In the popular film School of Rock, Jack Black, as substitute teacher Dewey Finn, leaps to the front of the classroom, whips out an electric guitar, and plays an original Led-Zeppelin-esque tune for his stunned fifth graders. Most teachers’ experiences with music in the classroom are a far cry from Black’s maniacal rock-and-roll antics—they find themselves on easier terms with a paper-towel-tube maraca than with a flaming red electric guitar. But any teacher—even those who discreetly mouth the words to “Happy Birthday”—can find ways to access the enormous educational benefits of music.

Sustained and rich school music programs are the ideal, and many teachers, parents,
and community members—armed with a wealth of research—have taken action to protect them. (See “Parents Demand More Music,” page 34.) But even if your school’s marching band, musical theater program, and after-school ukulele club eventually fall under the budgetary ax, music does not have to be banished from your school. Integrating music with other academic subjects is one way to salvage some of its strengths and to enrich the entire curriculum.

Math Set to Music
“Kids come to school knowing ‘Mary Had a Little Lamb’ and ‘Twinkle, Twinkle, Little Star,’” says Kay Smitherman, a retired math teacher from Angleton, Texas. “Wouldn’t it be nice if children came to school already knowing math formulas by heart?” Smitherman, whose “Math Songs” appear on page 66 of this issue, has made a second career of setting math-themed lyrics to popular tunes to help kids memorize essential formulas and skills.

“With music, the steps are already implanted in your brain,” she explains. “Students can hum while a test is being taken—it’s right there in their heads.” Once, she recalls, a student walked up to her after a test and confessed that a group of children had cheated. “What?” she asked, surprised. “How?” The sheepish student explained: “When we got to that part about mean, median, range...”

Have children sing the following song to the familiar tune of “The Wheels on the Bus.” For each stanza, segment a three-phoneme word such as sun, rug, duck, bug, cup, fun, nut, run, or luck. Invite children to orally blend the sounds and shout the whole word when the stanza is complete.

The sounds in the word are /s/ /u/ /n/; /s/ /u/ /n/; /s/ /u/ /n/. shout the word out loud!

—Phonemic Awareness Songs and Rhymes, by Wiley Blevins (Scholastic, 1999)

Children are desperate for authentic musical experiences. They are drawn to music videos, but that doesn’t impress them as much as someone sitting next to them, playing an instrument. Teachers can put up a notice at music stores, asking people to come and play. Folk, bluegrass, rap—many musicians would be thrilled to visit.” —Samuel Southworth, Durham, NH (musician and former middle-school teacher)

While the arts have been deemed a core subject by NCLB, there is no standardized test in place to measure how skillfully one strums a guitar chord. As a result, music programs in many schools are thought to be expendable. According to the Music Education Coalition, the current round of budget cuts will deprive 60 percent of K–12 students of an education that includes music. “To have music education stricken from the school system is devastating,” says composer Bruce Adolphe, music and education advisor to the Lincoln Center’s Chamber Music Society.

“Education should help create a whole human being, and it’s not going to if you have to only do well on English and math tests and excel in sports... Music is a language without barriers, and it creates a community that’s a model for humanity.”

activity: The Sounds in the Word

children are desperate for authentic musical experiences. They are drawn to music videos, but that doesn’t impress them as much as someone sitting next to them, playing an instrument. Teachers can put up a notice at music stores, asking people to come and play. Folk, bluegrass, rap—many musicians would be thrilled to visit.” —Samuel Southworth, Durham, NH (musician and former middle-school teacher)
and mode, we hummed until we got to that part, then wrote it down."

Getting students to participate in the music-making can add another level of engagement. Math educator Robyn Silbey, from Gaithersberg, Maryland, encourages the teachers she trains to “use music to help students recall basic multiplication facts, for example. The teachers challenge kids to reinforce these facts by making up new words to a well-known song. “This strategy is an effective way to have students embed anything they need to learn for mastery or to memorize,” says Silbey. “I like it because all the kids are involved in teaching and learning, it’s less work for the teacher, and it’s fun and gets the job done.”

