From fourth graders learning science by building their own Rube Goldberg machines, to immigrant students in Alaska creating bonds through a shared art project, the amazing stories of these five schools will push you to ask what you can do at your school to enhance learning through the arts. Each school is an ordinary public school that was awarded a 2010-2011 Champion Creatively Alive Children grant from Crayola. They didn’t have special abilities or extraordinary student populations that made the projects they embarked on possible. Instead, what they had were innovative ideas that became promising practices. What will you make possible in your school?
BURNET, TEXAS, is a tiny town of fewer than 5,000 residents about an hour northeast of Austin. For many students and their families, it’s a long trip to get to an art museum or science center. So principal Jill Wittekiend, art teacher Samantha Melvin, and their school’s team of fourth- and fifth-grade teachers resolved to bring hands-on art and science learning to Burnet.

Their goal, as Wittekiend and her team put it, was to “crank it up a notch” by creating innovative, sustainable projects for each of the two grades that would integrate art and science and allow the students to create fabulous final products.

For example, fifth graders at Richey Elementary were able to embark on an exciting art and science adventure. “When our fifth-grade standards changed to include the study of simple machines,” explained Wittekiend, “we took the opportunity to move toward a project-based, inquiry-driven model.” They studied the ingenious early machines of Leonardo da Vinci and the convoluted cartoon machines of Rube Goldberg. Like da Vinci, students aspired to be keen observers of the natural and mechanical worlds and spent many class periods recording, writing, and drawing their observations.

But it’s their final project that is just the kind that any 10-year-old is bound to remember for years to come. Students created textured clay pots with lids that would serve as simple machines. Then the students assembled all their clay pots into a collaborative Rube Goldberg-inspired sculptural form for marbles to run through.

“As a way to document their progress, student groups photographed and videotaped their marble machines as they developed them,” explained Wittekiend. Best of all, “their installations will be exhibited in the town square for everyone to see.”

Creating 3-D Science and Art Projects

Massachusetts
School: John P. Oldham Elementary (grades 1-5), Norwood, Massachusetts
Goal: To improve students’ writing skills through storytelling and illustration

Improving Writing Through Visual Art

AT OLDHAM ELEMENTARY on the outskirts of Boston, the language-arts block used to mean every first-grade teacher in every school in the district needed to be on the same page—literally, the same page of the textbook.

Not anymore. It had been a consistent practice of principal Wesley Manaday to collect and review writing examples from every student in the school once a month. Over time, Manaday observed that the reluctant writers were more likely to produce a stronger writing sample when they had been stimulated with the opportunity to create rich, textured images. More art meant more words and more complex sentences.

Oldham was able to create a story-making program in partnership with the University of New Hampshire’s Center for the Advancement of Art-Based Literacy. Literacy expert Beth Olshansky, the center’s director, helped Oldham use best practices to enhance both students’ writing skill and their creative process.

In her research, Olshansky has found that when students begin with the image-making process, they tend to move away from simple personal narratives and toward more robust and well-articulated fiction. Oldham students drew pictures first and then moved on to writing. In turn, their writing became much more varied and imaginative.

The school is looking forward to seeing how the new program affects students’ reading and writing assessments. While many schools are cutting back on the arts and enrichment to focus on testing, said Manaday, his school is proving that “the arts and enrichment are needed to increase student achievement.”
Digging Into History

EACH DAY, BUSES BRING kids from 30 different neighborhoods throughout the city to Pittsburgh Carmalt Science and Technology Academy. Principal Sandra Och noticed that although her 600-student school was a melting pot of sorts, students didn’t know much about one another’s neighborhoods. “I wanted kids to understand, yes, neighborhoods are different, but they have similarities too, and let’s embrace the similarities,” she said.

Thirty leaders from the various neighborhoods were invited to the school to talk about the history of their communities, the architecture, and the impact of immigrants. Kids then discussed what they heard and began a process that Och said helped students gain respect for their own neighborhoods and others.

Architecture students from Carnegie Mellon University worked with students to build three-dimensional replicas of buildings in their neighborhoods. They also designed site plans for their own communities. Then, students created commercials to promote their ideal neighborhood and shared them with students in other schools through distance learning. The partnership extended to the mayor’s office, expanding the children’s understanding of community and citizenship.

This project involved research, history, writing, music, technology, and art, and also gave the students a real sense of ownership, Och explained. “I’m always looking for a way to incorporate the arts into what kids are doing,” she said. “Children buy into education then. It’s something for them to look forward to and excite them—and they are learning.”

Pennsylvania
School: Pittsburgh Carmalt Science and Technology Academy (grades pre-K-8), Pittsburgh
Goal: To use the arts to plan an ideal community

Alaska
School: John D. Shaw Elementary (grades K-6), Wasilla, Alaska
Goal: To use the arts to build connections among the school’s Russian, Ukrainian, and English-speaking communities

Building Community in Alaska

SHAW ELEMENTARY SCHOOL was built five years ago to accommodate the growing population of families who have flocked to Wasilla, Alaska, making it one of the fastest-growing towns in the state.

Because there were so many newcomers from all over the United States, Russia, and Ukraine, many students and their families didn’t know one another. Principal Karl Schleich came up with a project to bring the community together.

After the students studied the migration of Alaskan salmon, the school gave each of the 400 students a wooden salmon to decorate at home to illustrate his or her family’s own migration story, reflecting the family’s culture and traditions. To accompany their visual representations, the students wrote papers about how their family came to live in Alaska.

The families were invited to view the artistic creations and share family recipes at a potluck dinner at the school. “One of our biggest goals was reaching out to the Russian and Ukrainian communities. We had newsletters and specific notes translated,” said Schleich. Nearly 480 members of the school community turned out for the event.

At the event, grade-level teachers acted as hosts for storytelling sessions, which took place all over the school. “People discovered lots of common connections. You’d hear them saying, ‘I never knew that about you,’” recalled Schleich. “Every family got to share their story. It was everything we wanted.”
WHEN SECOND-GRADE teacher Jennifer Falkowski wanted to raise the level of work in her classroom, she decided that changing the way she and her students thought about process would make all the difference in the final product. “I decided to put myself out there and take a risk. That’s what I expect my kids to do,” said the teacher at Springville K-8 School.

Instead of focusing on separate subjects, Springville students head off on “learning expeditions”—big units of study that merge art, science, and social studies. For example, third-grade students studied the various bridges in the state, learning about their history, engineering, and importance in the community. They then illustrated the different kinds of bridges they had studied during the unit.

Other students studied wolves and their habitat, including using a grid and painting techniques to create a 12-by-8-foot mural of wolves in the wild.

“Our goal is to embed high-quality products and the character trait of perseverance in our school culture,” said principal Cheryl Ames. At many schools, students make a picture or write a poem and move on. By contrast, Springville students are expected to evaluate and refine their work until it is the best it can possibly be. “It is only when students learn how to evaluate their work and use the feedback from others that they enhance and improve their work,” said Ames.

Creating a final product that has value outside the classroom is another key element in Springville’s approach. This year, second graders wrote books about wolves that are available to others in the library; fourth graders created a guidebook for an artifact trunk from the Westward Movement; and sixth-grade students wrote a guidebook with accompanying watercolor drawings of flora and fauna on a local hiking trail.

“We believe that it’s important for kids to express their learning in a product that they edit and refine until they achieve the level of quality that is expected of a craftsman. And there should be an authentic purpose to their work,” said Ames. To reach this learning goal, art has to be a part of the process: skills of art and writing go together in creating good citizens and in preparing students for college and success later in life, she said.

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