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Creative Teaching Strategies

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This chapter invites you to imagine creative approaches to learning by reading about innovative, educator-tested strategies. The featured articles showcase innovative approaches to teaching that harness digital tools, multimedia projects, and student-centered methodologies to enhance engagement and learning outcomes.

Articles from ISTE explore diverse creative applications. "Minecraft Education Is a Game — and a Learning Tool!" examines gaming as a legitimate educational platform, while Michele Haiken's "Get Your Students Creating Their Own Podcasts" transforms students into content creators and storytellers.

ASCD contributes "Read Write Connect," focusing on integrated literacy approaches, and Monica Burns and Tamera Musiowsky-Borneman's "How to Use Interactive Journals to Foster Student Agency," which transforms traditional journaling into dynamic, multimedia learning spaces.

These articles collectively advocate for moving beyond conventional instructional methods toward creative, technology-enhanced approaches that honor student voice, choice, and authentic expression while maintaining rigorous academic standards and fostering digital citizenship skills.

ARTICLE 1
Minecraft Education Is a Game— and a Learning Tool!

By Laylah Bulman

Few educators would be surprised to learn that Minecraft is the best-selling video game of all time. Chances are, they know more than a few students who've spent countless hours mining and building in the popular virtual world.

What might surprise some educators, however, are the many ways Minecraft Education can be used in school to teach essential skills.

Minecraft Education, the education version of the creative, collaborative game, is specifically designed with features and content that make Minecraft easy to use in a classroom setting. With Minecraft Education, learners not only have all the resources to explore and build, but educators have all the tools they need to support collaboration, assessment, coding and more. In fact, there are more than 600 standards-aligned

lessons to engage students across the curriculum, from STEM, coding, digital citizenship and responsible AI use to history, language arts, and digital skills. It has been hugely popular with educators and students since it was released in 2016.

The collaborative game, hugely popular since its release in 2016, fosters team-building and problem-solving and develops many other competencies. Here are just a few of the skills educators are teaching using Minecraft Education.

Digital Citizenship

In a digitally connected world, it's important to cultivate the five competencies of digital citizenship: achieving balance, staying informed, being inclusive, remaining engaged, and staying alert. Educators in Miami Dade County Public Schools (MDCPS) use Minecraft to instill essential digital citizenship and cyber-skills across their system, leading to job and career opportunities.

MDCPS integrates Minecraft's cyber and digital citizenship skills throughout its traditional, magnet and career and technical education programs, expanding access to young learners in grades 3–12 through a range of touchpoints.

From events, such as Safer Internet Day, to integrating Minecraft cyber experiences into computer science and introductory cybersecurity courses. Most recently, the district partnered with Minecraft Education and Florida International University in a CyberFlorida grant focused on building teacher capacity in cyber education. Educators attended a weeklong professional learning cohort of forty-five middle and high school teachers to learn Minecraft's innovative cyber pathway and integrate it into their curriculum. Results from the grant demonstrated that Minecraft's content was not only highly engaging but also viewed as a powerful teaching tool.

Computer Science and AI

Understanding computer science and artificial intelligence is crucial for today's students who will enter a workforce driven by AI. Minecraft is becoming a dynamic platform for teaching skills related to computer science and AI.

The NYC Department of Education and Urban Arts introduce computational thinking, coding and AI to students with multiple transformative computer science learning initiatives focused on harnessing creativity and coding.

The district has integrated Minecraft's CS progression in its CS4All program, building teacher skills in coding with Minecraft and introducing computational thinking and early coding skills in its elementary schools. Minecraft's Generation AI learning experience for the Hour of Code was its most played tutorial, teaching tens of thousands of students responsible AI use. The district is launching "Creative Coders" with Urban Arts, part of a national Education and Innovation Research grant. Using Minecraft's GameCode and Cyber curriculum, students from the district's middle schools will design and code their own mini-games and build arcades in Minecraft, showcasing and sharing their games at the Battle of the Boroughs, NYC's annual Minecraft esports competition.

