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## Diversity in Design: The Diversity Pipeline



CHAD sophomore, junior, and senior students (from left to right): Lauren Pinkney, William Bond, Edward Portley III, Yunas Hassani, Annie Wong, Malcolm Gary, Matthew Liggeons-Jones, Janelle Johnson.

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James Murdock

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Shortly after the 9:30 a.m. bell sounds, the 24 students in Michael Reingold's Drawing Foundations class begin sketching a classmate who has gamely agreed to model for them, an off-white sheet draped over her blue top and khaki pants. The week's lesson is on gesture, so Reingold encourages pupils to make as few pencil lines as possible before using charcoal to block out shape and shadow. It's a commonplace assignment in an introductory college art studio — except that these students are 14 and 15 years old, freshmen at the Charter High School of Architecture and Design (CHAD) in Philadelphia.

It was in Reingold's class that Ryan Brown had an epiphany about conveying motion with lines. "The opening of a line has to be toward the direction of the motion," Brown remembers. "I got mad at myself when I realized it was that easy." On this morning in late February, Brown, now a senior, is taking several visitors around CHAD. He points with pride at a wall of college acceptance letters. "This is my Penn State letter. There's Hampton University. And there's California College of the Arts," he says, pausing to exchange high-fives with classmate Chanelle Gilbert, who also has a letter from CCA.

This moment almost didn't happen. Brown nearly dropped out at the end of his junior year, when his mother was laid off and he contemplated getting a full-time job. Some advice from Marshall Purnell, FAIA, who met Brown that summer during Purnell's term as president of the American Institute of Architects, helped keep him in school. "You have to work hard, be persistent, and fight for what you want," says Brown, who, like Purnell, is African-American. "It takes a lot of work to get where these people are. I'm ready to be there."

Brown represents the face of architecture in about a decade — a future that could be more diverse thanks to CHAD and a half-dozen other design focused high schools nationwide, which serve mainly African-American and Latino populations. Many observers praise them for fueling a "pipeline" of underrepresented groups that will eventually improve the profession's chronic lack of diversity. Studies also suggest that these schools, along with design-oriented mentorship programs, boost students' proficiency in math

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and science and reduce dropout rates. Yet despite such successes, it's too early to judge their long-term effectiveness at broadening architecture's reach.

Indeed, at less than 1.7 percent, the proportion of licensed African-American architects has barely budged since National Urban League president Whitney Young famously called attention to the problem at the AIA's National Convention in 1968. Despite some gains, Latinos, Asians, and Native Americans are also scarce. Architecture was hardly remarkable four decades ago, but other professions have since tackled the problem with better success.

Many observers think that architecture's problem is one of visibility. CHAD, which marks its 10th anniversary this fall, has built a reputation for opening young people's eyes to new career possibilities. "I always liked to draw," Ryan Brown says, "but before I came to CHAD, I had no idea about architecture." Chanelle Gilbert has a similar story. "When I was little, I used to change my room around a lot and thought I wanted to be an interior decorator," she recalls. "Here, I was told I could design the entire house."

Eighty-five percent of CHAD's student body are African-American. The school offers open enrollment based on a lottery system, and as a result, the demographics of its students resemble the entire city. More than 90 percent qualify for free lunches. Students at the three-year-old Priestley School of Architecture and Construction, in New Orleans, fit a similar socioeconomic profile — as do those at the Phelps Architecture Construction Engineering High School in Washington, D.C., although this new charter school requires admissions testing.

These schools represent the diversity pipeline's intake valve. CHAD's founders explicitly sought to "develop more African-American architects," says head of school Peter Kountz. They also aspired to a broader goal of using education to lift kids out of economic and academic poverty. "We're not interested in becoming a middle-class high school, and that's important for anyone who seeks to understand us," Kountz explains. "Our kids are very parochial, just as a lot of suburban kids are. We help them to see a larger, more meaningful and complicated world."

In that vein, many of these schools draw a distinction between design and the core academic curriculum. "Students can't go from here to a school like NYU, Carnegie Mellon, or Pratt unless they're academically sound," says Stacey Mancuso, principal of the Design and Architecture Senior High School (DASH), in Miami, Florida. Celebrating its 19th anniversary this year, DASH — where 53 percent of the student body is Hispanic and 12 percent black — ranks as one of the oldest design-oriented high schools nationwide. It also boasts some of the highest test scores. In 2007, 96 percent of DASH students scored proficient or above on math exams, compared to just 57 percent for the Miami-Dade District and 65 percent statewide. Moreover, 100 percent of DASH's class of 2008 graduated, and 99 percent went on to study in college.

