learning First, Technology Second* (2017), sometimes tech is the way for students to focus on a task, become motivated to learn, and shift from passive to active learning.

Tools for exploring and creating in AR, for example, have tremendous potential to immerse students in a meaningful learning adventure, giving them more control of how, when and where they learn. Besides being fun to use, they offer students time to build skills in critical thinking, problem-solving,

and collaboration, while fostering creativity. Here are a few tools that I enjoyed trying; I could not wait to see what my students created on their own:

- 3DBear (**3dbear.io**) has many possibilities for classroom use. Students can use it to create 3D objects, place them in different spaces, and then record a story to go along with it. It's great for doing a project to talk about the community, give a book summary, create a story, and more. To help you get started, the 3DBear site offers lesson plans for coding, design thinking, language arts, math, science, social studies, and STEM.
- Figment AR (viromedia.com/figment) enables students to create an "experience," which includes activities and different features for exploring in augmented and virtual reality (FIGURE 4.7). Add emojis and effects like snow, and record a video. It's a great way to get students actively learning and creating in the classroom.



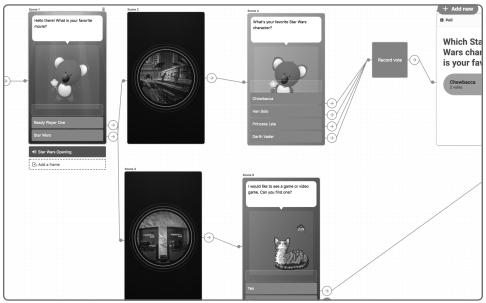


FIGURE 4.7 Students creating with Figment and exploring the portals

Metaverse (studio.gometa.io) enables you to create an experience of activities and different features for augmented and virtual reality. Students enjoy creating, and you can also use Metaverse to create assessments (FIGURE 4.8). Creating is based on a storyboard design, where students can add a variety of elements to their projects, such as videos, 360-degree images, portals, probability questions, polls, and Google Vision.

FIGURE 4.8 Creating a Metaverse experience and designing the storyboard



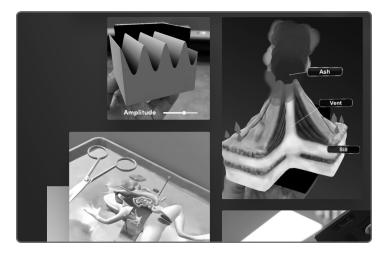


• MERGE (mergeedu.com) offers several options for educators to bring AR and VR learning opportunities to students. The MERGE Cube enables you and your students to hold and interact with 3D objects in augmented reality (FIGURE 4.9). With one of the several compatible apps, students can use it to explore virtual objects, investigate the solar system, learn about anatomy, and even record their own narrations to go along with an experience. Students can create their own experiences by using the MERGE Cube with CoSpaces Edu. To help you get started, the MERGE EDU platform provides many resources for educators, including lesson content and activity plans on various content areas and topics (FIGURE 4.10).

FIGURE 4.9
A MERGE Cube seen in reality and augmented reality



FIGURE 4.10 Examples of the content available with MergeEDU



• Flipgrid AR (flipgrid.com) enables students to take a Flipgrid video and "place" it into the real world by using a Flipgrid AR QR code. Both you and your students would need the Flipgrid AR app. Have students create videos and place the QR code on a visual that is displayed in the classroom for other students to walk around and scan. This is also a fun way to engage families at school events!

• Thyng (thyng.com) can be used to add objects into the real world. Students use an image as a trigger, or create a scene and then record the video to share. It opens so many possibilities for students to create and narrate.

Remember, the learning doesn't need to stop just because the VR or AR experience is over. You can spark more curiosity and continue to promote creativity by having students narrate a story about what they saw during their virtual field trips and explorations, building communication skills in meaningful ways. Need more ideas? Jaime Donally's website <code>ARVRinEDU.com</code> and book <code>Learning Transported: Augmented, Virtual, and Mixed Reality for All Classrooms</code> are two great resources for activities, tools, and more.

educator stories

LAURA STEINBRINK is an English and Spanish teacher at Plato High School in Plato, MO. Traditionally, students might write a children's story or book and decorate the cover. As I considered that activity, I pondered available tools before settling on CoSpaces Edu (cospaces.io/edu). Not only did students write the stories, but by using CoSpaces Edu, they also could create the world and scenes of the story for the reader to explore. And if that wasn't good enough by itself, each story created by students within CoSpaces Edu could be shared as a link. Our stories were being read in Seattle, Washington, and Meridian, Texas. The kindergartners in Washington even made suggestions for my sophomores. Talk about the impact of a lesson! Students were more engaged in writing a story for students in another state, and they became very focused on the quality of their work, especially after the kindergarteners gave them feedback. Game changer!