Global Collaboration

For years students have been using digital tools to interact with peers across town or around the globe on solving real-world problems. But what about connecting with peers on Minecraft? Students from Los Angeles and Calgary engaged in projects related to sustainable urban design and city planning, fostering cross-curricular connections and encouraging active citizenship in their communities.

In the Reinventing Cities programs with C40, students in Toronto will redesign their schools for a better future, harnessing the limitless potential of Minecraft and giving voice and agency to how young people can redesign and innovate their community's future.

In Level Up Los Angeles, LAUSD has partnered with Minecraft Education and launched a two-level esports competition. All PK–12 classrooms are invited to embark on an epic adventure and get ready to collaborate, compete and reshape the future of Los Angeles to help their city thrive in the midst of climate change.

Team Building Through Esports

From informal after-school clubs to highly organized and competitive high school leagues, esports is becoming increasingly popular in schools throughout the country. The benefits of an esports program are many. They appeal to many kids who otherwise wouldn't be involved in school activities while promoting interest in STEM subjects.

In New York City, a districtwide Minecraft esports competition called Battle of the Boroughs, has attracted over a million students, shaping the future of scholastic esports in the city.

STEM Literacy

Every school subject presents an opportunity for hands-on STEM learning, building literacy and identity in STEM for all students—and Minecraft can help engage students who don't consider STEM an option for them.

Hillsborough County Public Schools in Florida is pioneering an approach that uses Minecraft to integrate STEM learning to build student skills for the future.

Hillsborough's approach to STEM education includes using a network of collaborative partnerships, including institutes of higher education, business partners, philanthropic organizations and many STEM-rich cultural institutions. Through the use of experiential hands-on learning with Minecraft and cross-curricular collaborations, students of HCPS are prepared for college and career success.

Laylah Bulman is a senior program manager and executive game producer at Microsoft for Minecraft Education. She has over fifteen years of experience in immersive, game-based education and classroom teaching and leads strategy, content and new product development, reaching over 200 million students and teachers globally. Her achievements include launching the first statewide scholastic esports league and building significant educational partnerships, earning her recognition among the Top 100 EdTech Influencers. Her extensive background enriches her commitment to innovating education through gaming, computer science and esports.

ARTICLE 2

Get Your Students Creating Their Own Podcasts

By Michele Haiken

Tai Poole has been hosting the podcast series *Tai Asks Why?* with the Canadian Broadcasting Company (CBC) since he was eleven. Each episode is under thirty minutes and delves into thought-provoking topics like: How much is too much screen time? What is love? What's happening to my teenage brain? The podcast features input from Tai's family members, experts and scientists.

Tai is one of many young people starting their own podcasts, building an audience and brand around them. As an educator, why not get your students in on the podcasting action. You don't need fancy equipment to get started, and the process of podcasting

teaches invaluable skills. Producing a podcast requires students to articulate an idea, as they showcase their understanding and learning.

Students can create podcasts independently or in collaborative groups. The content can be serious or light-hearted, fictional or grounded in truth. Podcasts cover a wide variety of subjects including science, current events, history, fan fiction and storytelling.

If they aren't sure where to begin, students can listen to published podcast examples to help determine the direction and format. that feels comfortable for them.

Podcasting Builds Skills

When students produce a podcast, they become problem solvers and enhance their technology skills. The ISTE Standards for Students call for students to express themselves in a variety of formats and platforms. Throughout the podcasting process, students apply research, writing and verbal skills to communicate a message. When students create their own podcasts, they act as knowledge constructors and empowered learners.

Here are three more reasons to create podcasts with students.

Empower Learners

Most of the information students receive is in multimodal formats: digital, print, visual and audio. Podcasts are tools for learning information and content. Podcasts come in a variety of formats and topics. My students are currently listening to the murder mystery podcast series Tig Torres: Lethal Lit as a mentor text for their own mystery stories they are creating.

