"Michael Hernandez's new book on digital storytelling is a must-have for educators. It's a clear, practical guide for infusing storytelling in any subject. Hernandez outlines the essentials of digital storytelling with easy-to-follow steps and relevant examples. This book is perfect for teachers aiming to integrate more multimedia into their lessons and empower their students as creators. It's an invaluable resource for enhancing classroom engagement and creativity."

Monica Burns, Ed.D.
author of *EdTech Essentials* and founder of ClassTechTips.com

"Michael Hernandez is a master storyteller and a master teacher, and this beautifully designed book is a perfect example of his craft. Through the range of practical ideas and the illustrative examples in *Storytelling With Purpose*, every teacher, storyteller, and creator who aspires to refine their approaches will benefit from engaging with Michael's latest work. This is one of those rare books where you can benefit from reading it linearly from front to back or jump around to the areas that interest you the most (at first— you'll be compelled to read it all no matter what!). This is a wonderful contribution to the body of literature that focuses on purposeful, student-centered education."

Dr. Reshan Richards
Lecturer, Columbia University School of Professional Studies
Co-Founder, Explain Everything (acquired by Promethean, Inc.)

"*Storytelling with Purpose* is a much-needed resource for today's educator. Through stories and examples from his experience as a teacher, Michael brings us on a journey to understand ways to support storytelling in the classroom and to empower the voices of youth by design. Readers are able to explore different types, forms, and purposes of digital stories and then are guided through a creation process positioning students (and teachers) as thoughtful observers of the world, creators of stories, and messengers of perspective, experience, and action. Inspiring and inventive, this book will be one I can return to again and again!"

Jennifer Williams
ISTE Author, Global Educator
Co-founder Take Action Global and TeachSDGs

"The entire experience in Michael's classes set me on a course through college and into my journalism career, where I still lean on all those lessons every day."

Alicia Hastey
Producer, *CBS Evening News* with Norah O'Donnell

"Michael is an individual with a superb understanding of how to adapt to a student's comprehension of material. He not only has the 'know how' but he is able to convey his message so that it's suitable to the listener. He can teach anyone!"

Hunter Isbell
Curriculum Director and Music Teacher

"We value his ability to integrate his classroom experience with his extensive knowledge of tech and its power to personalize learning for students of all ages. He is an exceptional storyteller and talented speaker."

Kathy Crowley
Founder, Readability Matters

PROLOGUE

"If you want to build a ship, don't drum up people to collect wood and don't assign them tasks and work, but rather teach them to long for the endless immensity of the sea."

—Antoine de Saint-Exupéry, author of *The Little Prince*.

For 25 years, I've taught high school journalism, cinematic arts, and photography. While these courses have been frequently relegated to the margins as "elective" by standardized test companies and academic traditionalists, we are realizing now that storytelling is in fact central to learning and plays a crucial role in finding solutions to some of our most pressing challenges in education and society.

The COVID-19 pandemic shone a light on the flaws of traditional learning methods, both in terms of their effectiveness and the willingness of both students and teachers to play the game of direct instruction/memorization/regurgitation, which often only serves privileged students (CEW Georgetown University, 2019). We struggled to give ourselves and our students a good reason why school (in-person or remote) was important. Suddenly, everyone had new clarity on what mattered most to them, their lives, and the good of the planet, and school often wasn't part of that.

Cyberbullying, trolling, misinformation, and disinformation campaigns spun by bad actors on digital and traditional media platforms have fanned the flames of racism and hate and led to insurrections and violence around the world. The promise that social media and digital storytelling once held as a democratizing force for sharing information and ideas has been tarnished, and many parents and educators have reacted by banning technology, hoping that if we don't see social media, it doesn't exist and neither will its potential downsides. But this stance to embrace digital illiteracy under the guise of protecting our kids has only backfired. It makes teachers less legitimate in the eyes of our students, leaving them vulnerable to those who are more digitally savvy and antagonistic, and creates a generation of citizens who are unprepared to navigate the political, cultural, and professional world that has been digital-first for decades.

Advances in artificial intelligence now allow anyone to prompt an app to quickly write essays, college application letters, curriculum, computer code, or anything else you request. Suddenly, educators are forced to question what we're teaching and why, and if we haven't already, ask the most fundamental question of all: What do we mean by "learning"? Is it just teaching kids the mechanics of how to communicate ideas (grammar, spelling, sentence structure—all now rendered pointless by AI) or is it about focusing on the purpose of learning? And how can our students make good, ethical decisions when no one is looking?