App Smashing

One way to help students build a variety of technology skills while also developing knowledge of the content area is through app smashing. When we do this, we push ourselves to stay current with technology and also provide more options for our students. *App smashing*, a term created by Greg Kulowiec, is "the process of using multiple apps in conjunction with one another to complete a final task or project" (2013).

App smashing is a good way for students to build upon their skills and become more comfortable with technology. It can also help teachers become comfortable implementing tools into the classroom without the worry of having to take on too many things at once. The idea is that we gradually build on skills with increasing complexity, enabling us to enhance and extend learning and also move beyond using technology for simple substitution and instead, modify and redefine what we are doing. We also push ourselves to continue to grow professionally and take on the role of co-learners with our students as we address the ISTE Standards for Educators.

Using a camera is a quick way to get started with app smashing. For example, for students who may not want to do a presentation in class, suggest they use their smartphone instead. First, have them take a picture with the phone. Next, they can create an avatar using an app such as Voki (voki.com), then record their voice using Tellagami (tellagami.com) or another a talking app. Finally, combine their voice over the picture or something else that they choose. With app smashing, you can also provide options for your students to use multiple tools for the creation of an end product, whether an assessment for the end of the year or just a part of a project within a chapter or other unit.

As a foreign language teacher, sometimes I like to have my students find or take pictures and then narrate a story by taking photos and using Padlet (padlet.com) or a similar a tool to display their pictures, upload them into Buncee on their phone, or create an augmented or virtual reality experience to explore. The progression from one tool to another helps students build multiple different skills while they're doing this.

student stories

LOLA ABRAHAM and **GEORGIA TSAMBIS**, eighth-grade students from my STEAM course in Oakmont, PA, worked together to contribute their perspective.

We like to have choices in digital tools because it helps us create something different than our classmates. There are always options that make it easy to get started with and everyone can be creative. For science, English, history, or whatever the class, we can use the options to share what we know in words, but we can also use images, video, and audio instead and demonstrate a concept or a scene rather than relying on a plain slide or using too much text. Choices make it more engaging for us when we are watching the presentations, and we learn even more. Using tools like Buncee and CoSpaces makes it more interactive for us, and we can build more skills, be more specific, make stuff, add extra details, and get a better understanding of the material. Students will learn more, and it helps with teaching because this reinforces what we are learning in more ways that matter to students and represent their interests too.

App smashing is a simple way to build tech skills and address the ISTE Standards for Students: Students are Empowered Learners because they make decisions about what they are using and how they are creating. They practice being Digital Citizens by building and showing their knowledge in the digital world. They are Knowledge Constructors and locate information and produce a meaningful representation of learning. As Innovative Designers, students have choices of technologies and tools to use for their design as they create innovative work. They are Computational Thinkers because they are trying to decide how to best represent their information. Students are Creative Communicators and use various tools to share their knowledge with a variety of audiences. And finally, by collaborating with other students or connecting with other classrooms, students expand on their own experiences and perspectives and become Global Learners. App smashing also benefits our work as educators while we collaborate and as we learn with and from our students and build our own skills in the process.

Lesson Flows

Some educators choose to do a lesson flow, which is similar in concept to app smashing. A lesson flow involves multiple components where students engage with the content and then extend and explore their learning in different ways. For example, you can provide students with a short video to watch, follow up with a game-based learning tool or some other form of assessment, or even incorporate blogging or video responses. Students work through and complete tasks using various tools, their efforts culminating with the creation of an interactive lesson, infographic, or something else to represent what they have learned. The idea is to help students build skills at their own pace while meeting their interests and needs. Learning done in this way affords you the opportunity to work with each student and learn about their interests, while giving them a chance to drive their own learning and promote student agency in learning. Examples to start with include Quizlet (quizlet.com), YouTube videos, Educreations (educreations.com), Padlet, and Nearpod (nearpod.com).