Initiate Global Connections and Collaboration

Creating podcasts for a wider audience is engaging and authentic. The *New York Times* and National Public Radio both host annual podcasting contests for teens to create and record original audio material under ten minutes on any topic. Sharing student-created podcasts with the world enriches the learning experience for the listeners as well as the podcast creators.

Apply Digital Citizenship

Sharing podcasts with local and global audiences requires students to engage in positive, safe, ethical and legal digital behavior. Producing a podcast requires students to record and edit digital content. Students are required to choose sound effects, record interviews and include sound bites from expert to add engaging features that draw the listeners' attention. Podcasting depends on creative communication.

Michele Haiken is an avid podcast listener and uses podcasts as texts to read closely and critically with her middle school students. She is the author of ISTE's Jumpstart Guide *Podcasting for Students: Tips and Tools to Drive Creative Expression* (2020). Learn more about how she uses podcasts with her students on her blog *The Teaching Factor* and connect with her on X @teachingfactor and Instagram @teaching_factor.

ARTICLE 3
Read, Write, Connect

By Jewellyn Forrest

In my multi-age second-, third-, and fourth-grade classroom three years ago, we needed an infusion of something new.

On a regular basis, I observed students picking up a book, skimming through the pages, and quickly running to the classroom library for a new one. Were they really reading or engaging deeply with the text? No. I needed to find a way for them to slow down and savor the story, rather than let the words wash over them. Literature professor Louise Rosenblatt penned one of my favorite quotes: "Text is merely ink on paper until a reader breathes life into it."

How could I get my students to bring those words to life?

One day as I was reading aloud to my class, I opened the book and glanced at the bookplate on the inside cover, lovingly written by a former student. "Oh my! The book we are sharing today came from Iris!" I told them excitedly.

I'd felt this moment of joy many times when I opened a donated book, but this time it sparked an idea. What if kids felt that way when they opened a book? What if they became curious about who might've read it before? Curious about what those previous readers felt? I glanced at the stack of sticky notes on my desk, and an idea started to formulate.

Making Learning Sticky

I began by modeling my reader thoughts during whole-class lessons. I gathered my pen, sticky notes, and book. "Friends, we are going to read Eve Bunting's *Fly Away Home* as part of our author study today. I've always wanted to talk to Eve about her books, but she's not here! So, I am going to use these tools to show you how I can share my thoughts, questions, and feelings with her about her writing. Because I am writing them down, you'll be able to read my thoughts later, too!"

I began reading aloud, pausing after the first few pages. "Andrew says, 'Not to be noticed is to look like nobody at all,'" I said with a quizzical tone. "Hmmm … I have a mixture of wondering what that means and a bit of sadness reading that. I am going to write that here." I placed the sticky note under the document camera and wrote, "I'm wondering why he said that, and I feel sad he doesn't feel seen. –Mrs. F". I told them I put my name because I wanted to own those words, brought to life in my head. It was my powerful thought.

I held the book open and stuck my note right on the page. Eyes watched my every move—they had been used to my think alouds, but this was a new level. I continued reading, stopping at points to jot down more of my authentic reactions. "I'm so glad he has a friend! –Mrs. F" landed on a page to highlight character interactions. Later, "I see the bird escaped—that is a SYMBOL of how he wants to get out of the airport too! –Mrs. F".

After the reading, I placed the book in the basket with our other thematic read alouds. I watched the kids throughout the day and noticed them gravitate to *Fly Away Home* more than any other book. Something had piqued their curiosity.

Over the next few days, I continued that same process, writing one or two thoughts from my read aloud on sticky notes and placing them inside. Each time, I expanded my repertoire of noticings. I purposely would notice a character's traits when we were learning character analysis, or comment on a specific quote while studying dialogue. My thoughts became teachable moments—a powerful strategy to immerse students and bring curriculum to life.

The real strength of the routine came after I put the books down. As they "discovered" the notes, my students would pause to think about what I wrote and then re-read the text on that page. They would squeal in delight. "I remember this!" Then they would begin talking—not about my note, but about the book.

