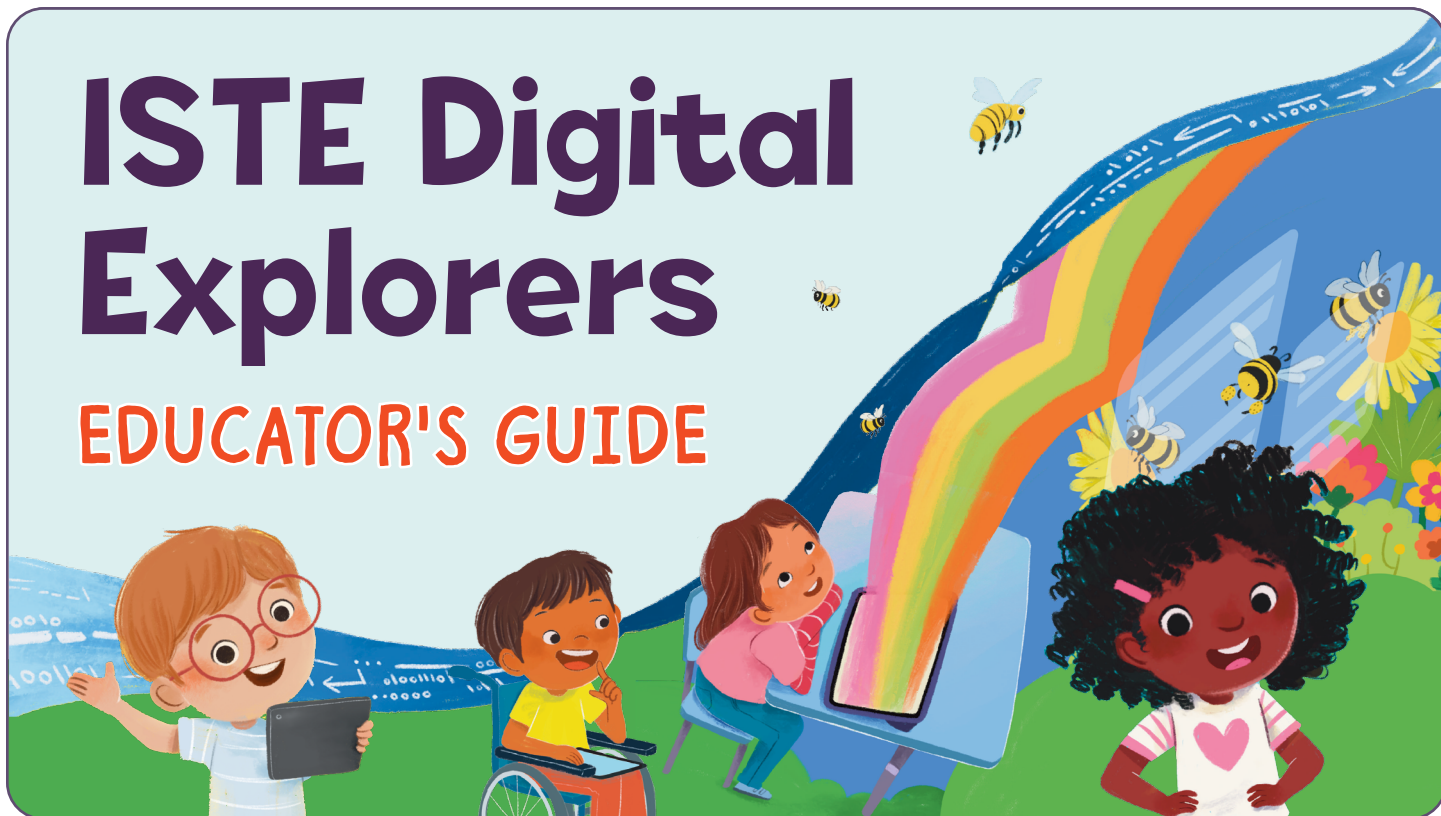


ISTE Digital Explorers

EDUCATOR'S GUIDE



ABOUT THE SERIES

Technology surrounds us, and this young group of digital explorers embraces every part of it. They use technology to solve problems, learn new things, connect with others, and dream up big ideas. Created in partnership with ISTE, each story in this early chapter book series focuses on one of the ISTE Standards shown in a relatable way. Young readers will be inspired to engage with technology in thoughtful, responsible, and innovative ways to supercharge their ideas.



ABOUT THE AUTHOR

Shannon McClintock Miller, an international speaker and author, is the District Teacher Librarian at Van Meter Community School District in Iowa and serves as the Future Ready Librarians Leader. Shannon is the author of the award-winning The Library Voice blog, and several books with Capstone and ISTE. She is a Library Journal Mover and Shaker and recipient of the Making It Happen Award from ISTE. In 2024, she was honored as one of District Administration's Top 100 Influencers. But most of all, Shannon is the super proud mom of Brianna, Brady, and Hagan.



ABOUT THE ILLUSTRATOR

Mel Darmawan is an illustrator based in Indonesia. Her childhood was filled with tropical plants and colorful bugs. Although she enjoys very much working digitally, gouaches and crayons are her all-time favorites. In her free time, Mel can be found drawing and reading books with her kiddos.

