

Headline:

Computer Science & Music Harmonize in Alturas Elementary School

Thanks to their Teacher / Conductor / Tech. Director: Chris Armstrong

Article:

Chris Armstrong has always had an ear for music and is striking the right note in Modoc County. Following in his dad's footsteps in teaching an artistic skill, Chris has pursued his love of music and education – teaching at Alturas Elementary School for the past 13 years. He says he feels like he's *"just about getting the hang of it."* Chris is a teacher, a musician *himself*, and a bit of a comedian.

The [Modoc Joint Unified School District](#) (MJUSD) includes one elementary school (*Alturas*), one middle school (*Modoc Jr. High*) and two high schools (*Modoc HS and Warner HS*). The Alturas students, in grades K-5, visit "Mr. Armstrong's" music class once or twice a week to sing, practice various instruments and work with computers.

Chris started working with CS4NorCal when he and his colleague Laurel Rulison attended an online Professional Development course. The *Implement 4 Impact* (I4I) series of four workshops provided educators with tools to integrate Computer Science and the College and Career-readiness standards (CCR) into classroom instruction. These teaching concepts included:

- Project-Based Learning,
- Agile Project Management,
- Emerging Concepts in Computer Science, and
- Showcasing Student Work.



Chris has seen the benefit of using technology in his classroom – whether it's with a Chromebook cart full of laptops or new headsets with microphones. *"It's great to see what the kids can create now that they have some of the latest technology tools at their fingertips,"* Chris said. *"It allows the students to be more creative since they don't have to play all the instruments – but still can create something that sounds really professional."*

This year, Chris was able to buy an entire set of Chromebooks for his classroom. These laptops (*housed in the music room*) meant students weren't transporting their Chromebooks from their home rooms – reducing the likelihood of drops and damages; and saving valuable class time by eliminating the need for additional log-ins. Chris also purchased a new set of class headphones with built-in microphones, so students could add their own vocals to their compositions. Chris noted the biggest challenge to getting more technology into his lessons was collecting the tools that were most beneficial for his music program.

Alturas Elementary School





As an educator, Chris appreciates how much *VERSATILITY* technology has brought into his classes. *"Computer science helps open up a world that kids can create and have a new experience they've never had before,"* Chris said. *"It allows students to create, record and sample music; and it definitely helps them to be more creative with their arrangements and mixes."* Chris is often inspired by his students' original compositions... combining their talent and imagination with technology and innovation.

"I had a fifth-grade student last year who, all on her own, went to a web-based app called BandLab, (which is like an online, collaborative audio workstation) and started composing an original song." Together, Chris and his student worked on her music together to make a polished arrangement – all with an app he had mentioned in class.

Chris has always been a fan of computers, going way back to when his parents had an original black & white Macintosh computer. He can still remember playing games like Number Munchers... an educational video program created by the same inventor who developed the popular Oregon Trail educational game. *"I think the thing I like most about computers is the puzzle aspect of the programs – and trying to solve problems,"* he said, which is one of the key concepts of the state Computer Science Standards.



Growing up with a musically inclined father, who used to lead the family in sing-a-longs around their fire pit, Chris always had music as the soundtrack of his life. He was born and raised in Rocklin, CA where most of his family still resides – including his parents, younger brother and younger sister. His dad has moved his artist talents to photography (*in his retired years*) and takes portraits of Chris and his dog, Lucy, whenever they come for a visit!

Music has played a huge chorus in Chris' entire life. After graduating high school in Rocklin, Chris attended the California State University in Chico and joined the college band... where he met his wife Christine. After graduation and marriage, both Chris & Christine continued their musical pursuits through teaching – Chris at Alturas Elementary while Christine plays for the Modoc High School Choir. Together, they have two wonderful dogs... Lucy, pictured above (*age 12*) and Finnegan (*age 3*).



Thanks to Chris' determination and drive to provide the best music education for his students, the halls of Alturas Elementary are filled with tunes, beats and songs. He has brought his love of music to hundreds of students – and keeps expanding a new world of technology they can use to create their own voice... and their own sound.

Thank you Mr. Armstrong for all you do – providing your students with a symphony of learning opportunities!