After a week, one of my students, Wardell, approached me with a book in hand. "Can I leave mail in my book for other readers, too?"

Voila. We had a name: Reader Mail.

You've Got Mail

The class was excited about the idea of Reader Mail, but first, we had to establish classroom agreements about the process. Our notes must be kind, genuine, and book-focused, and students had to sign their names. I was able to discuss integrity, kindness, and school-appropriate behavior in this authentic context. Students created an anchor chart with sentence stems and guidelines—readers held each other accountable rather than me having to constantly monitor.

Once the structure was understood, and we practiced several times together, students began to leave their thoughts, questions, and ideas for a future reader independently. I allowed them to use a basket of books first, and then expanded that to different sections of our classroom library. Each time, we would pause to talk about the process and what they were discovering. Reader Mail transformed simple sticky notes with a few words into a trail left like breadcrumbs for other readers to find.

Reader Mail drew reluctant readers to books, hesitant writers to pen. As their competency in writing and reading grew, so did their passion for this routine. Our classroom library was filled with hidden little gems to be discovered and enjoyed. Students connected—across classes, genres, and ideas. In the same breath, they connected with authors, themes, and writing styles.

Reader Mail continues from year to year, and with it, the legacy of each reader. "Oh, you're Jeremiah! I read your mail in *My Kind of Courage!*" a current student exclaimed. I beamed, knowing that reading and writing is what builds celebrity status in my class. When a well-loved treasure gets too "full," we transfer the sticky notes to a memory book as a way to value these treasured steps in readers' journeys.

I, too, found value beyond the obvious academic benefit for my students as readers and writers. As I read their Reader Mail, their words were windows to their thinking and opportunities for me to hear their voices in ways I'd never heard before. It changed my understanding of who they were and who they were becoming. Their thoughts and wonderings sewed an invisible thread between teacher and student, reader to reader.

Simple and transformative. One page at a time.

Jewellyn Forrest has invested over thirty years with PreK–college-aged children, helping them develop a sense of self-motivation and identity. Using what she's learned through her degrees in psychology and education and literacy, she designs learning experiences that help kids see their significance and purpose in the world. She's trained staff, mentored, and designed schoolwide programming. As a National Writing Fellow consultant and a co-founder of Autonomy Learning, she's walked side by side with hundreds of educators to empower the next generation of learners.

ARTICLE 4

Five Ways To Connect Students to National Parks (Without Traveling)

By James Fester

Our national parks have always been "islands of learning," helping to inform the public about topics ranging from the lives of our nation's presidents to the earth's dynamic history. And much like islands, these opportunities have historically only been available to those with the means to visit in person.

But now, thanks to a greater adoption of technology by parks personnel, many of these previous in-person-only experiences are now open to the wider world.

While no photo can ever truly capture the majesty of the Yosemite Valley, and no technology-enhanced experience will ever replace the feeling you get standing on the rim of the Grand Canyon, there are myriad ways you can bring "America's Best Idea" into your classroom to create amazing learning experiences for students, no matter where you live. Here are just a few you may want to consider integrating into your curriculum.

> Access a comprehensive and up-to-date spreadsheet detailing distance learning programs across the national parks.
> **bit.ly/3HDxUcO**

1. Distance Learning Programs

More than half of the sixty-three national parks provide distance or virtual learning programs where park rangers link up with classrooms across the country to video chat on topics ranging from animal adaptations to geological forces.

To sign up, you just need to know where to look. That's why I've created a directory of all existing distance-learning programs. The directory includes topics and the dates the programs are offered as well as information about how to sign up.

This resource includes only national parks, not the monuments, historic sites and other units that make up the entire park system. So there might be many more places you can discover by checking the website of the park that aligns to your learning goals.

2. Virtual Passports

If you are a park buff, you might own a Passport to Your National Parks booklet that allows you to get a stamp every time you visit a park. Did you know there's also a virtual version that students can complete online? Although the page was last updated in 2021, the links are still useful.