This book is an attempt to answer these existential challenges by reframing the learning process as one based on empowerment, centering student curiosity, purpose, and joy as the engines that drive all learning experiences. Using nonfiction storytelling as a framework for learning embraces the idea that learning should be an authentic experience, both in the academic sense of leveraging integrity to conduct research and develop ideas, as well as with the ultimate motivating goal of creating an original product that will have an impact on an audience beyond the classroom. Digital storytelling can be the framework upon which we hang our curriculum (skills, knowledge, information) and an opportunity to help students develop a more positive relationship to learning within the context of a global society.

My experience as a secondary teacher and as a dad has revealed that many students and teachers perceive curiosity and wonder as a weakness—a source of anxiety for many students who may fear getting a bad grade or looking unintelligent because of their lack of understanding or knowledge. We have also become a society where many take offense when our assumptions or the status quo are challenged, making it difficult to embrace inquiry in the classroom and beyond. This book offers ways to flip that model around and honors and embraces student curiosity as the driving force behind learning. Instead of being punished for what we don't know (through grades, personal status, scholarships, honor roll, etc.), we elevate and praise the most interesting, provocative questions and the extent to which we answer them.

My goal for this book is to help all stakeholders adopt a new set of mindsets, including learning to:

- understand how students can use nonfiction storytelling as a way of thinking and processing information
- use storytelling as a vehicle for inquiry and assessment, not as entertainment or distraction
- encourage student-centered learning where teachers are leaders/facilitators
- use multimedia as an effective, relevant way to communicate ideas beyond text alone
- integrate nonfiction storytelling projects in classrooms of all grade levels and subject areas
- honor and support student independence, ownership, and personal responsibility within the context of a global society
- reimagine what we mean by "learning" and "success" as human-centered experiences rather than data-driven processes

Not a "Nice-to-Have": Storytelling as an Essential Skill for Learning

While it's true that school can't be a free-for-all where students do whatever they want by choosing only what "feels good" to study and leaving behind essential skills and experiences, it's also true that traditional curriculum and teaching methods, under added pressure of high stakes testing and "accountability," have left our students unprepared to be successful citizens in a contemporary world (Marciano, 2001).

Storytelling projects are often treated as a reward for students once their "real work" has been completed. Somehow we've developed a mindset that project-based learning experiences like nonfiction storytelling are a lower form of learning than traditional assignments, perhaps because they can be fun and rewarding, rather than tedious or painful. But rigor and hard work can be synonymous with passion and purpose—we can and should enjoy working hard to achieve goals that are meaningful and for causes we care about. This is really the most important lesson we need to teach our students.

For nearly a quarter century, I've witnessed the power of storytelling projects to elevate learning and invigorate students' sense of curiosity and provide meaning and purpose for school. But don't take my word for it. There is a ton of research that supports my anecdotal experience and verifies storytelling and its associated skills and learning experiences as effective ways to elevate learning across disciplines and grade levels.

Some of the research finds:

- Storytelling is an effective way to improve literacy (Miller & Pennycuff, 2008).
- Curiosity improves reading and math achievement (Shah et al., 2018).
- Curiosity is a basic element of cognition and even to our biology (Kidd & Hayden, 2015).
- Image-based content, alongside text-based content, may serve as an effective pedagogical supplement to students with or without cognitive disabilities (Smith et al., 2021).
- Creative activities result in job mastery and control and positive performance-related outcomes (Eschleman et al., 2014).
- Memorization of facts (like for quizzes and tests) does not help higher-level thinking, but that retrieval experiences—like those required for storytelling projects—do (Agarwal, 2019).

How to Use This Book

This book provides practical examples and classroom-tested advice to get teachers started with digital storytelling projects, no matter your resources or technical expertise. I recognize that trying something new can be scary or difficult unless you have the support of colleagues, administration, and parents. To help you on your journey, I've also included research, examples from my classroom, and testimony from teachers across the country that show how the ideas in this book can help solve real, day-to-day challenges that educators face. It's my hope that this book can help make the case to stakeholders in your community for moving to a more learner-centered pedagogy based on authenticity and inquiry, and an understanding that a rigorous education should also be one filled with purpose and joy.

