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PLANNING A SUCCESSFUL SCHOOL MUSIC FACILITY

By Jerry Carstensen

Great school music facilities – like wonderful musical performances – represent years of preparation and hard work, with dedicated people striving toward a common goal in a productive spirit of cooperation. The impressive fine arts center at Brentwood Academy in Brentwood, Tennessee, beautifully illustrates the fruits of such an effort. This project also highlights four factors key to any music facility's success: acoustics, floor plan, storage and equipment.

LAYING THE GROUNDWORK

The first step in most facility projects is a vision for the future. In the late 1990s, Brentwood's Board of Trustees assembled a volunteer "Dream Team" of supporters to plan the future of Brentwood's fine arts program. Proximity to Nashville meant this enthusiastic group included professional musicians along with parents and other arts supporters.

After careful study, the Board and Dream Team concluded that strengthening the fine arts first required more students to sustain these programs. A new middle school was deemed the first priority, and its opening enabled enrollment to rise by more than 30 percent to almost 800 students, grades 6-12.

"Seeing the big picture and being patient was a great strategy by people passionate about fine arts," said Ray Mullican, the school's director of business and finance. "They put the school's overall sustainability ahead of short-term needs."

Fueled by increased enrollment and talented, committed faculty, the fine arts pro-

grams grew despite being squeezed into crowded classrooms, hallways and even the gym. The bands and choir both rehearsed in makeshift spaces built from two regular classrooms.

"Students and faculty got fired up about the arts curriculum," recalled band director Matt Nygren. "We planted the seeds and watered the growing saplings. When your arts program is in place, it's much easier to get the funding and support to build a fabulous fine arts facility."

CONCRETE PLANS

In the late 1990s, architect David Minnigan, AIA, a principal of Earl Swensson Associates in Nashville, had assisted with the master planning for Brentwood Academy. Minnigan, a Brentwood alumnus, understood the school's passion for the arts and deliberate financial approach of tackling facility needs in phases. He said the academic spaces were considered first, along with a flexible black-box theater that became a fundraising focal point.

"It's hard to generate excitement about rehearsal spaces, so the theater was a higher-profile goal," recalled Minnigan. "The addition of the black-box theater was a way to show prudent use of funds, while creating a flexible room for rehearsals and performances."

The multi-function black-box theater, with maximum seating for 138 people, features a sprung dance floor and hosts a variety of activities, including concerts, dance recitals, and cheerleader practice. It also provides students with learning opportunities in technical production.

Symbolically, the lobby to this new theater and fine arts center functions as an entryway into the entire school, a daily reminder about the vital role that fine arts play at Brentwood Academy. A wall of windows in the lobby indicates where the larger performance theater will connect in the future, when phase two of the fundraising is complete.

1. PROPER ACOUSTICS

More than any other subject, music is learned by listening, so acoustical considerations are crucial in any music facility. Students must be able to hear the slightest variations in pitch, tempo, articulation, and balance.

For rehearsal rooms, adequate cubic volume is of primary importance, so that the sound has enough space to develop and blend effectively, while minimizing the possibility of hearing damage. For band/orchestra rooms, we recommend a ceiling height in the range of 18-22 feet, and up to 2,500 square feet of floor area. Ensemble size is an important determining factor.

Sound isolation is also vital to effective listening – keeping sound-generating areas buffered from each other and preventing noise from mechanical systems like HVAC from interfering with learning.

Nygren said Brentwood's "bold and correct" band philosophy relies heavily on sectional work, where he's aided by four part-time instructors.

"Students get specialized instruction, and there's little wasted time in rehearsals – it's very effective," he said.

Dedicated sectional rooms make this possible, and Brentwood Academy also features five modular, sound-isolating music practice rooms, including one larger, ensemble-sized room.

Minnigan recommended these modular practice rooms because their sound isolation qualities are guaranteed. These modular practice rooms also offer the flexibility to be reconfigured or relocated later if necessary, either across the hall or across the campus.