Getting Started: Take the Risk

Students can experience learning through these tools as consumers, but they need to spend more time being the creators. For educators, deciding which

tools to use sometimes comes down to a personal choice based on your comfort with technology. The array of choices can be intimidating to think about, however, and you may feel like you have to know everything about them before beginning. A common concern is that students might ask questions that a teacher cannot answer. Don't let this stop you. We cannot possibly have all the answers, and it serves our students better that we don't. Some students learn new skills quickly, and we want them to problem solve and push through challenges in learning too.

Sometimes we need to take risks and use tools that may not be considered traditional in our content area, but that might just be the perfect way to hook students into the lesson more. Here are some ideas for getting started:

- Set aside time to get to know your students, ask about their interests, and then step aside while they create on their own. Learn from them and be okay with having them take the lead.
- Set goals for yourself to try new tools and share your experience with students. Model the learning process by openly embracing challenges and failures and involve students more in helping you learn too.
- Pick just one tool to start. There are so many options that it can be overwhelming. Select one of the ideas mentioned in this chapter and see what happens. Each of the tools discussed has content available—ready-made tours, sample lessons, etc.—so you can get started quickly.

By using different methods and innovative tools, we can co-create experiences that will engage students more in learning, increase motivation, and enhance their learning journey.

lessons learned along the way

When I attended my first ISTE conference in 2015, I presented a poster session on the digital tools I was using in my classroom. I remember speaking with a woman who stopped by, sharing some of the projects that my students had done and the activities we were doing in class, and she told me that I was app smashing. I wasn't quite sure what she meant, but as she explained, I realized that what I had been doing in my classroom was actually something that was recognized and used by other educators. Despite my doubts about the methods I was using, I discovered I was engaged in a practice that proved beneficial for student learning. That conversation led me to begin taking more risks in my classroom and replaced my prior uncertainty with some validation, which is what I needed in order to keep making a difference in how I was teaching.

5 to Try

As educators, we want our students to have a learning "experience" beyond what the traditional methods of classroom instruction might offer. Finding time to create and explore can be a factor in deciding where to begin, but with the right tools, it's easy to get started, especially when we let students take more control. Here are a few versatile tools and some ideas for using them. They each offer many options for classroom use as well as examples to help you get started right away.

- 1. Nearpod. Nearpod (nearpod.com) is the tool I used when I first started using virtual reality in my classroom. My students were able to explore the places they were studying, and it increased student engagement. Nearpod offers many virtual tour choices from around the world as well as 3D objects for students to explore; both serve as great hooks for a lesson. The content of Nearpod goes beyond the VR focus, but it's a great way to get started quickly and see how students respond. It's also a wonderful tool for app smashing and for station rotations in class. Use it to promote digital citizenship, digital storytelling, and exploring global issues.
- 2. CoSpaces Edu. CoSpaces Edu (cospaces.io/edu) is a virtual reality tool that empowers students as creators and offers many options for creating spaces (FIGURE 4.11). Students need to learn to collaborate, and within the CoSpaces Edu platform, students can work together in a group. Ask students to create a biome, tell a story, explain a concept, make a game, or just build something unique to explore. It promotes creativity and helps build skills such as digital citizenship, SEL skills, critical thinking, and problem-solving. Using tools like these offers more authentic ways for students to demonstrate learning while having fun in the creation process. Students learn to respect one another's work and see the power of collaborating in live time, just like with Google or Microsoft tools.

student stories

CASSIDY HUNTER is a high school senior in Plato, MO.

Last year during Spanish I, we used CoSpaces to make a model of our town for students in Spain and Argentina. The entire class was able to work on the same virtual map, and I appreciated the chance to collaborate with the rest of my classmates; I was new to that class during the spring semester, and this project was a great team-building activity. I genuinely enjoyed using CoSpaces, because I thought it was fun learning how to manipulate the 3D objects in our virtual creation, and it was cool to be able to scroll across the map and see what everybody else was doing.

