Educators are bridge builders. We help others bridge gaps between what is wondered and what is known. Many speak of the achievement gap, while others refer to it as the opportunity gap. Either way, moving students from here to there and helping them make personal connections with content and context requires us to build bridges.

Storytelling Links Life Lessons to Imagination

Storytelling is an ancient tradition that connects tale-tellers and audiences. New methods of storytelling incorporate animation, images, music, and technology, bringing this art form to life with mixed media. Acmetonia Primary School in Cheswick, Pennsylvania, developed its Kaleidoscope storytelling program, which infuses visual art with language arts and video production. Deeply embedded in the school’s approach to storytelling are four bridging principles:

• **Collaboration**—bridge unique points of view into consensus;

• **Cross-curricular**—arts integration bridges multiple subjects;

• **Community of learners**—bridge between current K–3 students and Acmetonia Primary School alumni, who serve as coaches; and

• **Culture of respect for student voice**—storytelling unfolds a bridge between students (the experts on their stories) and adults who learn from them.

The Kaleidoscope projects kick off by spurring imaginations and culminate in a film festival in which parents, teachers, and members of the broader community see the storytelling videos debut. Principal Gregory Heavner described the school’s commitment to multimodal learning: “It starts with students visualizing who is in their story and what happens to them. They draw storyboards to make the characters and plots more tangible. They use the Crayola Easy Animator studio as the tool to teach animation and prepare for their filming.”

The production struggles are the most memorable lessons; students resolve issues collaboratively. “Self-assessment has become a routine practice throughout the production cycle. Students use rubrics to determine whether their artifacts—the sketches, backgrounds, writing, and audio—are what they need to bring the stories to life. They narrate and illustrate prose and poetry, then watch video clips to decide if they met the expectations,” Heavner explained.

Teachers’ roles include stimulating
inquiry and helping students form their own flexible groupings based on interests and prior knowledge. While teachers help link creative writing, art, and technology, it’s the students who drive the production. A third-grader has risen to the role of production leader, with a team that supports him. “It’s almost like we have our own Apple Genius Bar,” said art teacher Lauren Hanlon. The team of third-graders runs a tech support operation at the iPad station, helping everyone from teachers to kindergarteners learn how to run the equipment. In addition, other students help teams evaluate and polish their stories.

Art Bridges Science and Language Arts

There is a natural rhythm in science. Similarly, there’s a natural rhythm in written and spoken words. Educators at Dover Sherborn Middle School in Dover, Massachusetts, have found that art bridges gaps between those worlds. Headmaster Scott Kellett explained that his middle schoolers use art to connect nonfiction writing with nature, authors, and mentor text. Students use Skype to connect with award-winning poet Joyce Sidman, and they have on-site visits with nonfiction author Loree Griffin Burns.

English teacher Laura Mullen, says that both authors “made it abundantly clear to our students that they can be, and already are, writers.” Seventh-graders spent a full day with Burns to discuss her books *Citizen Scientists* and *Beetle Busters*. Through these discussions, students learned how observation skills are essential in both science and art. “They bridged the concepts of ecosystems, biological fragility, and advocacy—allowing them to connect seemingly disparate pieces of information together,” Mullen said. “Within collaborative teams, they dove into projects, valuing their personal and peers’ perspectives on how to protect our environment and alert others to their concerns, as advocates.”

Visualization as a Learning Strategy

Dover Sherborn Middle School’s approach, based on visualization, is evidence-based. Researchers Claudia Leopold and Detlev Leutner’s 2012 study, published in the *Learning and Instruction Journal*, found that when reading scientific texts, having readers construct or draw an image was “superior to other reading comprehension strategies (i.e., main idea selection, summarizing).” Visualization efficacy has also
been reported by the What Works Clearinghouse: Timothy Shanahan wrote that “visualizing is a useful component of multiple-strategy instruction,” in the 2010 report Improving Reading Comprehension in Kindergarten–3rd Grade, published by the Institute of Education Sciences.

Commenting on this finding, the President’s Committee on the Arts and the Humanities described visualization as “clearly a skill that could be supported by helping students draw or paint pictures ... of what they imagine” from what is read.

Art, and the power of an image to be read as reliable text, offers insights that enrich student writing. Connecting with authors, exploring the visuals in their books, and creating original visuals serve to activate neuro-visual processing pathways and deepen learning. “The artistic view disclosed literary and scientific understandings that [students] did not previously possess,” Mullen observed.

Most exciting to the team of teachers was the impact on students in their special education program. “This bridged students and deepened their respect for each other,” said Andrea Moran, special education teacher. Arts integration “enables students who struggle with the traditional academic presentation of the world to forge a new pathway to learning through artistic processing.”

Promising Practices

Recommendations for other educators interested in bridging gaps in their learning communities include the following.

Reach out to authors. Writing books should not be mysterious to students. Nor should they feel pressured to pick one career path while in middle school. Hearing Burns explain that after receiving a doctorate in biology she changed careers to become a writer inspired students at Dover Sherborn.

Focus on observation. One skill that crosses all disciplines is observation. Building awareness is key to everything students will encounter—from self-awareness to collegial awareness, to awareness of their roles as citizens. To build this skill, Dover Sherborn art teacher Cathy Simino requires students to go beyond typical, run-of-the-mill drawings. “When they draw a lollipop or cotton ball tree or a V-shaped bird, I challenge them to really see, not assume. Stereotypes and presumptions permeate many areas of our lives. When we require evidence-based work and ask them to look more closely, they go deeper,” she explained. “Their art reflects a more accurate understanding of nature, and they attend to important details in the ecosystem.”
Give students agency. When students are empowered to do something phenomenal, they do. Students go beyond the core assignment and awaken their passion for being contributors, building awareness in others as active citizens. For example, middle schoolers transformed their outrage about environmental problems into motivation to come up with solutions. Kellett said he urges students to “be the change you want to see.” Learners will find the problems and also find effective ways to address them when educators trust them enough to drive their own solutions.

Kellett said this approach is especially important in middle school because at that age, “students are very perceptive; their insights are right on the mark. They can take on broad and varied lenses. They investigate their own thinking closely. It’s a critical time to embed the growth mindset that enables them to embrace new ideas and learn from unexpected results—without stigma of being wrong.”

Teachers and students in arts-rich schools find many examples where they are bridging gaps—between stereotypical roles of who teaches and who learns, discovering what it means to find unexpected results, and learning how to see something with a new lens. There is a tangible transfer of knowledge across those bridges.

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