

Renovate!



Existing facilities can support innovative learning

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It's truly an interesting time for the leadership of schools around the world, and certainly in Wisconsin. On one hand, we have a significant expansion in options and opportunities available to students and the emergence of fresh approaches to learning based on technology, new insights regarding the human brain, and a more collaborative approach to learning. On the other hand, we have perhaps the most significant economic challenges of our lifetimes.

While some might think the only way to adequately support 21st century learning concepts is to build a new school, this approach is impractical: it is unrealistic to say that all schools are obsolete. However, by making judicious decisions, existing facilities can be adapted to offer a more student-centered learning environment.

With any school renovation, one of the primary goals should be to provide flexibility and more options for the learners, both now and to meet the ever-evolving educational needs. Increasingly, educators are looking to adapt spaces to new and better forms of educational delivery.

■ Flexibility with Furnishings

Flexibility is the key that enables teachers to create different activity areas, form groups of varied sizes, or provide a forum for shared learning among groups.

Triangular or isosceles trapezoid shaped desks can provide a myriad of

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options for helping groups of all sizes collaborate, from clusters of small groups to a circle for large group discussions. The new Common Core State Standards put great emphasis on increased communication skills and teamwork — replacing traditional rectangular desks with more flexible shapes and detached chairs will facilitate this activity.

Today's casework (cabinetry) must match the more active and interactive style of our students' learning, which is

increasingly project-based. While storage options on the wall or integrated into the workspaces may work for many purposes, for others, providing flexible options that can adapt to the variety of classes and needs, now and into the future, may be vital. Mobile and flexible casework allows classrooms to be configured and re-configured for successful pedagogy.

If the pedagogy cannot adequately be supported simply by providing flexible furniture and casework, walls may need to be modified to create larger classrooms, meeting rooms for group work, or space for project storage. In this case, it is important that the educational facility designer understands the intended use but also provides flexibility to accommodate future changes in pedagogy.

■ Preparing for Tomorrow

Our work with Nekoosa High School provides a perfect example of transforming space to help students be college and career ready. The Nekoosa School District selected our firm to evaluate and assess the district's buildings, expedite the process with their facility study committee,



and guide the district and committee through the referendum process.

Among several key components of the final project, we remodeled the traditional metal shop into a clean technology lab. For a while, eliminating the traditional technical education laboratories became a trend but, as highly skilled manufacturing jobs gradually return to Wisconsin, there is an increasing demand for them to be revamped and equipped with state-of-the-art machinery and equipment.



Every decision should take into consideration how it will create a better, more versatile learning environment, while recognizing all of the ramifications of that choice. While opening up more space and providing a more collaborative environment is great, it may make it noisier.

■ Small Touches Go a Long Way

The potentially distracting chatter of a more collaborative environment can be greatly reduced by choosing high NRC (noise reduction coefficient) ceiling tiles. These acoustic ceiling tiles can readily be installed in existing ceiling grids. Carpeted floors will also absorb sound.

When freshening up the paint on walls, choosing light paint colors will make natural and artificial lighting more effective. A Light Reflectance Value (LRV) of around 80 percent will reduce the need for lighting without making the room too bright and sterile. The LRV data can usually be found at the back of a paint fan deck or on the manufacturer's website.

With all purchases related to your renovation—such as adhesives, paints, flooring systems, carpeting,

and furniture — choose low- or no-VOC (volatile organic compounds) products whenever possible. This will contribute to improved indoor air quality, which reduces symptoms for ailments such as allergies and asthma, resulting in fewer missed days for teachers, staff and students.

■ Windows and Lights

Many of today's classrooms have recessed fluorescent lights, which often produce unwanted glare. Consider installing direct/indirect fixtures where at least half of the light goes up, bouncing off the ceiling and causing it to be a source of light. This creates much less glare, requires fewer fixtures, and saves energy. Additionally, while we've grown accustomed to the benefits of motion sensors and timers to reduce lights being on unnecessarily, daylight sensors are available that measure when there is adequate daylight in the room and turn fixtures on or off as appropriate.

Today's menu of high-performance windows provides exceptional natural light while also improving thermal performance. In addition, they can replace gloomy windows with abundant natural light without creating excessive glare. The slight increase in heat loss/gain is greatly offset by the reduced use of artificial lighting. Another viable option, translucent wall panels, offers significant glare-proof light while protecting the temperature of the classroom. Even then, some windows should still be provided to maintain a connection to the outdoors.

Existing facilities need not be an obstacle to enhancing learning, preparing for the Common Core State Standards, being college and career ready, and competing globally. Simple renovations can play a significant role in setting the stage for the innovative learning that will continue to evolve and make a positive impact in the education of Wisconsin's students. ■

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