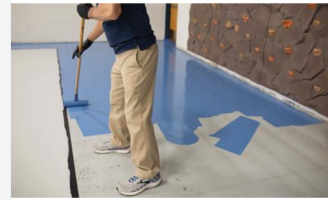
CHAD's administrators point to some equally impressive numbers: Ninety-five percent of students who start CHAD in freshman year will graduate four years later, compared to approximately 50 percent in Philadelphia's wider public school system. Overall, the city dropout rate averages 10 percent a year, yet at CHAD it is only 1 percent. And more than two thirds of the school's 2007 and 2008 graduates are enrolled in four-year colleges. "The question students used to ask each other was, 'Are you going to college?' Now, it's, 'Where?'" says Miguel Vazquez, CHAD's director of college placement.

When it comes to CHAD students' scores on standardized tests, though, the success story grows murkier. The school has yet to achieve Adequate Yearly Progress, a key assessment created by the No Child Left Behind Act. "That means we're not fully doing our job," Kountz admits. But he adds that proficiency tests are a flawed gauge of true progress. "We get kids coming into ninth grade who read at a fourth- or fifth-grade level. We can raise students to an 11th-grade level by the time they leave, but in the eyes of the test, we're still failing." Faculty go to great lengths to effect further improvement. At Priestley, which has a similar standing to CHAD, for example, teachers put in extra hours of tutoring and often serve as surrogate family members. "If I had been anywhere else, nobody would have fought to keep me in school," says CHAD student Brown, recalling how Courtney Tyus, the school's development director, helped him.

Administrators at both schools are searching for ways to boost students' test scores by integrating design into core curricular subjects. One tool they're using is *The Architecture Handbook*, by Jennifer Masengarb and Krisann Rehbein, published by the Chicago Architecture Foundation. Taught in more

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than 130 schools nationwide, this comprehensive design textbook incorporates math and science concepts into everything from CAD to sustainability. “The way a kid processes and applies knowledge is much more real if they look at something that exists in the world,” observes Rehbein.

Mentorship programs pursue a similar curriculum-based approach. The Salvadori Center, in New York City, pairs architects and engineers with school teachers to work on project-based learning modules. A bridge-building unit reinforces math and geometry concepts, for instance, while a lesson on monument design supplements social studies. As Salvadori’s executive director Leonisa Ardizzone explains, “We help teachers see that you don’t have to be an architect or an engineer to use the built environment around you.” Each year, Salvadori reaches an average of 2,400 students, 51 percent of whom are Latino and 30 percent African-American, and its testing track record is good. Before a Salvadori “math lab” was offered at schools in Port Chester, New York, for instance, only 60 percent of students passed state math tests; afterward, 93 percent passed.

In San Francisco, the Build SF Institute saw similar results among students who participated in its mentorship program, a majority of them Asian and Hispanic. It is one reason why the local education district actively encouraged administrators to expand the program from an after-school activity into a full-fledged school, which opened last fall. “We run it like a design studio,” says Alan Sandler, executive director of the Architectural Foundation of San Francisco, which runs Build SF. “There aren’t any class periods, but instead the students are given design problems they work on throughout the day. Each problem has aspects of math, science, and social studies integrated into them. That’s how we cover our standards, but it doesn’t look anything like a regular school.”

Mentorship programs provide the best piece of evidence that reaching minorities in high school can inspire them to pursue architecture. Of the 47,000 high school students who participated in the ACE Mentorship Program of America since it began in 1994, says president Pamela Mullender, 82 percent are black or Hispanic. One third of past students now have jobs in a design-related field, and 53 percent of last year’s senior cohort are now majoring in architecture.

The success of charter high schools at producing architecture majors is less certain. At CHAD, the number of students applying to design-centered colleges has been steadily increasing — from 50 percent in initial cohorts to 63 percent among this year’s seniors. Yet among the 138 students in the class of 2009, just 15 percent say they intend to major in architecture. Kountz faults the school for failing to emphasize architecture strongly enough in its curriculum. Many observers believe the blame lies elsewhere.

“We keep talking about making kids aware of architecture as a profession,” says Marshall Purnell. “But here’s the interesting thing: If you look at how many African-American architects of my generation have children who also chose the profession, you’d be surprised at how low the percentage is. It’s because they almost know too much about the profession.”

Statistics suggest that even the diversity pipeline cannot resolve the profession’s overarching shortcomings. Dennis Mann, a professor of architecture at the University of Cincinnati, codirects the Directory of African American Architects. “We’re adding about 50 people to our list each year, totaling just under 1,700,” he says. “But when you account for people who pass away, the overall number of licensees is not increasing.” There are some nuances. The number of licensed female black architects, for instance, is growing at a rate “far exceeding” other increases: from just 48 in 1990, when the directory began, to nearly 230 today.

