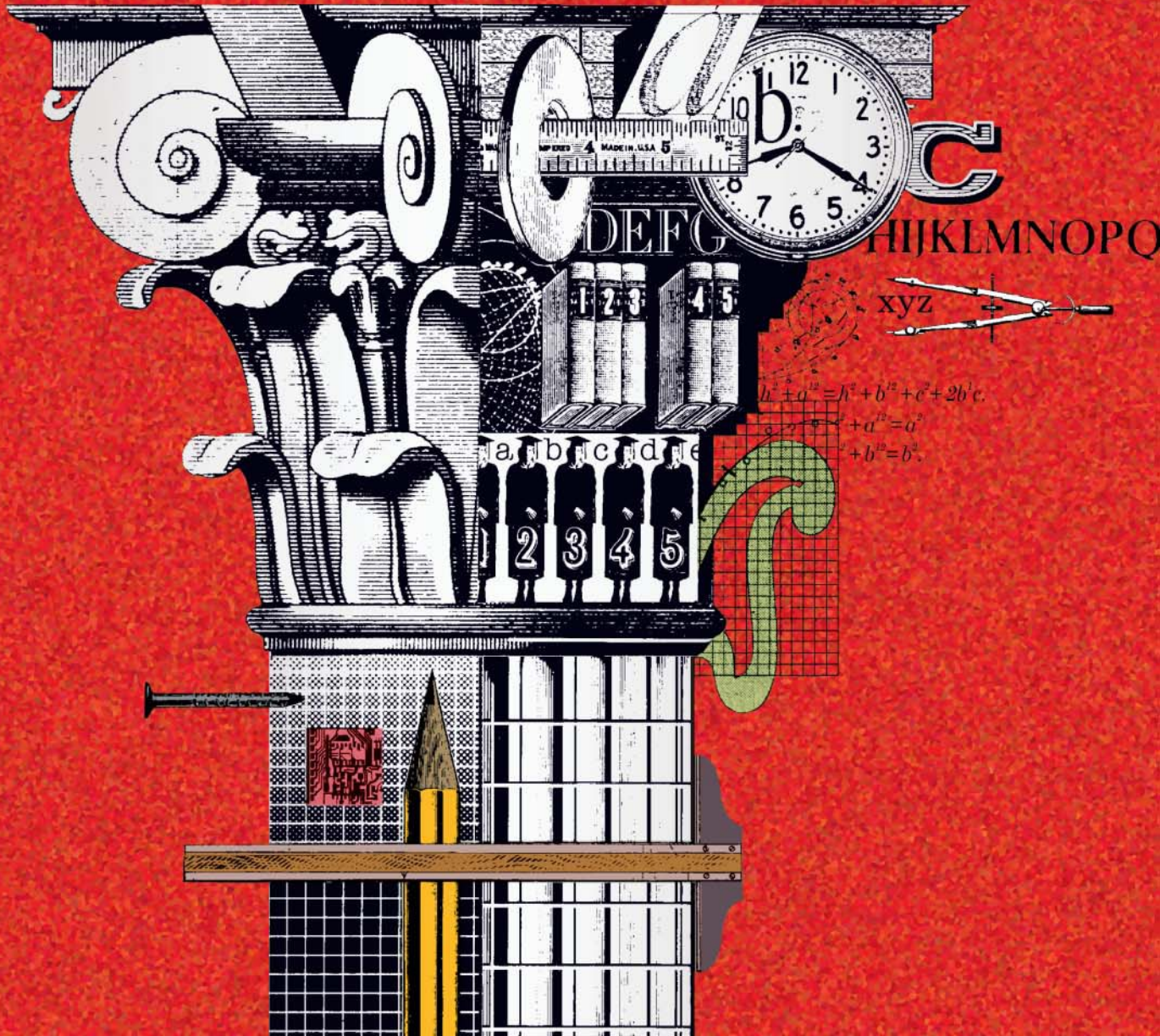


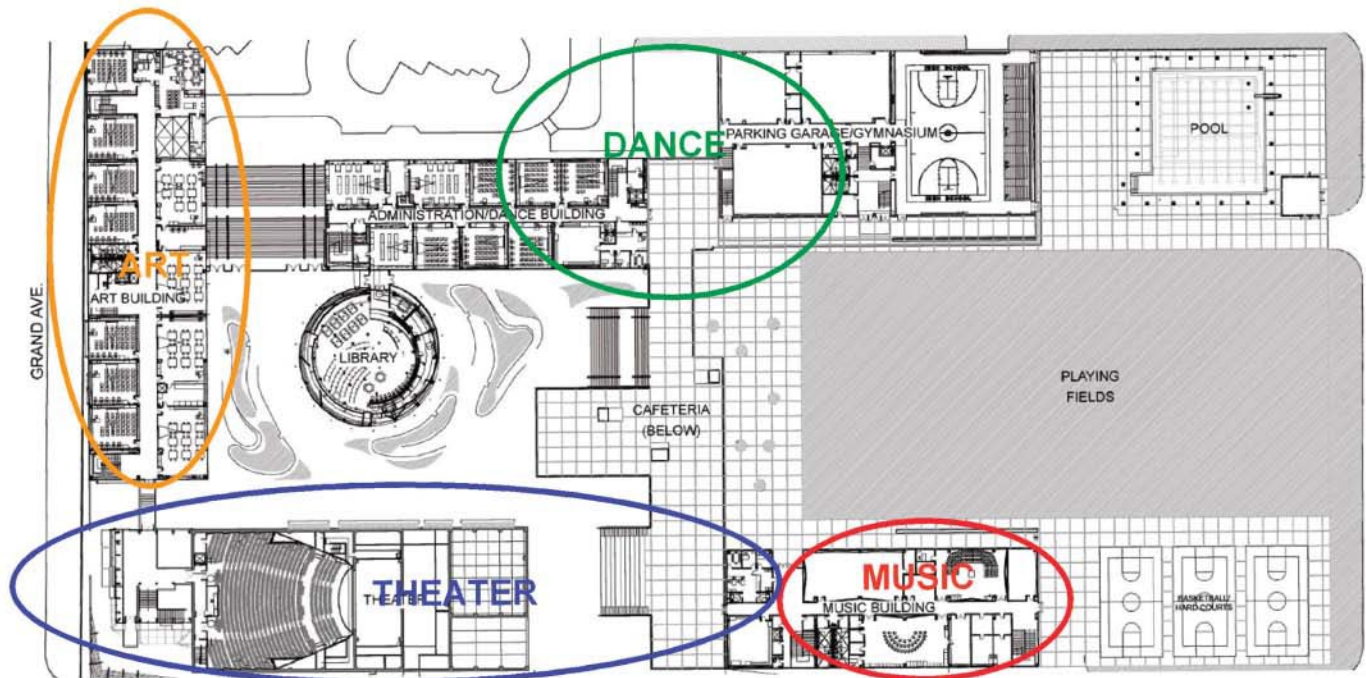
LEARNING BY DESIGN™

*A School and University Leader's Annual
Guide to Architectural Services*



An Architectural Learning Revolution

Designs support small learning communities and enhanced learning



LAUSD Central Los Angeles Area High School No. 9 will feature four small learning communities dedicated to music, dance, theater, and art, as shown in this site plan for the school.

By Glenn Massengale, Ph.D.

An architectural revolution is taking place in school districts nationwide. The purpose: to positively affect students' academic performance. School districts are following suit. Instead of building mammoth-sized campuses designed to accommodate thousands of students, districts are increasingly building smaller campuses and redesigning existing facilities into small learning communities (SLCs).

The thinking used to be that bigger was better, but that's not necessarily the case anymore. Indeed, while school districts across the country have spent more than 40 years making schools as large as possible, thinking that the sheer size would give facilities a longer shelf life, a growing body of research indicates that students actually perform better in smaller learning environments.

Research suggests it is best to design smaller schools, ideally with no more than 400 students, and to break up existing schools into SLCs or groupings where teachers and students can more closely interact with one another, both socially and academically.

Los Angeles Unified School District (LAUSD) is one of many

school districts across the country that is building new schools using the "smaller is better" approach. Two of LAUSD's newest schools, in fact, are typical of the SLCs that many other school districts are trying to create.

SLC case in point

LAUSD South Los Angeles Area New High School No. 3, slated to open in 2009, will provide 144,376 square feet of space for 1,215 students. While the numbers seem big, the campus will actually be divided into three SLCs of roughly 400 students each. The three communities will focus on different subject areas, including art, science, and technology.

"Each community will have its own satellite administration area and will act as a separate school within itself," says Chris Lawrence, senior project manager for HMC Architects, the firm working with LAUSD. "The athletic facilities, library, cafeteria, and multipurpose rooms are shared facilities. Each community will also feature a central administration area."