The book is divided into three parts, the What, Why, and How of digital storytelling:

- Part I defines what digital storytelling is and how its unique capabilities can elevate learning for students of all abilities. I break down the steps of the storytelling process, share secrets about working collaboratively, and tell how to come up with good story ideas.

- Part II is dedicated to understanding why we should use digital story projects, and how they fit naturally into our existing curriculum, including how to use them for inquiry and design thinking, and as a way to provide authentic, uncheatable assessments.
- Part III is a compilation of my favorite storytelling projects, organized by learning needs, like anthologies, observation and inquiry, creativity, and writing. I've included simple, easy projects you can use right away, as well as advice for more complex projects when you and your students are ready.
- The appendices are a curated set of resources to help you find the best tools to use for story projects, ethical guidance about copyright and privacy, and a bibliography of my favorite books, organizations, and resources.

If you can't wait to start creating digital stories, jump ahead to chapter 16 for Quick Win projects you can use with your students right away, then circle back to earlier chapters for advice on assessment, developing story ideas, and the logistics of how to integrate these projects into your curriculum.

The ideas and mindsets I describe are intended to help students in your school become curious, confident, engaged citizens who have a healthy relationship to learning throughout their lives. But this book is just the beginning.

Digital Resources: Student Examples and Updated Tools

Digital tools and resources evolve rapidly, so I've created a website that collects my latest, updated recommendations for tools, articles, and other resources for your classroom. You can also see examples of the student projects discussed in this book.

Scan the QR code to access the site.

Join a global community of educators who share a common goal of creating authentic learning experiences by sharing your ideas, student projects, and insights by using the hashtag #StorytellingWithPurpose. Have questions or need advice on how to use these ideas in your learning space? Visit storytelling-with-purpose.com or drop me an email: michael@storytelling-with-purpose.com

PART I

WHAT ARE DIGITAL STORIES?

Digital stories are much more than videos–they include a broad range of interactive multimedia formats, like infographics, audio recordings, photographs, and digital books that are flexible enough to be used in every subject area and grade level. In this first part of the book, I talk about what digital storytelling can be, how it amplifies and expands on what teachers already do best, and share the secrets of how to create effective stories.

CHAPTER 2

BEYOND WORDS: THE POWER OF MULTIMEDIA STORYTELLING

When we say, "Oh, I see!" what we really mean is that we understand. But the metaphor of sight as knowledge is more than just a turn of phrase—seeing *is* believing, and digital stories offer opportunities to use our senses to make sense of the world and to learn in three dimensions.

