FEATURE

By David Kalina

Realize the Full Potential of your New Facility

THE LAST IN A SERIES OF ARTICLES ON HOW TO **IMPROVE ENVIRONMENTS FOR LEARNING**.

WHAT A GREAT DAY. WARM AUGUST breezes keep the crowd cool while speeches are made and ribbons are cut. After five long years, the new building is finished and ready for students.

If you have ever gone through the building process we have been writing about this year, you will know what a relief a day like the one described above is. As stated, this process could take up to five years—five of the toughest and most satisfying years of your career. Going through this process you learn a lot about your community, your staff, and most of all, about yourself. You build solid relationships with members of the design and construction teams. You reconnect with the joy of becoming a student again as you learn a whole new language of planning, design and construction. But even when the building project is completed, there is still work to be done.

Now you must take full advantage of the capabilities that you've created. This entails readdressing academic delivery and developing new approaches to operating the new facility.

Preparing for a "New Age" in Academic Delivery

If you have followed all the steps we have outlined this year, you have built a new facility around the concept of learning—a concept that enables the instructor to:

- Step to the back of the room as a facilitator, coach and mentor;
- Work with multiple technology platforms; and
- Continually customize the learning experience for each student.

But does your staff know how to do this? Do they realize the capabilities your new facilities provide? All but a few may be intimidated by the new facility and any new technology. And, they may be disturbed by the prospect of changing how they teach.

The key to really getting staff on board is to locate your group of early adopters—those individuals who are willing and eager to try anything new. Get these people together, no matter how diverse their program areas, and cultivate, incubate and promote their experimentation. They will be your pioneers who will open up the new territories of learning. They will encourage the bulk of the remaining teachers to embrace the new facilities and begin to use the new technology. They will become the group to teach the teachers.

If possible, send these people to conferences; even challenge them to present at conferences on new academic delivery based on technology and facility enhancements. As their stars rise in your institution, and as their students start showing measurable improvements over their contemporaries, others will start to migrate toward the light.

Ideally, this process of getting teachers on board will have occurred before you started building your new facility. This can be done by connecting with another school that recently went through this process, establishing reading lists and discussion groups, setting up sample new classrooms, and focusing your inservice training around the new facilities and technology. The intent is to build a culture within your organization that is excited and prepared to take full advantage of a new academic delivery model.

Operating and Maintaining the New Facility

Think about building operations for a mo-

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ment. Depending on the scope of your project, your head of maintenance could go from just keeping a facility open and running to in charge of millions of dollars worth of systems and technology. Do he and his staff really have the training necessary to efficiently and effectively operate this tremendously complex and sophisticated machine? And what is it going to take to maintain it?

Keep Up with the Upkeep

Once the new facilities have been completed they can very easily fall into disrepair without proper maintenance. A plan should be developed to ensure that the facility will remain in working order.

On the facilities side, there are specific things that can be done to prepare your staff to effectively operate and maintain your new systems.

Commissioning is a relatively new service we see surfacing in the industry in response to the increasing complexity of building systems. Commissioning is a service that is added to the completion of construction where a consultant—either a design professional or a mechanical service company—reviews the design intent and assists in certifying the proper operation of systems as the facility is turned over to the owner. In addition, more in-depth training can be added for your staff that goes beyond the basic operational training to give them a better understanding of the operating philosophy of the systems and building code implications. In the old days, the architect and engineering consultants would routinely provide this service—but with the increasing complexity of building systems and regulatory requirements, combined with the increased pressure for lower design fees, this service has been forced out of the basic design services agreement.

In addition to making sure the facility is operating properly at the start, there is the maintenance consideration of operating efficiency over time. Under basic services, the architect typically delivers a redlined, marked-up set of as-constructed drawings, most often produced by the building contractors. The architect also collects the operations and maintenance (O&M) manuals for the systems and components installed in the facility and gives them to the owner. You will have stacks of drawings and large boxes of manuals with which your maintenance staff is expected to operate and maintain this multimillion dollar taxpayer investment.

Many districts have realized the value of investing in the preparation of O&M plans and computerized maintenance management systems (CMMS). The plan will:

- Assess your district's capacity to perform maintenance;
- Suggest staffing changes and training; and
- Identify maintenance activities that should be outsourced.

A CMMS will print work orders for regularly scheduled maintenance tasks as well as track all O&M activities and costs.

Many design firms, operating firms and specialty companies can help you select and populate a CMMS. CMMS systems can range from inexpensive, Internet-based products with annual fees of less than $2,000 to complex, multidisciplined software packages costing $100,000 or more that can manage large, multiple-location campuses, including space planning features, inventory, and fleet maintenance functions. Talk with a consultant or multiple vendors of these packages to get an idea of how complex (and expensive) of a package is required to meet your needs. Most importantly, don't overlook the complexity of operating the system and the related training requirements necessary to make it work effectively.

For a nominal cost, you can request that those redlined markups on the construction documents be applied to the architect's original CADD files. This will generate a relatively accurate set of as-built plans for your facility. Have these printed as reproducible mylars so that you can run copies of drawings as needed in the future. Plan to invest in a set of large-format flat files to store the drawings or they'll become damaged or lost. It is also prudent to have a compatible CADD package loaded on your maintenance system's computer, and make certain your maintenance staff gets sufficient training so they can read the electronic files.

Following these tips and suggestions, you should have a great building and be prepared to manage and operate it for the enjoyment of the students and teachers.

This concludes the article series on planning, design and construction of facilities. It's been a pleasure to write and I hope the series will serve as a reference as you embark upon development and improvement projects in your district. If you ever have a question or comment related to a facilities topic, drop me an e-mail and I'll try to assist. Good luck with your educational program and your facilities—have some fun and learn something new! T