Lyrics and Language
As the self-styled Ms. Music, Beth Butler spent years visiting preschools throughout her home state of Florida, using songs to teach little ones the days of the week, parts of the body, and more. Then she made a discovery: “Using music is exactly the way to teach a new language,” she says.

A fluent Spanish speaker, Butler started Boca Beth (www.bocabeth.com), a Spanish-English language program that uses songs, movements, and puppets to teach Spanish vocabulary and phrases. The familiar songs on Butler’s DVDs and CDs—such as “Five Little Monkeys Jumping on the Bed”—alternate between English and Spanish stanzas.

“Children are such sponges,” says Butler. “They pick it up quickly, and music makes it so much easier for

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**CDs THAT ROCK**

**Way Out**, by Justin Roberts (Carpet Square, 2004). Lively songs about trips to the doctor, best friends, and a camel named Samuel who dreams of the ocean.

**First Grade Rocks!** (Curriculum Rocks!, 2003). Developed by teachers, this excellent series (www.curriculumrocks.com) puts academics to catchy tunes.

**The Putumayo Kids: Sing Along With Putumayo** (Putumayo, 2004). A compilation of kid-friendly classics, including the most jamming “Old MacDonald” rendition you’ve ever heard.

**The Best of Schoolhouse Rock** (Rhino Records, 1998). The impossible-to-forget lyrics to “Conjunction Junction” and more are as timeless as ever.

**Philadelphia Chickens** (Rounder Records, 2004). Children’s author Sandra Boynton concocts an imaginary musical soundtrack with the help of famous friends. Dinosaurs, pigs, and snuggle puppies take to the stage!

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**[HIGHER TEST SCORES?]**

The reduction in school music programs is not only damaging from an aesthetic standpoint, it also flies in the face of research that suggests kids who study music perform better on tests. Numerous studies reveal that kids who participate in music programs show improved spatial-temporal skills, enhanced academic performance, and better social skills. According to a 2001 College Entrance Examination Board study, students with coursework or experience in music performance scored 57 points higher on the verbal section of the SAT and 41 points higher on the math; those who participated in music appreciation scored 63 and 44 points higher, respectively, than those students with no arts participation. A 1999 study from the UCLA Graduate School of Education and Information Studies showed that gains from music were just as great or greater for students of low socioeconomic status as for privileged students.
Music in the Classroom

“I use call-and-response tunes to call my students to sharing time or class meetings—this is also a quick way to get their attention. I will clap out a rhythm that they must repeat. This instantly focuses everyone. Sometimes I will select a student to create a rhythm for the day to call the class to attention.” —Dawn Flowers Thompson, Clara Barton School #2, Rochester, NY

Ninety-five percent of parents say that music is a key component in a child’s education,” says Laura Johnson, associate executive director of the American Music Conference, a nonprofit organization that promotes the benefits of music-making. People sense intuitively that “kids who study music do better in school and in life,” she says, “and that’s backed up by a great deal of research.” The community at large supports music education; according to a 2003 Gallup poll, 97 percent of respondents believe that playing music is “a good hobby” and “a good means of expression” that “provides a sense of accomplishment.” For advice on how to assemble a campaign to save music in your school, visit www.supportmusic.com. On the site, you’ll find an arsenal of facts about music education and a step-by-step action plan.

Musical Intelligence
When Diane Connell taught a lesson on honeybees to third...

(Continued on page 67)
graders—including children with special needs—she looked for a way to make the subject come alive. A quick browse through the local music store turned up Rimski-Korsakov’s “Flight of the Bumblebee.” Back in class, the children got out of their seats and “buzzed” around the room to the fast, jerky rhythm of the composition.