"We must design facilities for change," said Minnigan. "I can't tell you how many hard-walled practice rooms I've been in that are now just storage rooms."

2. EFFECTIVE FLOOR PLAN

Making music is a physically demanding activity. The music area requires more square footage, per student, than any other part of the school. Instrumentalists need space for their instruments and room to play them. Choir members need space for vocal exercises and choreography. Specialized furniture, equipment, and supplies also take up space.

Proper planning addresses these needs by incorporating adequate floor space, efficient traffic flow, easy access to related areas, and flexibility for multiple activities. Visits to other facilities can be particularly helpful when developing a facility's floor plan.

"I encourage our clients to open a dialogue with us," explained Minnigan. "Visiting facilities together is very helpful, whether it's the 'perfect' building or not. Sometimes you learn more from someone else's mistakes."

He believes this field research empowers some music educators who are so facility-deprived they might jump at anything as an improvement over their current situation.

These off-site visits also help foster a common vocabulary among members of the team.

"For example, some people may not know the characteristics of a resonant band room until they experience it in person," added Minnigan. "Brentwood Academy has an excellent faculty. Giving them the right tools allows them to teach the students with a greater opportunity for success."

3. SPECIALIZED STORAGE

The storage needs in a music facility vary widely, but generally must accommodate instruments, sheet music, uniforms, robes, and other miscellaneous equipment. For the typical high school, the combined value of this inventory often exceeds $300,000. Protecting this investment requires secure, specialized storage systems, including cabinets, lockers, or mobile racks.

Effective storage solutions dovetail with

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the floor plan, ensuring that convenient locations enable a logical, streamlined flow of students and equipment. Storage space is always at a premium in music facilities, and underestimating storage needs is a common problem.

Prior to the opening of Brentwood's new fine arts facility, the lack of specialized instrument storage cabinets meant students kept their instruments in regular school lockers scattered around school or stacked on the floor of the band room. Neither option was very convenient or secure.

Brentwood's new fine arts facility features a whole wall of instrument storage cabinets located in the hall outside the band room. For sheet music storage, a high-density, pull-out storage system helps organize 30,000 music titles, while using less than half the wall space of traditional filing cabinets.

4. SUITABLE EQUIPMENT

Although most equipment is selected after the blueprints are finalized, it's always wise to look ahead at how the spaces will be outfitted. This is particularly true with technology, which should never be an afterthought.

"In my first meeting with David Minnigan, he asked me about my dream facility," recalled Nygren. "He encouraged me to imagine a building that could accommodate future growth. If our plans had to be scaled back later, at least we'd be scaling back from magnificent – not mediocre."

Nygren believes that dreaming big also helped build enthusiasm for the project's fundraising.

After examining enrollment numbers and projections, Nygren estimated the largest future band would probably be 70 students. The band room was designed and equipped accordingly.

Technology was an important component, with projected media and high-end audio systems designed into every rehearsal space, including an 8-channel mixer, tuner, metronome, and pre-conduit wall interface.

"We can record ourselves and play it back, or listen to recordings of jazz greats or Mahler symphonies," explained Nygren. "We can also project warm-up and rhythm-teaching exercises from DVD, VHS or the Internet."

Nygren's own sweat equity helped make it heavenly. Just before the facility opened, he was disappointed to learn that the AV systems planned for the three sectional rooms had been cut due to budget constraints.

"These systems were part of the dream facility I had told my students about and looked forward to, so I really wanted them," he said.

By volunteering to install the systems himself, Nygren saved significant labor costs, and the school was able to afford very good components.

It's important to consider any purchase, including technology, as a long-term investment. Equipment and furniture that is sturdy, functional, and well-designed enables both students and teachers to better focus on their music, ensuring the maximum results from their efforts.

By addressing key issues of acoustics, floor plan, storage, and equipment, an outstanding facility helps develop and inspire even greater musical achievements and performances in the future. CSP

Jerry Carstensen *is vice president of sales for the Wenger Corporation. To request a copy of Wenger's free Planning Guide for Secondary Music Facilities, visit www.wengercorp.com.*