

Audio system amplifies an elementary school's transformation of traditional library into a makerspace

WITH THE TOPCAT AUDIO SYSTEM, STUDENTS GAIN CONFIDENCE AND ENHANCE 21ST-CENTURY SKILLS

The library at Mountain View Elementary School, home of Mountain View interactive technology (MViT), in Simi Valley, CA, looks much different than the traditional library. Instead of rows upon rows of books, desktop computers, and desks, the school has transformed the once individually focused workspace into a collaborative makerspace complete with materials as low-tech as cardboard and as high-tech as the Topcat audio system by Lightspeed Technologies.

The environment is designed to encourage students to use their imagination to create new products, explore technology, and practice the 4 C's of 21st-century learning: communication, collaboration, critical thinking, and creativity. The evolution from a traditional library to a makerspace started in January 2015 and has grown to include tools

to teach robotics, coding, video creation, sewing, crafting, and building. According to librarian Robin Glugatch, the space continues to evolve on a daily basis as the school discovers products they want to purchase and ultimately include in the space.

“We started small with a 5x5 Lego wall, dry erase paint on our tables, and some crafting activities. The options to include in the space are based on our students’ interests, and donations have expanded beyond my wildest belief.”

*Robin Glugatch,
Mountain View Elementary School
Librarian*

explained Glugatch. “I ask every store manager that I meet if they can contribute to our program. Many stores donate the items that don’t sell when they are on clearance.”

When it came to choosing high-tech items for the MViT makeover, the school wanted to align its decision with MViT’s school vision to blend instruction and technology in a way that promotes student-centered learning and allows students to use technology to improve 21st-century skills. Principal Jenny Goldman saw the Topcat in action at a local

MAKERSPACE ON A BUDGET

Working with a very limited budget, MViT has built much of its makerspace with donated materials. The paint for dry erase tables and the green screen wall were donated along with Legos, a sewing machine, fabrics, cardboard, duct tape, toilet paper rolls, and more. When Glugatch created a makerspace “wish list” and sent it home with students in a letter, parents and family members also started contributing donations to the growing makerspace.

“It is amazing what you can get just by asking,”



MOUNTAIN VIEW ELEMENTARY/MVIT SIMI VALLEY, CA

CHALLENGE

While building a low-budget makerspace, the librarian was searching for high-tech tools that could be used during presentations, small-group work, and to enhance 21st-century skills.

LIGHTSPEED SOLUTION

Topcat, Flexcat



RESULTS

- Enables students and teachers to hear each other more effectively
- Promotes student growth in developing 21st-century skills and makes them more comfortable when speaking publicly
- Has significantly improved the level of engagement and focus of students
- Is incorporated into group and individual presentations to ensure all voices are heard

conference, and after purchasing a few for her classrooms, she knew it made sense to incorporate it into the makerspace environment.

“More critical than the space and activities is the change in mindset. I am watching the emergence of confidence, enthusiasm, collaboration, and excitement in our students. The library is their space and a place where failure is embraced. We are constantly trying new things and figuring it out together, which inspires me to keep building and growing the space as our students evolve.”

Robin Glugatch

“If the students can’t hear the instruction, all the other technology in the room is irrelevant,” said Goldman. “I wanted to be sure that all of our students have equal access to instruction, regardless of the child’s proximity, attention capacity, auditory processing, and hearing ability.”

BENEFITS OF ADDING A CLASSROOM AUDIO SYSTEM

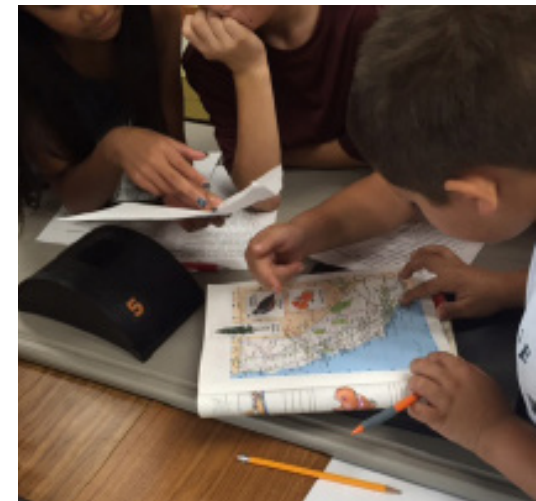
As the librarian, Glugatch reads to the students every single day. She says that the ceiling-mounted Topcat amplification system has significantly improved the level of engagement and focus of students, and prevented her from having to raise her voice or use her “lecturing” voice. Overall, the mood is more relaxed, and so is Glugatch.

Students also enjoy using the Topcat during presentations so they can hear their peers’ voices through the speakers. For one lesson, Glugatch split students into teams and challenged them to see who could engineer the tallest tower of paper cups. When the contest was over, she passed the microphone around to each group so they could have their time in the spotlight to showcase their towers.

“I noticed a huge change in their confidence by speaking into the microphone,” said Glugatch. “Additionally, the other students were listening more attentively. The Topcat System has certainly added a calmness and focus to the space.”

MTiV chose the Topcat because it can be installed directly into the ceiling. Educators also saw the benefits of the Topcat system when paired with Flexcat pods. The small, portable units are used with students in small groups. Teachers can monitor and provide input to multiple small groups at the same time via the Flexcat’s bidirectional communication feature. The Flexcat pods allow students to ask teachers questions via a small earpiece the teacher wears, and the teacher can respond to the students via the Flexcat speakers in the workspace. The Topcat/Flexcat combo has been instrumental in promoting small group collaboration and project-based learning in the makerspace.

While she is pleased with how her space has changed to allow maximum flexibility and creativity for students of all ages and ability levels, Glugatch says there’s no cookie-cutter formula for creating a makerspace. And in fact, she says, the space is not what matters most.



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