LAUSD Central Los Angeles Area High School No. 9 is being designed as a visual and performing arts school. Scheduled for completion in 2008, the 10-acre campus will house 1,584



An exterior view of LAUSD South Los Angeles Area New High School No. 3—slated to open in 2009—the school will feature three small learning communities focusing on art, science, and technology.

students who will be divided into four separate academies focusing on music, dance, theater, and art.

The campus will provide specialized buildings for each artistic discipline, including dance studios and associated changing rooms, indoor and outdoor studios for visual arts, sound-proof rooms for the music academy, and a special “black box” theater for performing arts students, who will have the ability to reconfigure the theater stage and seating arrangements based on specific performance needs. Each academy also will have

its own localized administration area, while all four academies will share the cafeteria, library, gymnasium, and athletic facilities, including a swimming pool. There will also be a main administration building.

Configuring campuses this way is indeed revolutionary, considering how educational facilities have been built during the past half century. But designing the physical structures to house small learning communities is the easy part. The bigger challenge, according to designers and LAUSD officials, is convincing

A growing body of research indicates that students actually perform better in smaller learning environments.



An exterior view of LAUSD Central Los Angeles Area High School No. 9, scheduled for completion in 2008.

teachers and administrators to embrace the new approaches to teaching that make SLCs successful.

Design as a teaching tool

Education facilities designed as SLCs introduce a significant paradigm shift in the typical teaching experience. SLCs are a departure from the traditional ways in which teachers interact with each other and their students. For example, in a typical high school, the teachers in the math department interact almost exclusively with each other and recognize their primary responsibility as simply delivering the best math instruction they can provide.

The SLC approach encourages collaboration across disciplines. For example, math teachers who once collaborated exclusively with each other now team up with English, science, and social studies teachers and are assigned to specific groups of students. With this approach, teachers from various disciplines collaborate to help their students academically across the board, regardless of the students' age or level of preparation.

A 2000 study by RAND found that states with the lowest student-teacher ratio in the early grades had the highest scores on National Assessment of Educational Progress (NAEP) tests. The study was based on the performance of 2,500 students in 44 states using NAEP test data from 1990, 1992, 1994, and 1996.

Similarly, the American Youth Policy Forum concluded in 2000 that smaller schools prepare students for college as well as or better than larger schools on college-related variables, such as entrance examination scores, acceptance rates, attendance, grade point average, and completion.

Smaller schools also help close the achievement gap between students from higher-income families (who are mostly white and Asian-American) and students from lower-income families (mostly African-American and Hispanic-American) according to a 1998 report by Michael Klonsky, director of the Small Schools Workshop at the University of Illinois at Chicago.

Of course, student academic performance is influenced by far more than architectural designs. "Just changing the architectural arrangements in a school doesn't mean it's effective," says

Raymond Pecheone, co-executive director of the School Redesign Network at Stanford (Calif.) University, whose mission is to support the redesign of large high schools into SLCs. "But if we focus on the teaching and learning that support small learning communities, in conjunction with architectural designs that support collaboration and student achievement, then we have created a powerful environment for learning."

Creating the SLC environment

However, change comes slowly. In fact, Larry Tash, an administrator in LAUSD's Office of School Redesign, acknowledges that the district is "all over the place" in terms of adopting the SLC approach. "We have schools that have already broken their schools down into small learning communities and others that are at the very beginning stages of having conversations with their faculty."

"The real work is about people," he continues. "What I have learned is that every little change is a giant step. Every little step has consequences and push back. So the work is sometimes quite messy, and frankly, it's not easy."

Overall, Tash believes SLCs will serve as a powerful tool in helping the district improve students' test scores. "If we keep doing things the same way, we're going to continue getting the same results," he says. "We simply must improve our results by changing our approach and attitude."

Educators themselves have to take the first steps. Simply changing the physical layout of a school cannot impose SLCs. "Educators really must define what they want before the facilities staff and architects can design buildings for them," Tash says, adding that the pace of reform ultimately depends on teachers and administrators. "It isn't that schools are moving slowly. It is more about getting people who are reluctant to change to change." ■

Glenn Massengale, Ph.D., a former school district superintendent, currently serves as the K-12 practice leader for Ontario, Calif.-based HMC Architects. He can be reached at gmassengale@hmcarchitects.com.