Browse national parks virtual activities by region and download resources and badges. **bit.ly/3UCxNRK**

Virtual passport programs for 2020 and 2021 link students to interesting and exciting learning opportunities. They cover many science and history topics, including a special collection on the Network to Freedom focused on civil rights. Once completed, students can print out their own passport stamp as a way of showing that they have completed their visit.

3. Junior Ranger at a Distance

Younger visitors to national parks have the opportunity to earn their Junior Ranger badge by completing a series of educational activities that teach about each park and its significance. After completion, they receive a certificate along with a wooden ranger badge that they can wear to signify their new status.

The majority of national parks that offer an onsite Junior Ranger program also have virtual versions. Students can download and print off their own packet, fill it out and mail it to the park to get their badge, just as if they were there in person.

There are even some thematic Junior Ranger badges that students can complete, like Paleontologist or Night Skies Explorer. If you are looking for a list of all the parks that offer Junior Ranger at a distance, this page provides a good overview (bit.ly/45pe7Ha). But it is always best to go to the park website to see what they offer.

Author's website featuring three virtual tours with teaching resources and videos. **festeredu.com/tours**

See how to integrate a virtual hike into a larger inquiry-based activity by following this example from the Petrified Forest National Park. **bit.ly/45qXPgZ**

4. Virtual Interpretive Tours

About 300 million people a year visit our national parks, and many of those visitors post photos and videos they've taken on the web. These images include 360° photospheres that can be viewed through platforms like Google Maps. When correctly sequenced, you can use them to create a virtual tour, very much like the ones that rangers give every day.

Thanks to a grant from National Geographic, I was able to create three such tours that you can look at and use. There are also directions for creating your own.

5. Virtual Hikes

Hiking is one of the most popular activities offered by national parks, probably because it's not just a great form of exercise for your body, but also for your mind. Taking students on such excursions can also help them develop their observational skills, practice using descriptive language, and prompt them to ask questions.

While you can absolutely do this in your own community, there is a way to simulate hiking in the national parks.

Google Trek is a program that took the Google Street View camera and mounted it on a backpack, allowing hikers and explorers throughout the world to document thousands of miles of trails.

You can use the same technology to take kids down iconic trails, such as the Blue Mesa Loop in Petrified Forest National Park. Combine these hikes with activities like nature journaling, wonder walks, or simple thinking routines, such as see-think-wonder.

As you can see, there are plenty of ways to connect students with national parks that don't require travel of any kind!

James Fester has worked in public, private and online schools as a teacher, instructional coach, technologist and curriculum specialist. In addition to serving as a member of PBLWorks' national faculty, Fester served as a facilitator for the National Park Service Teacher-Ranger-Teacher program. He's also a facilitator for the United Nations through UNESCO-MGIEP, a National Geographic Certified Teacher and grantee, and a public lands volunteer and advocate who has collaborated with state and national parks across the country to strengthen their educational offerings. He is the author of *The National Park Classroom* (ISTE, 2024).

ARTICLE 5
Simple Starters for AI Literacy and Digital Citizenship Learning

By Lisa Blank and Carrie Rogers-Whitehead

When surveyed in 2023, half of teachers felt that artificial intelligence would make their jobs more challenging (Clever, 2023). Even more noteworthy, 96 percent reported not receiving any training on the topic of AI. In our own small survey at New York's NYSCATE Annual conference in November 2023, we saw a range of emotions on the topic from excitement to fear. Teaching digital citizenship, a broad multi-disciplinary subject, was already challenging. But how to incorporate emerging AI technologies into it?

In our work, we aim to mitigate those fears or feelings of overwhelm with simple ideas for incorporating both AI and digital citizenship into the classroom.

First, how do AI and digital citizenship intersect? Some areas of overlap are easier to find, particularly around media literacy. Who owns the content created through a user prompt in an AI system? AI has made it easier to develop deep fakes and other mis- or disinformation. Deciphering what is real, what is fake and everything in between takes an understanding of media literacy.