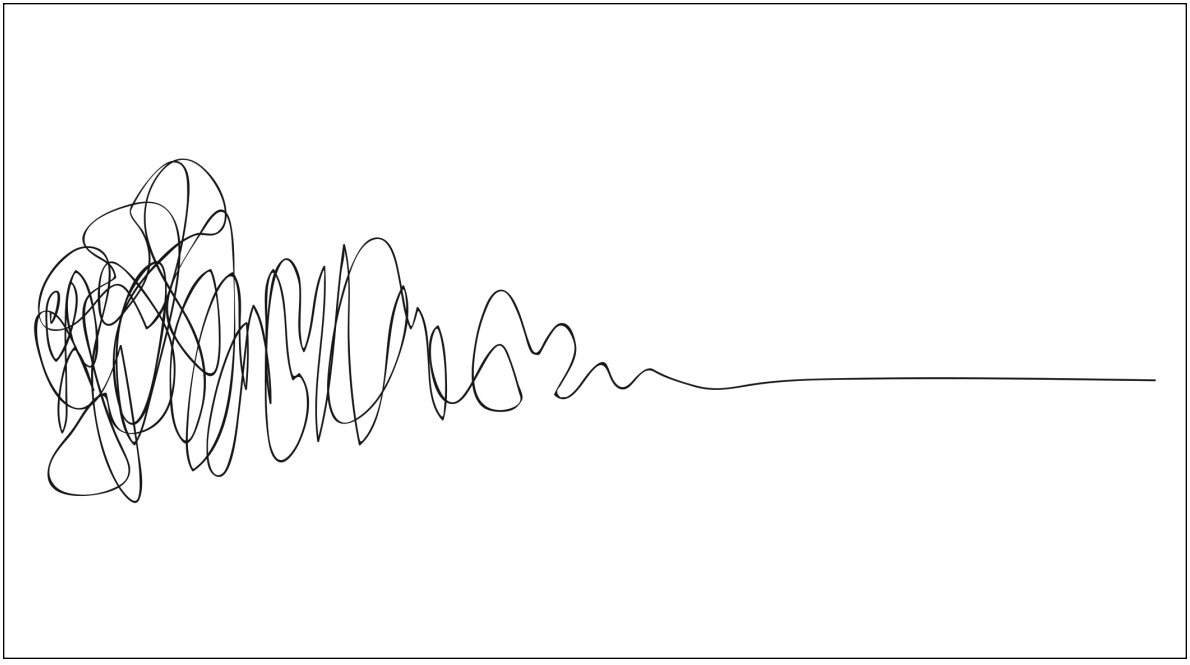


FIGURE 2.1 *The creative process. Even a simple line can convey complicated processes and help an audience understand without the need for words. Source: The Process of Design Squiggle by Damien Newman, thedesignsquiggle.com*

Consider the ironic humor of a political cartoon, the way a time-lapse video spans seasons or the lifetime of a plant, and how audio reveals the song of humans and the natural world. Illustrations aren't just for assembling IKEA furniture—they're critical for assembling knowledge, especially concepts too complex for words. (We'd literally be lost without maps and charts, for example.) So why have we privileged the written word when multimedia has so much to offer?

While writing is at the heart of every digital story (think scripts, interview questions, captions), I like to think of multimedia as a different kind of writing, with its own grammar, that works alongside words to create spatial relationships and provide unique information and detail that words simply can't.

In this chapter, I share the secrets of using multimedia (photography, audio, video, data visualizations, and illustrations) to provide clarity, improve accessibility, and tell stories that resonate with an audience's heart and mind.

What Photography Brings to Storytelling

Visual evidence. Documents an event, action, or phenomenon.

Context. Shows the relationship between objects or people within an environment.

Freezing action. Allows detailed analysis of an object or action that's not possible when experiencing it live or while in motion.

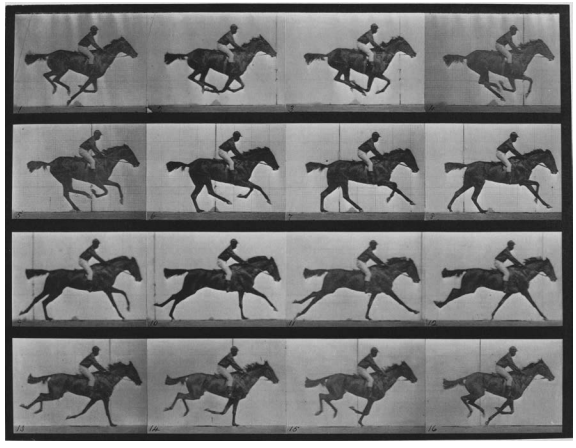


FIGURE 2.2 *Eadweard Muybridge, Animal Locomotion, Plate 626, 1887. Using photography to freeze movement of animals and people, Muybridge was able to analyze physical phenomena, like the galloping horse in this image, which revealed for the first time that the animals leave the ground while running.*

Photography: A Thousand Words

Photography is the most familiar and accessible type of visual storytelling. It's also a powerful way to document reality and provide visual evidence, making it a great place to start when creating multimedia stories.

Photography as Nonfiction Storytelling

Historians, journalists, and scientists rely on the collection of information to understand events, draw conclusions, and make predictions about the future. Photography is a great way to document phenomena and provide proof—or visual evidence—to support research and persuasive stories alike.

Photography for Analysis

In the 1800s, Eadweard Muybridge created the first stop-motion images, which proved the power of photography to aid scientific research by analyzing movement. His images were the first evidence that horses left the ground briefly while running, which had previously been impossible to observe with the naked eye. Consider using photographs in the same way to freeze movement to analyze details students might not be physically able to perceive on their own, or use them to create time for closer inspection and reflection.

Macro and telephoto lenses, like microscopes and telescopes, can help us observe details of objects up close or far away, and capturing people's faces can also provide an emotional, human dimension to a story, an important qualitative type of data collection.

Audio: Storytelling with Emotion

Audio is an underestimated and immersive storytelling medium that is also one of the least complicated to create. Without being bogged down with visual skills like composition and lighting that are required for video and photography, these types of stories allow students to focus on elements like writing, speaking, and conducting interviews.

