

## SPECIALTY CONSULTANTS AND BUILDING COSTS

As a specialty consultant in theatre design, architects often tell me that the client won't hire us because "we increase the cost of the project." In a way, this is true. Projects with specialty consultants like theatre consultants and acousticians don't actually cost more because of the consultants, but we inform the team of the true cost of specialty equipment and building elements required for successful projects. A cost estimator may assign a value to theatrical equipment systems with little real-world experience of the costs, and be badly shocked to discover, for instance, that good-quality AV systems for a high school theatre should be properly budgeted at \$250-350K, while their budget line item is only \$60K. This doesn't mean the AV consultant has "made the project more expensive", it means that the architect does not understand the systems needed. They may not understand that "AV" really means at least 5 systems - sound reinforcement (i.e. amplification), playback (creating and distributing sound and effects to the auditorium amplification system), production communication (communication between technical personnel), program monitor (distribution of stage sound and/or video to dressing rooms, box office, house manager and lobby), and assistive listening (providing program sound to headsets for hearing and/or visually-impaired patrons.) That's just audio; I haven't even gotten to the "V" side yet, which often includes projectors and screens for digital video projection, a powered lectern for computer-based presentations (PowerPoint, TED talks) and perhaps rear projection screens and projectors.

This phenomenon seems to be more prevalent in performing arts projects - a science lab project would never move past schematics without experienced consultants on board to inform the team of the scope and cost of specialty systems. Somehow, many architects believe that theatres are self-explanatory and do not require expert assistance, even if they are so naive, as has happened in my experience, that they don't understand that there is space on either side of the stage critical to the function that can't be seen by the audience! One firm drew a trapezoidal stage with full-height walls between the visible stage and what should be wing space and labeled the areas "dressing rooms" and "props." Dancers would run full-tilt into these walls trying to get out of audience view, and scenery could never move at all. Hard to believe, but absolutely true.

Architects may not realize the need for catwalks over the audience for stage lighting - performance must have front light (and side light and back light) in order for performers to appear 3-dimensional and not like kids playing Halloween with flashlights. Catwalks are not inexpensive; they are made of steel and they have guardrails and kickplates and other safety features...and stairs or ladders to get to them....in locations also hidden from the audience. Control rooms must have a view to the stage over the heads of the standing-ovation crowd in front of them, and they must be accessible to persons with disabilities, and they need operable

windows for tech rehearsals and when the sound operator must work from there rather than in the seating area.

I could enumerate much more of the arcane knowledge that specialty consultants bring to projects and explain the costs the go with that knowledge, but the details are not relevant to the theme - specialty consultants may seem to raise the cost of performing arts projects, but that is a byproduct of our expertise and the difference between a mediocre design with inadequate systems and a well-designed and -equipped performing arts venue. Our educational projects, in particular, deserve the best buildings we can produce - experienced professionals can overcome the many obstacles of poor buildings and bad equipment but students cannot, and to expect them to do so belittles their efforts and undermines the value of what they are being taught. My heart sinks whenever I hear, "It's only a high school," which is often paired with the cost accusation that started this article.