Along with media literacy, AI is connected to digital citizenship in the realms of online safety and the digital economy. Scams and spam have proliferated online with AI. Platforms and policymakers are struggling to constrain the rise in synthetic content and opportunities for scammers.

However, teachers should go beyond those specific subjects to include the broader, overarching topic: ethics. Digital citizenship addresses the whys of technology; it

encourages our students and us to reflect both on our system ecosystems and digital behavior. AI raises many ethical questions, such as:

- Who benefits from AI?

- Who owns the AI content?

- What does it mean to be creative?

- What does it mean to be human?

The ISTE Student standards encourage these deeper and more critical questions. With AI, we are all operating with ambiguity—the laws haven't caught up, and it's often unclear what's real. ISTE Student Standard 1.4.d. (Open-ended Problems) addresses this: "Students exhibit a tolerance for ambiguity, perseverance and the capacity to work with open-ended problems." We need learners who can adapt, reflect, and operate in this sometimes-confusing liminal AI space we all are part of. But how can we teach our students to learn these skills?

Grade-Level AI and Digital Citizenship Activities

Grades K–2

Introduce K–2 students to basic concepts relating to AI and its applications. Start with simple machines and the notion of what it means to think. Discuss the steps required to complete common daily activities and how we make decisions. Continue with an overview of the basic language of computer science.

Vocabulary words for K–2 students should include:

- Real
- Artificial
- Algorithm
- Intelligence
- Learning
- Machine
- Training

Activities can address foundational ideas, such as what it means for something to be artificial, what it means to be intelligent, how machines learn, and the difference between a human and AI.

Many activities for this age group can be rooted in play. Have students "teach" a simple robot to navigate a maze as a way to understand robot "learning." There are a variety of

appropriate platforms for this type of activity, including Fisher-Price Code-A-Pillars, Bee-Bot Robots, LEGO SPIKE Prime, and others. If robots are not available, students might take turns in an "unplugged" activity, such as playing the role of a robot in navigating a maze with instructions provided by a partner. They can also use a program to move a sprite on a screen through a maze.

Figure 6.1 Kindergarten students are "training" their code-a-pillars to complete a maze. To accomplish this, they must add segments that direct the motion of the code-a-pillar.

Grades 3–6

In grades 3–6, students can delve deeper into machine learning and what it means to "train" an AI system. Code.org developed AI for Oceans, a fun way for students to learn about artificial intelligence, machine learning, training data, and bias, while exploring ethical issues and how AI can address world problems. It is also important for students to see positive applications of AI and become increasingly aware that AI systems' actions depend on the training data used in the development of those systems. Students may also be encouraged to read articles and books on the subject. A search of the topic "artificial intelligence" on Newsela provides many articles that may interest students.

Grades 7–12

In the secondary grades, it is important for students to address the pros and cons of AI. Students might view short clips from popular media (*WALL-E*, *Star Wars*, *Ironman*, *Free Guy*, *AI*) and discuss machine learning applications, artificial intelligence, and deep learning. Students at this stage enjoy delving into the topic of deep fake technologies and the ethics associated with AI applications. One interesting activity is to explore how popular movies would look if a different actor were placed in a leading role (Charlize Theron as Captain Marvel, Tom Holland replacing Toby McGuire in the 2002 *Spiderman*, Harrison Ford as Han Solo in *Solo*, or Brendan Frasier in *The Mummy* reboot).

Addressing these ethical considerations through literature circles is also a great way to engage this age group. Students could examine a book in which an individual or group wishes to change the thoughts and perceptions of another group. Examples of age-appropriate novels for this activity include:

- *The Hunger Games* by Suzanne Collins
- *Cinder* by Marissa Meyer
- *City of Ember* by Jeanne DuPrau
- *Matched* by Allie Condie
- *The Giver* by Lois Lowry
- *Divergent* by Veronica Roth
- *Fahrenheit 451* by Ray Bradbury
- *Uglies* by Scott Westerfield
- *Delirium* by Lauren Oliver

As a culminating group project for the literature circles, students could use green screen technology to create their own images or videos about the novel's characters, organizations, and/or topics. Discuss the ramifications of creating extremely realistic ("deep fake") imagery and video. What are the risks and benefits of this technology? What are the challenges? What are some examples of harm that could come from it?