Sonic stories tend to be the best at capturing emotion because they're an intimate and personal medium. Consider someone's accent or the fatigue in their voice, or the specific sounds of a frozen lake beginning to melt. Unlike photography and video, audio stories can also minimize audience bias: because we can't see the people being interviewed, audiences are less liable to judge them based on race, age, or how they're dressed.

What Audio Brings to Storytelling

Details. Animal calls in nature, the power of thunder, the strength of a rushing river, congestion of traffic on a street, accents of regional and foreign languages, the sounds of machines when they work right or when they are malfunctioning all can establish atmosphere and a sense of place, which help us feel what it's like to be in a particular place. Accents can tell us where someone is from.

Emotion and tone. Vocal tone may reveal someone's emotional state or if they're being hyperbolic, sarcastic, or ironic.

Music. Whether captured intrinsically as part of a recording, like a band or radio playing in the background during an interview, or added on top of a story later, like a film score, music can evoke emotion, create motifs, and provide opportunities for allusion. It's also a great way to document and examine culture and history.

Accessibility. The ability to record and playback ideas without the need for text puts the focus back on content and thinking and removes technical and physical obstacles of reading and writing. For younger students whose ideas may surpass their writing ability, those with learning disabilities, and students with mobility issues that make writing or typing difficult, consider recording student voices as an alternative to written assignments.

Oral Histories

Audio histories have long been used by sociologists and anthropologists to document people and culture. StoryCorps is a nonprofit that produces audio histories by letting people record a personal story in a mobile recording studio. These stories are later archived at the Library of Congress's American Folklife Center. They also provide resources and a mobile app to help you record and upload your own audio histories. See ideas for oral history projects in chapter 12.

Use audio stories to collect data and information, such as:

- eyewitness accounts of historical events
- sounds of the natural world like animal calls and weather
- music, languages, and regional accents that are quickly disappearing in our globalized world (cultural phenomena)
- conversations when studying foreign languages

Audio Stories for Research

Sound is a powerful tool for both qualitative and quantitative research. Interviewing experts and eyewitnesses helps students and their audiences make personal connections to topics and build empathy for others because we hear evidence and reactions directly from a real stakeholder. Documenting the sounds of a phenomenon or event provides context, data, and evidence. Consider documenting the sounds of your community and use audio stories for research, analysis, and preservation.

Quantitative research

Audio recordings can collect data in two ways: inside the content of the recording, and data from the recording itself.

Data inside the content of the recording comes from decoding statements from people who might be interviewed in a story, such as experts and stakeholders who share statistics and other countable info. This might include the number of times someone has won or lost a sports game, how many siblings they have, how many books they've read, or what countries they've immigrated from. Experts can provide data related to story topics, such as population changes in your town, the cost of repairing cities after large storms, or distances in migration patterns.

Data derived from the recording itself can provide unique insights about the topic, too. For example, counting the frequency that something happens over a period of time, like the number of times a woodpecker pecks wood (slow down the recording to count!), the number of cars passing in a specific location on a road, or the frequency of certain words used in a conversation. Duration can also be a data point, such as the time it takes for vehicles to pass or the sustain of a musical note.

Video: Sculpting in Time

Video combines the visual evidence of photography with the emotional detail of audio and adds a new dimension that makes the medium unique: movement. Whereas photography freezes action, video shines when it's used to show movement and change. The use of slow motion, frame-by-frame playback, and time-lapse videography can help students analyze actions more closely to reveal details not possible with the naked eye or photography alone. It's also the medium that best helps audiences feel what it's like to be in a specific place and time.

Use Video Stories To:

- Document an event, action, or phenomenon, like reactions in a science experiment.
- Document and analyze technique, such as solving equations, determining narrative structure of paragraphs, poetry, or essays, or studying the skills of a sport.
- Record a time-lapse of a creation process that takes a long time, such as painting a mural, building a robot, or the growth of a plant.

What Video Brings to Storytelling

Movement as visual evidence. Think of the ways video can show how an animal moves or feeds, the way a soccer player "bends" a ball to make a goal, or the flight path of a rocket—the movement made possible with video helps us understand the concepts of these kinds of phenomena more accurately.

Movement as context. Video allows the viewer to see changes over time and how people interact with one another. Moving the camera during recording can reveal spatial relationships.