FIGURE 4.11
Students creating in
CoSpaces and example scene created





3. Video Lessons. An idea that has worked well with my students is the creation of video lessons, which can be used in the classroom or shared with students who are looking for additional practice. While students plan their process, experience the power of using video for communicating ideas, and decide how best to convey their information, they are also learning important communication skills that will no doubt benefit them in the future. Some options would be for students to create a screencast, deliver a short talk about a specific topic, or teach and record a lesson for other students in the class to use (FIGURE 4.12). Some digital tools to explore are WeVideo (wevideo.com), Educreations (educreations.com), and iMovie (apple.com/imovie).

FIGURE 4.12
A student-created cooking show to discuss food and recipes in Spanish



4. Infographics. Using infographics, students can learn to sort through information and find the best ways to represent data. Educators can address many of the ISTE Standards for Students by having students create in this format using such tools as Adobe Spark (spark.adobe.com), Buncee (app.edu.buncee.com), Canva (canva.com), and Piktochart (piktochart.com). Infographics can also be a unique way to present an interactive lesson or for blended learning (FIGURE 4.13). By including hyperlinks within the infographic and directions for students to create their own, you can increase the level of interaction with the content, and the infographic becomes a new way to deliver instruction.





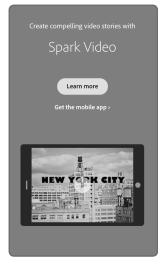


FIGURE 4.13 Options available for creating with Adobe Spark

5. Talk and Share. Using tools for facilitating asynchronous discussions or creating videos or other animations are some of the best ways to promote student voice and to encourage students to share their thinking and their learning with others. Keep in mind potential issues with student access to the right devices and offer multiple options so students can choose what they need. Such tools as Animoto (animoto.com) for short videos, GoSoapBox (gosoapbox.com), Socrative (socrative.com), or VoiceThread (voicethread.com) encourage students to share ideas and respond in either written format or post a video (FIGURES 4.14 and 4.15). With Wakelet (wakelet.com) and similar tools, students can add resources, upload a video response, and curate all materials in one space (FIGURE 4.16).

FIGURE 4.14 A discussion started in GoSoapBox

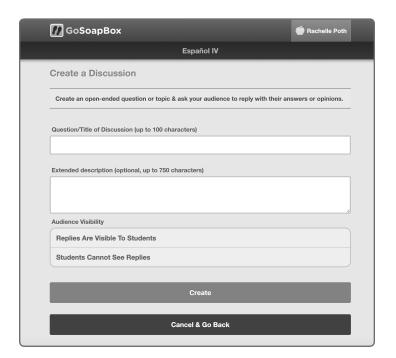


FIGURE 4.15 Options for activities to use within Socrative



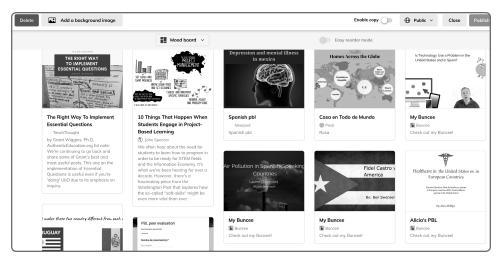


FIGURE 4.16 Wakelet used to share PBL resources and projects

Questions for Reflection

- In what ways have you had students share their learning? Are they following a specific outline or template
 for what to create, or do they have options for creating
 on their own?
- How can lesson flows or app smashing enhance your teaching practice?
- What are some ways to encourage colleagues to explore these new ideas?



Tools and Resources

Let's continue our learning journey together: Choose one of your answers to share on Twitter using the hashtag #ChartYourNewCourse, or share some of your new ideas for ways to use the techniques and tools discussed in this chapter. You'll be helping create more resources for all of us.

ISTE standards addressed

Standards for Students:

- Empowered Learner 1a, 1b
- Digital Citizen 2c
- Knowledge Constructor 3c
- Innovative Designer 4b
- Creative Communicator 6a, 6b, 6c, 6d
- Global Collaborator 7a, 7b

Standards for Educators:

- Learner 1a
- Collaborator 4b
- Designer 5a
- Facilitator 6a, 6b, 6d

For the full list of the Standards, see Appendix A, "ISTE Standards for Students," and Appendix B, "ISTE Standards for Educators."