It is important for schools to engage students in exploring AI and its applications. Some people fear it, others embrace it, but regardless of where we stand, it is here to stay. Ultimately, the course artificial intelligence takes depends on us.

The development of AI technologies and policies regarding their use are driven by human decision-making. It is, therefore, essential for us all to work together for the ethical application of artificial intelligence. Working together begins with a basic understanding of the vocabulary, underlying concepts, benefits, and challenges. As educators, we play a key role in helping our students develop foundational knowledge to allow for sound decision-making in the future.

Lisa Blank, the Director of STEM Programs for Watertown City School District in Watertown, New York, is an ISTE certified educator and DoD STEM Ambassador. Lisa is passionate about creating rich STEM learning opportunities and believes in equipping all students with skills, knowledge, and dispositions to solve big problems in our world.

Carrie Rogers-Whitehead is the founder of Digital Respons-Ability, a mission-based company that teaches tens of thousands of students, parents and educators digital citizenship. She is the co-author of *Deepening Digital Citizenship: A Guide to Systemwide Policy and Practice* (ISTE, 2023).

ARTICLE 6
How to Use Interactive Journals to Foster Student Agency

By Tamera Musiowsky-Borneman and Monica Burns

Can you think of a single student who doesn't want some level of independence in their learning process? Even the youngest learners will often say, "I can do this by myself." We shouldn't intervene when students demonstrate this impulse. According to a 2019 OECD report on student agency, learner agency allows students to "learn how to learn," creating motivation and instilling lifelong skills. Agency also gives students the confidence to tackle challenging tasks and develop self-efficacy. As learners, students should have opportunities to share their ideas in meaningful ways, have space to make choices, and be trusted to make decisions about how to share their learning—all essential elements for agency.

In our experience, interactive journals can be a powerful tool to kickstart student agency. Earlier this year, we worked with a group of third- through sixth-grade students at Kōkua Academy in Kailua-Kona, Hawai'i. This school offers a whole child, project-based approach to education by providing learning opportunities that are relevant to students' lives and instruction that supports students as individuals. With this mission, the idea of student agency is always front of mind.

Teachers at Kōkua wanted to introduce new outlets for students to share their thinking using a digital tool. At the start of a new unit on ocean animals, students were instructed to explore interactive "I Wonder" journals on their Chromebooks and then capture some wonderings about what they might want to learn from their unit of study.

Creating interactive digital journals elevates student agency. Interactive journals allow students to have more ownership of the content of their journals. Students can choose the features for their journals, as well as some content. With a digital journal, students have access to tools such as voice recording, voice-to-text, the ability to add images, and more.

Creating Interactive Journals

Students who might be hesitant to share with a partner or the class may be more willing to capture their ideas and questions in a digital space. In her book *EdTech Essentials*, Monica discusses the importance of honoring student interest as you curate resources and set students up for success as creators. Interactive journals leverage open-ended tools that students can use in many different ways.

You might choose an ebook tool like Book Creator or a slide-based tool like Google Slides or PowerPoint. With an ebook tool, students can make choices about how to share their learning which gives them agency over the learning experience. One of the reasons we loved using an interactive journaling tool for the ocean animals project was the number of ways students could place their ideas on a page. Some students used voice tools, others typed out their thoughts, while others searched for pictures, images, emojis, and icons that connected to their wondering.

In *The Minimalist Teacher* (ASCD, 2021), Tammy and coauthor C.Y. Arnold share an important idea about instruction, learning, and the use of tech tools. They suggest using versatile and evergreen tools with high capacity and lasting value. A tool such as Book Creator provides some structure yet offers choice and opens opportunities for multiple streams of use and ongoing projects.