Time remapping. Slowing down or speeding up video can help us get a more accurate understanding of phenomena, sometimes revealing new information that would be impossible to discern using any other medium. This is helpful in science and also in performance-based curriculum like art or athletics, when analyzing body movement.

Image and sound in sync. Some phenomena can only be truly understood with the combination of image and sound, such as a recording of a thunderstorm or testimony of a documentary interview.

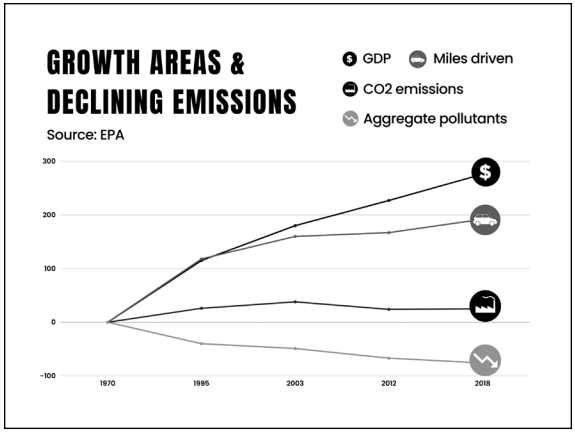
Data Visualization: Painting by Numbers

It's difficult to make sense of raw numbers by staring at a spreadsheet or reading descriptions in paragraphs of text. The best way to make sense of numerical data is often to picture it. That's where data visualizations come in. Pictorial representations of numbers, like charts and graphs, literally help us connect the dots to make sense of data and clearly explain to an audience what they mean.

What Data Visualization Brings to Storytelling

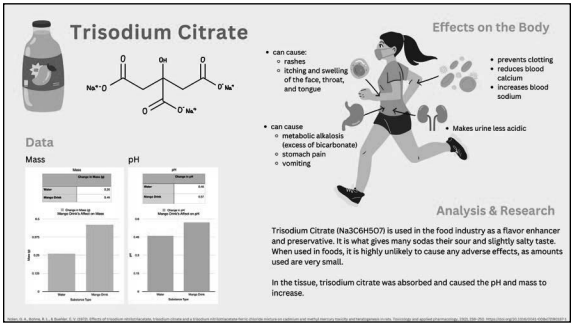
Understand relationships. Bar graphs, scattergrams, and vector maps show how data compare to one another and help reveal similarities and differences.

Reveal patterns. Pictorial representation of data helps us see trends and changes over time, like global temperatures in the past 200 years, or the number of women in the workplace since the 1950s.



Data				Settings			
	GDP	Vehicle Mi	CO2 emiss	GDP	Vehicle Mi	CO2 emiss	aggregate
1970	0	0	0	0	0	0	0
1995	115	118	26	115	118	26	-40
2003	180	160	38	180	160	38	-49
2012	227	167	24	227	167	24	-67
2018	276	192	25	276	192	25	-76

FIGURE 2.3 *Pictorial representation provides more clarity and understanding than raw numbers.*



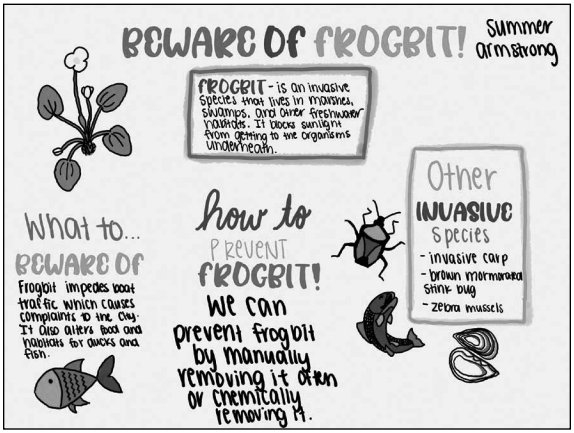


FIGURE 2.4 *Infographics combine images, text, and data to communicate ideas clearly to an audience. Images created by Saipragnya Akula (top) and Summer Armstrong (bottom).*

Data Visualizations for the Rest of Us

Charts and graphs aren't just for math and science students. There are many kinds of data whose story we can visually represent—and therefore understand better—in every subject area. These might include:

- using timelines to sequentially view historical moments, evolutionary or geological events, or show a sequence of steps in a process
- creating tables to make comparisons and organize information like data about different planets or how to conjugate verbs of foreign languages
- designing graphs that compare demographic information about important figures related to your curricular area, like the age, gender, or race of often-referenced scientists, authors, or musicians, and compare that to your community or state population
- taking the temperature of your community by polling students' and community members' reactions to content in your curriculum, like pieces of literature, historical events, class projects, or future areas of study

Find out more about tools to create data visualizations in appendix A.

