

# Old School?

## GIVING TEACHERS A VOICE IN DESIGNING THE LEARNING ENVIRONMENTS OF THE 21ST CENTURY



BY **LEAH SHAFER**, ON MAY 24, 2016 4:46 PM

When it's time to renovate an old school or build a new one, many principals and teachers have a simple wish list. They “just want buildings that work,” says **David Stephen**, educator, architect, and founder of **New Vista Designs for Learning**. They’re thinking about windows that are operable, good air handling systems, enough classrooms to fit everyone in — the building blocks of a basic, functional school.

But learning has changed, says Stephen, and it’s time for educators to seize the chance “to think beyond the traditional school blocks that they’re accustomed to.” So how can educators help design 21st-century learning spaces?

Usable Knowledge asked Stephen to share some advice. We also asked **Daniel Wilson**, the educational chair at Harvard's **Learning Environments for Tomorrow Institute**, and Grace O'Shea, an eighth-grade teacher in New York City and a member of **room2learn** at the **Harvard Innovation Lab**, to share their thoughts.

## AN ARCHITECT'S VISION

Changes in technology and in teaching methods are making it possible to think of school buildings in far more dynamic terms, says Stephen. Schools no longer have to be "collections of classrooms, administrative spaces, and a gym, auditorium, and cafeteria. They can be high-performance work environments that promote the 21st-century soft skills of critical thinking, creativity, collaboration, and communication.

"Schools are becoming interconnected ecosystems — less compartmentalized and departmentalized. Classrooms and the spaces between them, as well as shared amenities such as the cafeterias and media labs, are becoming more flexible and agile."

What does this look like in practice? A focus on project-based learning might mean that workspaces are more flexible — desks can move and stack easily against the walls or connect to form large, flat working surfaces. An emphasis on high-quality learning might mean that classrooms are more physically transparent, so that passersby can see students working in a robotics lab or an art studio. A fully wired school might mean that learning can take place anywhere, so hallways become extended-learning areas.

## TEACHERS AS DESIGNERS

But an architect designing a new school can't construct these changes on his own. To work in a space that supports their goals and sense of innovation, educators need to be prepared to describe precisely what kind of learning environment they want to create. Wilson, the Director of **Project Zero** at the Harvard Graduate School of Education, thinks the conversation between educators and architects should cover four broad points:

- 1 **Visions and goals.** Educators should be ready to share a broad vision of the school's mission and what teachers are trying to achieve, such as "We want students to be global citizens" or "We want students to be collaborators and creators."
- 2 **Illustrations of those goals.** Once educators have articulated their general goals, they need to share examples of what success might look like in daily practice. If a principal wants students actively engaged in current events, then the school might need gathering spaces where students can watch and discuss the news during free periods. If teachers want students regularly working in groups, then classrooms might need easily maneuverable desks.
- 3 **Current obstacles.** Educators can use this chance to consider some of the biggest challenges they face in their current setting. Are they lacking storage for project materials? Are they missing common spaces for bringing together multiple classes of students?
- 4 **Supporting teacher learning.** A new school is an opportunity for teachers to consider the ways they learn and grow at work. They should think about how they collaborate best with colleagues or generate lesson plans, and recognize that a new building is a chance to help them on their path of professional development.

## REBOOTING YOUR CLASSROOM

What if you're a teacher who wants to transform her classroom, but a total-school redesign doesn't look feasible? The room2learn team, comprising students from the [Harvard Graduate School of Education](#), [Harvard Graduate School of Design](#), and the [Harvard Business School](#), is creating an online platform for teachers and designers to share resources and ideas for transforming classrooms. (The site hasn't publicly launched, but you can learn more [here](#).) O'Shea shares some of her favorite hacks to optimize space and augment learning:

- 1 **Remove the desks.** If you want students to be totally absorbed in a specific object, such as a text, drawing, or model, try pushing the desks against the wall and arranging the chairs in a circle in the middle of the room.
- 2 **Repurpose unused furniture.** If there are empty bookshelves against the walls in your classroom, try making them into workspaces. Remove the middle shelves, and then have students sit on stools and use the top of the bookshelves as a "bar" to work on.
- 3 **Change writing surfaces.** "It's amazing how you can get even the most reluctant writer to enjoy writing when you allow students to write on tables or walls, which you can do by adding [idea paint](#)," says O'Shea.
- 4 **Use Velcro.** If you apply Velcro to pencil boxes or supply boxes, you can then stick them on the walls anywhere the room. When supplies are visible and accessible for students, there are more opportunities for them to engage in self-directed learning.

How do you know if your space needs a reboot? Stephen, Wilson, and O'Shea say that students themselves will provide a hint. Schools and classrooms are meant to be *their* spaces. If learning is stagnant, if the arrangement of objects or the layout of the classroom is hindering engagement, it's time to consider a change.