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The Top Ten Mistakes in Planning and Designing High School Theatres

By: Bill Conner

Teachers and administrators: Don't let these happen to you

Recently, a question was posed on the Stagecraft Mailing List: Which designer had made theatre peoples' lives harder—Frank Lloyd Wright or George C. Izenour? I believe the best answer is neither. It is the many architects who design middle and high-school theatres with no help or experience. Based on nearly 30 years of theatre consulting, and having been principal theatre consultant on more than 50 high school theatres, I've seen a lot of mistakes—and, I'm sure, I've committed a few. Here are those I see repeated continually.

1. Basing seat count on an all-school assembly or graduation results in the equivalent of a church sized for Easter Sunday. The events mentioned in the previous sentence belong in the gym or field house, not the theatre. The temp-

tation to design for the entire school population results in a space that serves a few events satisfactorily and many events poorly. A quarter-full house is unsupportive of student performers. With a smaller house, you have the benefit of not stretching too little money over too big a space.

2. Sizing the proscenium's opening width for the largest band ever, and the height by some outdated formula related to the roof elevation, will result in a space that's hard to fill. Every foot beyond 40' wide is a step in the wrong direction—and 50' is it. Size the hard proscenium opening for music, at least 25' high, and plan on trimming for a drama opening around 18-20'. (A 50'-high stage, because of building and fire codes, is common today, and dividing that by two and a half or three results in a disastrously squat proscenium.) Avoid wide, short letterbox- or sausage-proportioned prosceniums at all costs. Any proscenium that is near or more than twice as wide as tall is poor design. Masking the width leaves the acoustic reflecting side wall surfaces and lighting position too far away from the center-

line, and undermines the audience's focus on the performer. You can solve this when money is no object, but that's only true for a few high schools nationwide.

3. Like the proscenium, building an audience chamber that is too wide or too low, with seats far away from the stage, is the antithesis of good design. It destroys the ephemeral sense of intimacy that is so important for a performance venue intended to support the work of students. A real professional can connect with the audience while reading the White Pages with his or her back to the audience in a noisy underlit room; student performers cannot. Give them a break; keep the room com-



A 750-seat space with handsomely proportioned proscenium, pit, and lift, and ample front-of-house lighting positions.

pact, and support the audience performer-relationship.

- 4. Land-locking the stage from the exterior, with a narrow passage to the shop or loading dock, will be regretted forever. This rule also applies to the practice of locating the band room a long distance and/or a floor apart from the stage. Getting objects and people in, out, and around efficiently is key to the function and success of a performance room. Loading from the truck dock, you need to fit anything that fits in a trailer; that means anything 8' wide, 10' high, and 21' long. The band director should be able to singlehandedly supervise the moving of band and equipment between the band room and the stage. The choral room shouldn't be much further; it makes a great place for storing the grand piano—much better than on stage.
- 5. There is always a temptation to fill the stage wings with dressing rooms and all manner of other spaces. Don't allow it. High school theatre productions rely on three-dimensional scenery and pieces that move on and offstage. You need the wings to get people and objects on and offstage, and this process involves moving large objects quickly. The wings and fly space allow you to quickly change over from a band concert to a play to a movie. With correctly set-up wings, you will use much less labor, allowing multiple uses of the theatre on one day or night after the other without high overtime or temporary labor.
- 6. Don't allow a shiny blond wood floor installed directly on a concrete slab. Stage floors must take a beating and look good. First, the floor should support heavy point loads, such as orchestra shell towers, vehicles, and all manner of personnel lifts. For most performance spaces, some resiliency is required for dance, actor movement, and even for music. Finishes must be durable to withstand dragging scenery, instruments, and crates. Lots of tape gets stuck to stage floors and rolled over by casters before being pulled up—make sure the finish doesn't peel up with the tape. The administration may like the look of maple with a clear finish,

designers play games, proposing budgets that are far too low, with no basis in reality. Figure out what you need, and make sure there is a clear understanding of both equipment and installation costs. Don't underestimate the resources available to do it right.



Under construction: At this point, most of the budget is committed and it's too late for significant changes.

but most working stages do better with black.

- 7. Efficiently functioning front-of-house lighting catwalks with safe, easy access are fundamental. Contrary to what you may think or be told, catwalks are not that expensive to build. The detailed design required to hang and service theatrical lighting and meet suitable safety requirements would need a long article in itself, so find an example that works, or find someone to help. Two catwalks are usually required. More is better, especially if you can re-lamp all the house lights by walking to them rather than climbing a ladder over fixed seats on a sloped floor. Hoists or dead-hung lighting positions over the audience floor are almost never satisfactory in a working theatre.
- 8. Constructing a theatre without proper building provisions is not good stewardship; neither is installing poorquality or under-designed systems. Too many administrators and designers play games, proposing budgets that are far too low, with no basis in reality. Figure out what you need, and make sure there is a clear understanding of



This is a modified gridiron with careful design and coordination of the catwalks to permit maximum fly space and some effects and spot lines in a 50'-high stage. Electrics and the orchestra shell fly in the space under the catwalks.

both equipment and installation costs. Don't underestimate the resources available to do it right. For most projects on which I consult, more funds are invested in the theatre and its systems and equipment than originally anticipated, because I present a clear, strong case for the wisdom of the investment. Put in a cheap system now, and it will be replaced far sooner than its expected life, at a total cost much greater than that of doing it right the first time. Don't live by the mantra of "there's never enough money to do it right, but always enough to do it over."

9. Don't rely on an architect who has never designed a theatre, or who hasn't done so in a long time. You need performance-space expertise at the earliest planning stages. Too many high school theatres start with inaccurate and uninformed notions, resulting in many of the ills outlined above, as well as basic construction systems and materials that aren't suitable for theatres. Insist on expertise. Don't rely on vendors and sales reps for objective advice. Exercise due diligence in research; make sure the design team has an excellent track record on this type of construction.

10. Don't ignore the users—the drama teacher, band director, dance instructor, and so on. They have a lot to offer in terms of day-to-day tasks and making those days longer and harder is poor planning. Teachers should have as much time as possible to teach, and should not have to move equipment around the stage or between rooms.



This 750-seat high school theatre has three lighting catwalks in the house, along with a suitably located followspot booth, and lighting positions on the balcony and side gallery fronts.

Remember: If you're planning a building, start early. It may seem like all the theatre goodies come at the end, but plan for what you need in advance.

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