Illustrations: Pictorial Representations

If you've ever tried to explain to someone how to carve a turkey over the phone or made someone upset when your ironic text didn't land the way you intended, you quickly realized the limits of words.

FIGURE 2.5 *Images like this heat map of shots taken on goal for lacrosse can bridge math, sports, and student interests. Courtesy Jesse McNulty.*

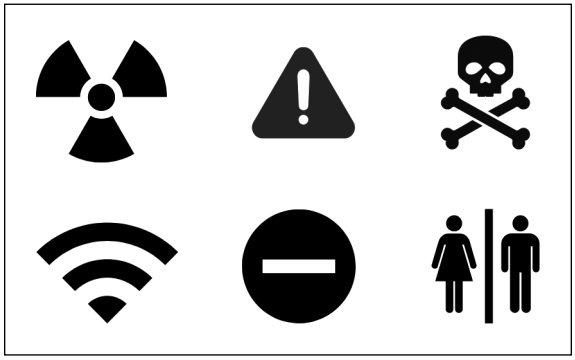


FIGURE 2.6 ***Symbolic:*** *Convey important information quickly without the need for words.*

Illustrations are a great way to help students and audiences make sense of a topic by showing relationships, organizing content, and conveying nonverbal information, especially when a technique or process is too complex for words, or when the audience might have difficulty reading or understanding text (Bobek & Tversky, 2016). They can include everything from furniture assembly instructions to book covers to memes.

What Illustrations Bring to Storytelling

Clarity and simplicity. Sometimes it's best to "just show me!" Universal symbols for things like stop signs, electrical hazards, or nuclear radiation are needed when safety is too important to be left to interpretation.

Accessibility. Words may prevent younger learners, language learners, or those with learning disabilities from understanding concepts.

Emotional and interpretive connection. Book, album, and podcast cover art can get attention and create an emotional relationship toward a work. Students can create illustrations to show their interpretation of a story and help the audience see a story in new ways.

Nonverbal cues like irony or humor. Editorial cartoons and memes use satire to activate high-level thinking skills in the author and audience. These types of projects add another level of interpretation to subject matter that can help us see stories through the lens of pop culture, and the relation of our curriculum to current events.

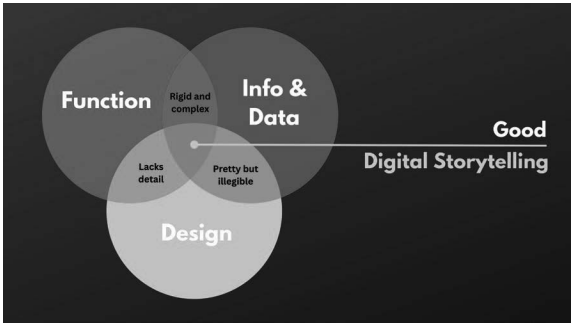


FIGURE 2.7 *Diagrams like these help provide clarity by showing relationships and context.*

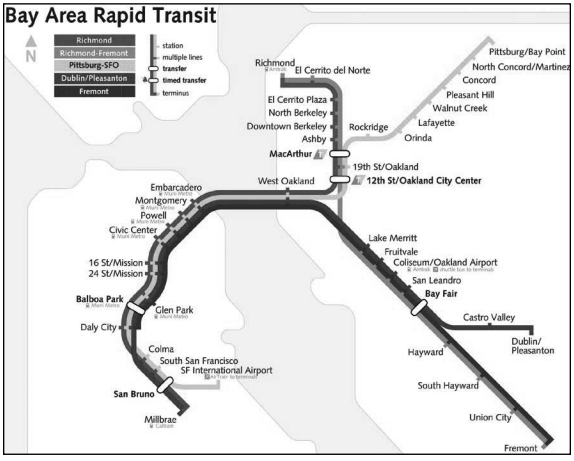


FIGURE 2.8 *Use maps to sort information spatially and show relationships between information.*

Diagrams

Everyone who's assembled furniture from IKEA knows how helpful images can be when understanding a complex process, and when words alone don't make sense. Diagrams can also help us show relationships and provide a way to organize information, like Venn diagrams and company organizational charts.