One leak in the pipeline is the college experience. It’s telling that nearly three quarters of licensed black architects come from historically black colleges and universities, such as Howard University. Historically white institutions are making efforts to recruit more minorities, but many observers feel they haven’t gone far enough to ensure that a supportive environment exists once these students arrive on campus — particularly when it comes to kids from schools such as CHAD. “Our kids are street smart, but they don’t know how to behave academically,” Kountz says. “It’s very difficult for our kids in college.”

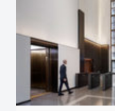
Steven Lewis, AIA, president of the National Organization of Minority Architects (NOMA), is so concerned about what happens to black students in college that he’s made it one of three priorities during his NOMA presidency. “Kids get hit hard by the very cold and competitive studio culture. That’s true for all kids. But when you layer the race issue on top of that, it complicates matters,” he explains. This spring, Lewis plans to unveil a tool kit to help

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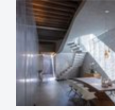
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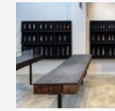
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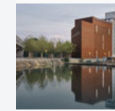
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matters, he explains. This spring, Lewis plans to unveil a toolkit to help colleges “feather the nest” a little better. One recommendation is that faculties hire more people of color.

The fundamental truth is that race still matters. “It’s something that faculties at architecture schools around the country are really struggling with,” admits Mark Robbins, dean of the Syracuse University School of Architecture. “One doesn’t have to be Latino or African-American to be sensitive to issues of diversity and race. But if we’re going to be meaningful as institutions, students of all stripes who come here should be able to find themselves within the faculty.”

There is also a lack of role models in senior management positions out in the field. High-profile African-Americans, such as Diane Hoskins, FAIA, an executive director of Gensler, and Ralph Jackson, FAIA, a principal of Shepley Bullfinch, are the exception at white-owned firms. Many observers believe lingering racism is keeping minorities down. “The important factor in successfully building a client base and getting ahead is not so much what firm principals say about a person of color when they’re in the room, but what’s said when they’re not in the room,” observes Ted Landsmark, president of Boston Architectural College. “Firms have to provide access to clients. That will enable more people of color to demonstrate the talents they have.”

Landsmark has faulted the AIA for failing to take a leadership role sooner. “Institutionally, there needs to be a person with the authority to affect policy, budget, and outcomes,” he has contended. “In the absence of that, we will continue to initiate programs that enable us to feel good at the front end but that don’t produce tangible results.”

For his part, Purnell praises the AIA for strides made within the past few years. But he doesn’t mince words when it comes to describing institutionalized racism — and he lays most of the blame on corporate and government clients. “The GSA has never selected a black architect to design a new, freestanding structure of any size anywhere in this country since the agency was created in 1949. If I can make that statement today, in 2009, it should bring crystal clarity to this problem we have in the profession,” he says. (For its part, GSA is reaching out to minority firms.) “We can put as many kids in the pipeline as we want, but unless we solve what happens at the end of the pipeline, it’s going to be a funnel.”

The recession could further complicate matters. Some observers speculate that layoffs and hiring freezes will give young architects time to finish their IDP requirements — making them more attractive candidates when the hiring market eventually recovers. Layoffs also might prompt black and Latino architects to enter teaching, thereby becoming role models for younger generations. But others fear that the recession might deter children of color from studying architecture in the first place. Vasquez, CHAD’s college counselor, is already seeing a slight increase in the number of students who are heading to college this fall to study nursing.

One thing is certain, most analysts agree: The economic crisis heightens the urgency that all architects should feel about making headway on diversity. “Our client base has become more diverse, and that requires a more diverse range of designers to serve populations with different language and cultural expectations,” Landsmark says, pointing to states such as California, Florida, and Texas, where Latinos are almost a majority. If architects fail to satisfy clients’ needs, business will instead go to engineers and other disciplines that have already diversified. “We risk irrelevance as a profession,” Purnell concurs. “This problem is killing job opportunities for all architects.”

But Purnell avoids such dire talk when he meets with teens such as Ryan Brown. Indeed, he still believes that fueling the diversity pipeline with fresh faces is architecture’s best hope — and he’s acutely aware of his own importance as a role model. “It wasn’t until college that I met my first black architect,” Purnell says. “I said, ‘If he can do this, I can do this.’ I hope that’s what Ryan thought when he met me — someone who’s black, owns a firm, and was president of the AIA. I can only imagine Ryan felt like there were no limits. That’s what you’ve got to feel at his age.”

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