Content related to the ISTE Standards contributed by Greta Sandler, Technology and Digital Design Coordinator, St. Catherine's Moorlands School, Buenos Aires, Argentina, and ISTE Certified Educator; and Arvind Reddy, ES/MS STEAM Teacher, SENA, Arequipa, Peru, and ISTE Certified Educator.

I AM A DIGITAL EXPLORER

ISTE Student Standards

Questions to Explore Together

You can discuss these questions with students before, during, and after you read the books. These are a great way to explore several important topics that are part of the ISTE Digital Explorers series.

1. As an **empowered learner**, why is it important to ask questions when you don't understand something?
2. As a **digital citizen**, why is it important to be kind and respectful with your comments online?
3. As an **innovative designer**, what do you do when something doesn't work the first time?
4. As a **computational thinker**, why is it important to keep trying and not give up when solving a problem?
5. What does it mean to be a **digital explorer**?

EMPOWERED LEARNER

I use technology to set goals, work toward achieving them, and demonstrate my learning.

DIGITAL CITIZEN

I understand the importance of respecting others, staying safe online, safeguarding my well-being, and using technology responsibly in our connected world.

KNOWLEDGE CONSTRUCTOR

I critically select, evaluate, and combine digital resources into a collection that makes learning meaningful for me and my classmates.

INNOVATIVE DESIGNER

I solve problems by creating new and imaginative solutions using a variety of digital tools.

COMPUTATIONAL THINKER

I identify authentic problems, work with data, and use step-by-step processes to explore and develop solutions.

CREATIVE COMMUNICATOR

I communicate effectively and express myself creatively by choosing appropriate tools and applying different styles, formats, and digital media.

GLOBAL COLLABORATOR

I strive to broaden my perspective, connect with people from diverse backgrounds, understand different viewpoints, and collaborate effectively in teams using digital tools.

View the ISTE Standards student section in full:

iste.org/standards/students





EXTENSION ACTIVITY

Create a Digital Citizenship Pledge Gallery

In *Sonia Speaks Up*, Sonia and her classmates create animal drawings that become part of a digital art gallery. In this activity, students will create a Digital Citizenship Pledge.

STEPS:

1. Go to the ISTE Digital Explorers Library in Book Creator (bit.ly/digexplorerslibrary) to find the My Digital Citizenship Pledge template. Educators can create a free Book Creator account at bookcreator.com/ISTE-digital-explorers. The template can be downloaded to print and use too.
2. Discuss the *Think About It* questions on page 29 of *Sonia Speaks Up* to kick off this activity.
3. Have students create a Digital Citizenship Pledge as explained on page 30. They can use the template to sketch out their ideas. For example: *I will be kind online* and other attributes Sonia and her friends have in the story.
4. Using Book Creator and the template, have students create their Digital Citizenship Pledge with the drawing tools, text, images, camera, and more.
5. When complete, publish the library of students' work within Book Creator and have students read and share their creations. Get more details and tips for this activity at the ISTE Digital Explorers companion site (istedigitalexplorers.com).



ISTE Student Standard Connection: Digital Citizen

1.2.a Digital Footprint: This book addresses how students should manage their digital identity and make smart, ethical choices online. Mr. Thompson's discussion about positive online behavior teaches his students how to behave meaningfully and positively online. Sonia also discusses the concept of a "digital footprint" and explains to her classmates that comments you make online can stick around forever.

1.2.b Online Interactions: In Chapter 2, the conversation between Sonia and Max emphasizes the importance of being empathetic and responsible while engaging in online interactions. In Chapter 3, the way Mr. Thompson handles the class discussion about being kind, thoughtful, and considerate when using the class platform aligns well with how students can engage with technology in safe and respectful ways.

1.2.c Safeguard Well-Being: Mr. Thompson deleted the previous comments (some of which were hurtful) and provided opportunities for students to participate in the discussion on the class platform, encouraging them to be mindful of their actions online.

For a hand's-on alternative, try this:

1. Follow Steps 1 through 3 above.
2. Once the Digital Citizenship Pledges are complete, hang them up in the Digital Citizenship Pledge Gallery.
3. Have students use sticky notes to write kind and thoughtful comments to leave on their classmates' artwork.
4. When everyone is finished, do a gallery walk to read and reflect on all of the special comments. You can bring these thoughts together to create a class Digital Citizenship Pledge too.





EXTENSION ACTIVITY

Create New Toy Designs with Tinkercad

In the “Time to Innovate” section in *Jack’s Playground Plan*, students use their Innovative Designer skills to create a new toy. In this activity, students will use Tinkercad, a free, web-based 3D design platform, to create their new toy. They can use paper to make a sketch first.

STEPS:

1. For this activity, start by signing into Tinkercad (tinkercad.com). Teachers create a class and then give students a code to join.
Tip: Have students work through the Learning Center tutorials to get started (tinkercad.com/learn).
2. Have students create a new toy using the different shapes, objects, and colors within Tinkercad. For more ideas and guidance, refer them back to the Learning Center tutorials.
3. Once their new toys are designed, ask students to walk around to see their classmates’ creative designs.

