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COMMENTARY

Don't Just Rebuild Schools—Reinvent Them

By Prakash Nair

The [American Recovery and Reinvestment Act](#)  [Back to Story](#)

could be a boon to educational facilities, with its provisions to help reduce the interest on school construction and renovation bonds, and its permission for state fiscal-stabilization money to go for school modernization, repairs, and, as outlined in U.S. Education Department guidance, new construction. As communities gear up for the chance to utilize this much-needed help, let us remember that what may be great for bridges and highways may be exactly the wrong thing for schools.

The deep decay of our school systems is best represented not by falling plaster and leaking roofs, but by something much more fundamental—the philosophy behind the design of more than 99 percent of our school buildings. If we simply repair broken structures, we will ignore the real problems with American education while giving renewed life to a model of teaching and learning that has been obsolete since the end of the industrial era.

Let's start with the fundamental building block of almost every single school in this country: the classroom. Who seriously believes that locking 25 students in a small room with one adult for several hours each day is the best way for them to be "educated"? In the 21st century, education is about project-based learning, connections with peers around the world, service learning, independent research, design and creativity, and, more than anything else, critical thinking and challenges to old assumptions.

So, what can we do to begin changing our current practices and modernize schooling? It's really quite simple. We should attach strict conditions to any support for facilities projects under the recently enacted federal stimulus package. Those conditions should send a clear message to each community that facilities spending be leveraged to change the educational paradigm from the largely teacher-centered model now practiced everywhere to a 21st-century, student-centered approach.

Here are some effective ways to assess whether a school community is deserving of support for its plans. Let's ask whether those plans include real efforts to do the following:

Create personalized learning communities. Will the money be used to break down the anonymity of the larger school by creating small, personalized learning communities of between 100 and 125 students and from four to six teachers? These communities would replace classrooms with multifaceted learning studios and common areas for various collaborative and hands-on activities.

The idea is for each student to be known, respected, and educated at a very personal level. Positive relationships with adult mentors and older peers are keys to academic success and critical to the development of good social and emotional skills. This can only happen if students belong to a community that is small enough not to exceed its members' ability as human beings to relate on a personal level with other human beings.

Make technology ubiquitous. Will the plans enable school buildings to finally enter the 21st century in the arena of technological sophistication? Support should be given to schools that are committed to redressing the imbalance between students' technology readiness and the schools' willingness to let them use it for learning at all levels.

Students should have anytime, anywhere access to the Internet via high-speed wireless laptop computers, smartphones, and hand-held computing devices. Experts from all over the world should be able to pop in on demand via distance-learning programs accommodated by two-way videoconferencing facilities. Schools should be the coolest places in the community when it comes to high-end equipment and for testing new and experimental software.

Connect with the outdoors for health, fitness, and improved academics. Will schools start paying attention to the mountain of data that directly correlates human health and well-being with the amount of time spent communing with nature and the outdoors? Instead of focusing only on large, expensive sports facilities, schools should create indoor-outdoor fitness centers that all students can benefit from through dance, yoga, work in kitchen gardens, and exploration of nature trails.

Focus on student comfort. Do schools recognize the common myth that spending money to make students comfortable is wasteful and represents an unnecessary level of pampering that might actually be bad for them? Nothing could be further from the truth. New research suggests that students need to be comfortable (just like adults) to learn. That includes ergonomic seating and other furnishings, ample daylight, lots of fresh air, and well-designed artificial lighting and acoustics. Facilities that are created with respect for students are, in turn, respected by students.

Celebrate art, music, and performance. As Leonardo da Vinci proved, there is no inherent conflict between the sciences and the arts, but this understanding has been slow to seep into the educational mind-set. In fact, the sciences and the arts are much more closely aligned in the 21st century than at any other time in human history. In this creative age, artistic enterprises that have existed on the fringes of our education system need to assume their rightful place as the centerpiece of each student's educational experience. Schools should be encouraged to direct their facilities dollars toward changes that help improve their offerings in art, music, and performance.

Embed sustainability as a core principle of facilities spending—and the curriculum. To what extent will educators take the notion of sustainability seriously by going beyond just the selection of "green" materials and technologies in designing or renovating schools? They should heed the words of the renowned [environmental educator David W. Orr](#), who recommends that schools "begin a process of finding ways to shift the buying power of this institution to support better alternatives that do less environmental damage, lower carbon dioxide emissions, reduce use of toxic substances, promote energy efficiency and the use of solar energy, help to build a sustainable regional economy, cut long-term costs, and provide an example to other institutions." Moreover, he adds, "The results of these studies should be woven into the curriculum as interdisciplinary courses, seminars, lectures, and research."

It is not hard to imagine—once the school building itself is "greener"—how much more

engaging such a curriculum would be, and how students learning in this manner would be more likely to grow up as responsible stewards of our fragile ecosystem.

Treat teachers like professionals. Are schools proposing to allocate facilities funds toward amenities for teachers with the knowledge that it will enhance their ability to help students become better learners? We know that happy employees are productive employees and result in happy customers. And so, it is time to stop treating teachers like second-class citizens even as we place greater demands on them to educate our children. Teachers need quiet places to plan lessons and work one-on-one with students, areas where they can collaborate in interdisciplinary teams with peers, and access to the latest technology.

Engage parents and the community. Do schools plan to fully tap the wealth of community resources that are available to benefit their bottom line of delivering a sound education? Facilities aid can be directed toward changing the intimidating, institutional design of most school buildings to one that is cheerful, colorful, and welcoming. By creating well-outfitted centers within schools that are available to parents and the community, we can better enable these groups to participate and contribute positively toward the education of students.

Rather than simply be invested in short-term fixes, any new support for school facilities that districts receive should go to develop tomorrow's facilities as infrastructure *responses* to an educational philosophy—one whose goal is not to control students, but to empower them to take charge of their own learning.

Prakash Nair is a futurist, planner, and architect with Fielding Nair International, an architectural firm specializing in school design. He can be reached by e-mail at prakash@fieldingnair.com

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