“The music helped them feel exactly what I was talking about in the lesson,” says Connell, now an associate professor at Rivier College in Nashua, New Hampshire. Teaching the students in this fashion engages the emotions. “If students really care about something, they’ll remember it,” asserts Connell.

As one of Howard Gardner’s major intelligence areas, music is valuable for its own sake as well as for what it can add to a lesson. Linda DiPasquale-Morello, a teacher at John C. Milanesi Elementary in Buena, New Jersey, feels that music is “just as or even more important than reading, writing, and math.” She says, “Many children who do not show academic awareness or excellence have the ability to show their forte in the arts—either musical or visual art. That’s why I am so against using just standardized testing for knowledge and understanding. We need all kinds of people with all kinds of talents!”

As Greg Percy, a teacher of art for 20 years in Madison, Wisconsin, has discovered, a musical intelligence can even help kids with—what else?—other types of art. Percy’s greatest hits (www.songsinthekeyofart.com) include the “Picasso Polka,” “From Matisse to You,” “Michaelsangelo Mad,” and “The Red and Yellow Blues”—the latter a catchy ditty on primary colors.

In his art classes, Percy will show some samples of an artist’s work, talk about the artist, and then play an original song pertaining to that day’s art lesson. For example, his song “Van Gogh (No Stereo)” appeals to kids because they remember one gruesome fact about the Dutch master: that he cut off his ear—and, as the song goes, couldn’t hear “in stereo.” The songs ignite the kids’ interest and help them remember important facts and elements of art history.

“The kids are learning, but they don’t know they’re learning,” says Percy. “That’s the best situation.”

Culture and Music

The students that Teri Tibbett meets are often isolated—with sometimes as few as six children and one teacher to a rural schoolhouse—and starved for artistic experiences. Tibbett, an itinerant music teacher based in Juneau, Alaska, brings the only musical exposure that these students have.

With younger children, Tibbett emphasizes movement: clapping, bouncing, and finger play. Older kids in fifth through eighth grade learn about the music’s “background, where it came from, and the sociology of the music style.” In the summertime, Tibbett works with native youth—mostly of the Tlingit and Haida tribes—in a juvenile detention center. She starts with a Native American unit from her book Listen to Learn: Using American Music to Teach Language Arts and Social Studies (Jossey-Bass, 2004). “They get excited,” she says, “because that’s who they are. They realize this isn’t the typical music appreciation class. Then they’re hooked on it.”

The older kids also get to see and handle instruments from various cultures. Tibbett asks questions that get them to analyze and compare: “Here’s a rattle. Touch it, look at it. Why does...” (Continued on page 76)
Music Promotes Wonder

Beyond the research, teachers know from the expressions on their students' faces that music's benefits go far beyond what can be assessed. Put simply, students enjoy, gain nourishment from, and build their confidence through participation in the arts. writes Norman Weinberger, Ph.D., a professor in the department of Psychobiology at the University of California, Irvine, “Arts education appears to really bring out the best in students, capitalizing on their natural curiosity and allowing it to flourish in a varied, stimulating environment.”

For the student who has given up on school or has never found his or her strength, music is sometimes the incentive needed to show up every day. “Everyone has a gift to explore and develop,” says Jackie Buckner, a third-grade teacher at Frank Kohl Elementary School, in Tulare, California. “Part of my job as a teacher is to assist in locating and developing those gifts.”

Take away the opportunity for children to find these strengths, and you are doing a disservice to society, says Ann Fennell, a third- through eighth-grade music teacher at the Vista Academy of Visual and Performing Arts in San Diego. Fennell is director of Music Ventures, a program that trains teachers how to integrate music into the curriculum. “It’s imperative to teach all of the arts,” she says, “because we don’t know whom we are denying. Take Louis Armstrong. Had he never held a trumpet, what would the world have lost? Many kids do not get these chances at home. As a teacher, you have to open up every door, to every child, to let them discover their infinite possibilities.”

Jennifer O. Prescott is the managing editor of Instructor.