In the same way we rely on sentence diagrams or the periodic table to organize and bring visual clarity to our curriculum, use diagrams in student stories to help them explain relationships and context.

Maps and Charts

Maps are for much more than seeing countries, topography, or roads. According to Carissa Carter

of Stanford d.school in her book *The Secret Language of Maps*, a map can be defined as "information that is sorted spatially and depicted visually" (p. 15). Create maps for projects like family trees, timelines, treasure maps, and star charts.

Editorial Illustrations

If you've stopped in your tracks to pick up a book in a store, paused your scrolling through social media to read an online article, listened to a podcast for the first time, or bought new music, it was probably because of an eye-catching illustration. Editorial illustrations are artwork created to visualize and reflect the concepts of another medium, like a book, music album, or magazine article, and are frequently used as part of marketing strategies.

Editorial illustrations are one of my favorite storytelling projects because they require deep, critical thinking where students translate abstract concepts into visual representations. In this process, they draw on their knowledge of design and color theory, metaphor, and symbolism, and make cultural and historical references. Language arts teachers may already have a book cover assignment in their curriculum, and editorial illustrations are also a great way to help students conceptualize abstract ideas in science, math, and social studies.

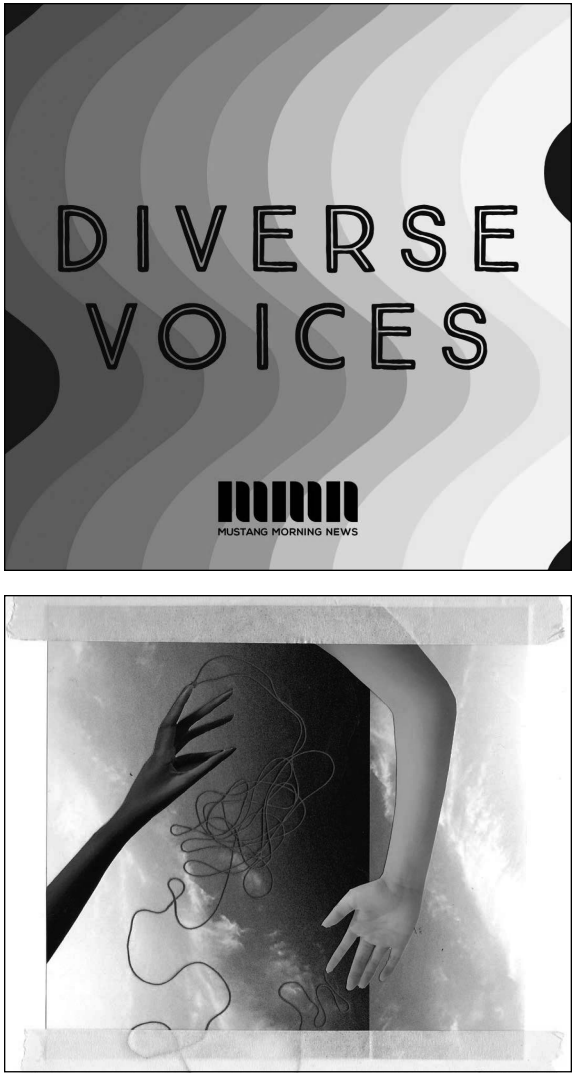


FIGURE 2.9 *Use illustrations to create cover art for books, albums, or podcasts. This is the cover art for a student podcast about the experiences of BIPOC students at my school (top) and the editorial illustration created by my student Natalee Park for the same podcast (bottom). See projects for illustration in chapter 13.*

Know What I Meme?

Sometimes, explaining yourself or a cultural moment requires a sense of humor, irony, or even sarcasm. A social media phenomenon that has emerged in the past few years is the meme: an image, usually a photo taken from news or other websites, with text added to create a social or political commentary. Social scientists and politicos have begun to pay close attention to memes as a powerful way to create perceptions (or misperceptions) about a person, group of people, or political topic, especially in these times when audiences have short attention spans and often create meaning from headlines or social media posts. Student-created memes are a great way to activate critical thinking about a topic in a way that is powerful and relevant.

Find out how to use image-based storytelling in your classroom in chapter 13.

FIGURE 2.10 *Memes combine images and text to make a social or political commentary. This image, created by my student Vanessa Lopez, was inspired by artist Barbara Kruger.*