

washingtonpost.com

In This Class, Math Comes With Music

By Michael Alison Chandler
Washington Post Staff Writer
Tuesday, October 23, 2007; B01

The red plastic ON AIR sign is always lit in Eric Chandler's second-grade class, where a simple question about subtraction could elicit a rock performance styled after the [Red Hot Chili Peppers](#).

You say the bigger number and count backwards/Or say the smaller number, then count forwards/Just say one, count the other on your finger/Where you stop's the answer, now let's sing . . . Take it away, take it away, take it away now.

The [Loudoun County](#) teacher writes his own songs and also adapts the lyrics of popular tunes. Some musicians find inspiration in love or nature, but Chandler finds it in the Virginia Standards of Learning. The right combination of chords and rhythm, he says, makes the state's curriculum more fun and more memorable.

"A song, if it's catchy enough, gets stuck in your head," Chandler said. So he embeds lessons in verses that kids might hum one day when sitting for a test.

For years, researchers have studied whether music education raises IQ points, test scores, spatial sense or math and verbal skills. Definitive results are scarce, but experts agree that music sparks the memory.

"Just think of the alphabet song," said Ellen Winner, a [Boston College](#) psychology professor who studies how music education affects learning.

As formal music instruction is getting squeezed in many schools to make room for math, reading and testing, more teachers are looking for new ways to add melody or syncopation to the daily classroom diet of worksheets and more worksheets.

In the past three years, nearly 200 artists have contributed to a [Michigan](#)-based Web site, <http://SongsforTeaching.com>, that offers music for core subjects, foreign languages, special education and classroom management. Other Web sites specialize in math or science songs. A national Science Songwriters' Association sells independently produced albums, including some with Washington-area connections.

Most educational songwriters sell online or at teaching conferences, having found it hard to get their songs on shelves in music stores. The Chromatics, an a cappella group of mostly research scientists based in Greenbelt, has sold nearly 15,000 copies of its educational astronomy albums in those ways.

"We wanted to be the 'Schoolhouse Rock!' of astronomy," said singer Padi Boyd, saying she remembers many of the grammar- and history-based jingles from the educational films that aired between cartoons in the 1970s and '80s. Boyd's group used national science curriculum standards to write songs about the

Advertisement

8 Investing Mistakes You Should Avoid This Year

Don't wait to find out if you're making costly investment errors. Instead, download the latest report by Forbes columnist and money manager Ken Fisher. It's called "*The Eight Biggest Mistakes Investors Make and How to Avoid Them*." Even if you avoid just one of these mistakes, you'll be glad you acted now!

[Click Here to Download Now!](#)

FISHER INVESTMENTS™

sun, planets and sound waves.

Chandler recently finished an album of songs about spelling, including "Short Vowel Rock." His greatest math hits include "Fact Family," set to the tune of "We Are Family" by Sister Sledge, and his own "Addend Plus Addend."

After a decade teaching first grade, Chandler moved to second grade this year at Mountain View Elementary School in [Purcellville](#), providing another set of grade-level state standards to dive into. Eventually he wants to cut an album for each elementary grade and sell them statewide.

Chandler, 33, embraced musical pedagogy after learning about a teaching method called Quantum Learning, which encourages using music to keep students engaged and focused.

Now Chandler is more likely to reach for his acoustic guitar than a dry-erase marker when explaining something complex. He even starts off the day with song.

One recent morning, students were quietly reading "The Ralph Mouse Collection" and "Froggy Goes to School" when the first beats of C+C Music Factory's "Everybody Dance Now" thumped from a boombox. Josh Smith pumped his fists in the air, and Matthew Hudler struck a pose. Chandler, and then his students, started clapping in time. With one final big clap, the room went quiet.

First lesson? Geography. Chandler strapped on his guitar.

I live in Purcellville/I live in Loudoun County/I live in Virginia/I live in the United States of America/I live in [North America](#)/I live on Planet Earth/I live in the Solar System/I live inside of the Milky Way/How can anyone live in all these places?/Sometimes it is hard to understand.

They sang another song called "Objects Move" for a science lesson. They also sang along in a rousing, [Johnny Cash](#)-like version of "That Shiny Nickel," with a count-by-fives chorus. Chandler finished with nimble riffs on the guitar, moving his fingers fret by fret until the children applauded.

Sophia Sgarrella, with two long braids, called out from her desk, "You're going to break your pick someday."

"Thank you, thank you very much," he said, Elvis-like at the mike.

Chandler said his songwriting has evolved. He called his early attempts too singsong. "Kids don't go around singing nursery rhymes," he said. "They are into popular music. First- and second-graders, they listen to the radio."

Now his subtraction rocks. For more edge, he obtained a grant to purchase his own portable studio, including a microphone, electric drum set and recording equipment. He collaborated with a technology teacher at his school to make slide shows or music videos of his songs, many of which have been posted on the school system's server for other teachers to use.

Special requests have started coming from colleagues. Chandler wrote a fourth-grade song about [Virginia](#)'s Native American tribes and a rap about Virginia "Document Dudes," also known as the Founding Fathers, who penned such works as the Constitution.

Though his customer base is growing, he already has adoring fans, and possibly future musicians, in his

class. Chandler said that after winter break each year, a handful of students come in with new guitars and want to learn the class tunes.

Others are happy just to sing along.

"There's only one teacher in the whole school who plays guitar," Sophia bragged after a morning of musical lessons. "And I'm looking at him."

[View all comments](#) that have been posted about this article.

Post a Comment

[View all comments](#) that have been posted about this article.

You must be logged in to leave a comment. [Log in](#) | [Register](#)

Submit

Comments that include profanity or personal attacks or other inappropriate comments or material will be removed from the site. Additionally, entries that are unsigned or contain "signatures" by someone other than the actual author will be removed. Finally, we will take steps to block users who violate any of our posting standards, terms of use or privacy policies or any other policies governing this site. Please review the [full rules](#) governing commentaries and discussions. You are fully responsible for the content that you post.

© 2007 The Washington Post Company

Ads by Google

[Math Lesson Plans](#)

Teacher's Lessons Plans, Fun Edu Awards Winning Animated Movies K-8
www.BrainPOP.com

[Round Rock Tutoring](#)

1 on 1, In Home Tutors. Pre K-Adult All Subjects. Certified Teachers.
ClubZTutoring.com

[Music](#)

Download Your Favorite Songs. Get Free And Legal Music Downloads Now.
www.FreeMusicConnection.com