ISTE Student Standard Connection: Innovative Designer

1.4.a Design Process: The story shows how the students use a step-by-step design process to solve a problem. It’s easy to see how their ideas evolve as they keep working on their playground project.

1.4.c Design Constraints: The book highlights the importance of testing and refining. When the kids realize their slides are too steep and the zipline isn’t safe, it’s such a great way to show that mistakes are part of learning.

1.4.d Open-Ended Problems: Exploring the idea of making the playground more inclusive demonstrates consideration of real-world needs and different perspectives.

Bonus Fun!

For a little extra technology fun, have students use the 3D simulation tool Merge EDU to hold and interact with their toy.

1. For a free trial of Merge EDU, go to trymerge.com to sign up.
2. From the design in Tinkercad, go to “Send To” and select Merge EDU. For detailed instructions, visit mergeedu.com/jack.

Tip: From the Merge signup page, you can also print a Merge paper cube for each student or small group for free.





EXTENSION ACTIVITY

Create a Favorite Animal Presentation

In *Hagan Proudly Presents*, Hagan and Madison create an amazing presentation about whales and present it to their class. For this extension activity, you'll have students create an animal presentation too.

STEPS:

1. Have students use **PebbleGo Animals** ([pebblego.com](https://www.pebblego.com)), or another research tool to learn more about their favorite animal.
2. While researching, have students find interesting facts in these five areas: *Body, Habitat, Food, Life Cycle, and Fun Facts*.
3. Using a digital presentation tool like Book Creator (bookcreator.com), have students create a presentation including the facts they researched. Go to the ISTE Digital Explorers Library in Book Creator (bit.ly/digexplorerslibrary) to find templates to use.
4. When students have finished their presentation, ask them to share it with their classmates and friends.
5. When students have finished sharing, as a class talk about what they learned. What were the most interesting facts? And how did using technology help them learn about the animal they picked?

For a low-tech alternative, try this:

1. Have students follow Steps 1 and 2 above.
2. Instead of using a digital tool to create their presentation, have them use paper, pencils, markers, poster board, and other materials to showcase what they learned about the animal.
3. When they have finished, display the projects around the room and host a gallery walk.

ISTE Student Standard Connection: Empowered Learner

1.1.a Learning Goals: Hagan's curiosity about whales and his decision to ask questions during the virtual call demonstrate his ability to articulate learning goals and engage actively in the process. The GAS strategy reminds students of the steps involved in setting up goals and working toward achieving them.

1.1.b Customized Learning Environments:

The virtual call with Dr. Perez exemplifies how technology can broaden learning networks and offer students new opportunities to connect with experts. Hagan and Madison's partnership to create the whale presentation demonstrates students building networks and learning environments to support the learning.

1.1.c Feedback to Improve Practice:

Hagan's use of technology during the virtual call and his teamwork with Madison reflect his active participation in seeking knowledge and collaborating to demonstrate his understanding. Their descriptions of how they used technology for the presentation—finding whale photos and a cool video on a tablet—align with this indicator.





EXTENSION ACTIVITY

Learn How to Code Like Ana with ScratchJr

In the book, Ana shares the steps of pollination using a coding app. In this activity, you'll have students try out coding with the ScratchJr platform. There are different activities they can complete, or students can create on their own too.

STEPS:

1. If you don't already have one, create a free account or log in to ScratchJr (scratchjr.org), which is perfect for our youngest learners, or Scratch (scratch.mit.edu) for ages 8 and up.
2. In the app, have students pick a tutorial or activity they'd like to complete. Check out the Ideas section for tutorials and project ideas (scratch.mit.edu/ideas).
3. When students are finished, have them share what they created with their classmates. They can swap iPads to let a friend see and play what they created, or go to bit.ly/sharescratch to learn how to share using Scratch online.

ISTE Student Standard Connection: Computational Thinker

1.5.c Decompose Problems: The teacher actively encourages students to follow the Computational Thinker steps and reviews them with the class. Additionally, the sequence of Ana breaking down a problem, trying different approaches, and adjusting her method clearly demonstrates the problem-solving approach outlined in this standard. When Ravi doesn't understand her explanation, Ana tries to solve the problem by drawing. When that doesn't work, she reassesses and comes up with the idea to create an animation using coding.

1.5.d Algorithmic Thinking: The book demonstrates this indicator when Ana creates a program using a coding app and thinks step-by-step to explain the pollination process to Ravi, as well as in the Step-by-Step Sandwich Challenge (pages 30-31).



Additional Resources

- Check out the series companion site for more cool ideas and resources (istedigitalexplorers.com).
- Dive into *Sonia's Digital World* with this companion site (soniasdigitalworld.com).
- *Sonia's Digital World* soundscape brings your read aloud to life with interactive music and sound effects (noveleffect.com).
- ISTE Digital Citizenship in Education provides resources for bringing digital literacy to your classroom in meaningful ways (iste.org/digital-citizenship).