Giving Students Agency

How does it feel to have agency? At Kōkua Academy, students were excited to try out interactive journals that allowed them to create something that was entirely their own, and that they could continue to work on at their own pace. Book Creator was new to them, although they had used Chromebooks, laptops, and tablets in the past. One student remarked that she "could have an open mind and ask questions and [share]

wonderings." Other students stated that they liked all the photo options and the voice activation tool to help them search and write text.

This introduction of the interactive journal proved to be successful because students left the session feeling satisfied with their creations and motivated to use them at home. If you're looking for a project that gives students agency while connecting to your curriculum goals, an interactive journal might be worth exploring. We used this digital space for, "I Wonder…" journals that gave students the flexibility to capture questions that could lead to future inquiry projects and a deeper dive into high-interest topics.

Tamera Musiowsky-Borneman is an international education adviser, teacher coach, and classroom teacher who has taught and led in Singapore, New York City, and Edmonton, Canada. She is a past president of ASCD Emerging Leaders Alumni Affiliate (ELASCD). She values simplicity and clarity and has created a coaching model centered on the idea of coaching teachers in short, flexible, and focused chunks of time, with personalized content.

Dr. Monica Burns is a curriculum and EdTech consultant, Apple Distinguished Educator, and founder of ClassTechTips.com. As a classroom teacher, Monica used digital tools to create an engaging, differentiated learning experience to meet the needs of her students. Monica started her blog, ClassTechTips.com, in 2012 and launched the Easy EdTech Podcast and her membership site, the Easy EdTech Club, to support educators who want to streamline technology integration. She is the author of *Edtech Essentials*, Second Edition (ASCD, 2024).

Discussion Questions

- What are the potential benefits and challenges of incorporating game-based learning into teaching?

- What shifts in classroom dynamics occur when students become content creators through podcasts, interactive journals, and multimedia projects?

- How can virtual connections to places like national parks or digital story-telling platforms create authentic learning experiences that rival or complement real-world field trips?

- What role should students play in exploring the ethical implications of AI while using these tools for their own creative work?

- What systemic changes would be needed to implement creative teaching approaches across entire schools or districts?

Resources

Podcasting for Students: Tips and Tools to Drive Creative Expression **by Michele Haiken** (bit.ly/460rGwO). Podcasts come in a variety of formats covering a wide range of content areas. For example, informational podcasts can take the form of investigative journalism, interviews and storytelling, and can provide ways to explore problems and solutions, as well as cause and effect. The more students have access to high-quality podcast models, the more they're able to think about how they want to structure their podcasts and engage their listeners. In this engaging and accessible guide, author Michele Haiken shares tips, tools and examples to get your students up and running with podcasting.

The National Park Classroom: A Guide to Designing Project-Based Learning Adventures **by James Fester** (bit.ly/4725vrc). This book introduces the National Park Classroom (NPC) Framework, which enables teachers of all subject areas and grade levels to take advantage of national park resources and educational practices. Park rangers draw on pedagogies such as project-based learning, inquiry-based learning and culturally responsive teaching in their lessons, and the book shows how the NPC Framework can help classroom educators use those same approaches to design engaging units and projects for subjects like math, science and language arts.

Edtech Essentials: 12 Strategies for Every Classroom in the Age of AI, **2nd Edition by Monica Burns** (bit.ly/4lBM6AU). A powerful and reader-friendly guide to incorporating EdTech across all grade levels and subject areas. Thesecond edition is updated and expanded to help educators meet the needs of students amid the proliferation of apps that leverage AI, the easy access we all have to chatbots, and the clear need for educators and students to understand the implications of AI.

The Minimalist Teacher **by Tamera Musiowsky-Borneman and C. Y. Arnold** (bit.ly/4lHzyrT). In this timely and accessible book, the authors show how to bring a minimalist mindset to the classroom and shed the burden of too many initiatives, strategies, and "things" in general. Their Triple P process helps teachers declutter in three steps: identify something's purpose, prioritize what is important, and pare down to essentials.