

omsday District inthe From the mayor's desk to the principal's office, from grassroots parent activists to teachers aiming to transform instruction and assessment, from the superintendent's seat to a boldly reimagined vocational academy, here are the stories of Penn alumni trying to carry out the increasingly embattled mission of public education in Philadelphia. BY TREY POPP | With additional reporting by Dave Zeitlin C'03 PHOTOGRAPHY BY CANDACE DICARLO

aybe you heard about the sixth-grader who died several hours after suffering an asthma attack at a school lacking the budget for a nurse last fall. Maybe you read about the firing this spring of three principals embroiled in a standardized-test cheating scandal that implicated 140 educators in 33 city schools. If you've caught any news about public education in Philadelphia recently, chances are it hasn't been good. Headlines about the city's school system have been so alarming, and so frequent, that it's hard to know where to begin.

In 2011, school district superintendent Arlene Ackerman was sacked after three years marked by ballooning deficits, political acrimony, and a teacher-assisted cheating scandal. Her dismissal, which came two weeks before the start of the school year, included a \$905,000 buyout package. Three months later, she astonished local taxpayers by filing for unemployment compensation.

In 2012, the district borrowed \$300 million to cover immediate operating expenses. The state-chartered School Reform Commission (SRC)—a five-member unpaid board that has supervised the Philadelphia School District since the city's board of education was dissolved by Pennsylvania's legislature in 2001—cited "dire circumstances" stemming from a structural deficit.

In 2013 the SRC voted to close 24 schools that were operating below capacity, yielding poor educational results, or both. Despite this cost-saving measure, the district faced a \$304 million shortfall. It responded with a so-called "doomsday budget" that laid off 3,783 teachers, counselors, nurses, assistant principals, school aides, and others in June.

In August, new Superintendent William Hite announced that unless the District received \$50 million to restore some of these positions, he could not guarantee the basic safety of children in the city's schools. With the School District's bond rating at junk status, Philadelphia Mayor Michael Nutter W'79 pledged to fill the gap, setting off a two-anda-half-month tussle with City Council over exactly how. *The New York Times* published a front-page story comparing the city's "cashed-starved public schools system" to the municipal bankruptcy of Detroit.

There is little relief in sight. The District's effort to win \$133 million in concessions from the Philadelphia Federation of Teachers, who have been asked to accept salary cuts ranging from 5 to 13 percent, has been mired in slow-moving negotiations since the expiration of the last three-year contract in August. It has received less from the city and state than it requested, and nearly all of that has taken the form of one-time cash infusions. Consequently, District officials are already projecting a shortfall of some \$400 million for the 2014-15 school year.

Many factors lie behind the tide of red ink, from escalating pension costs to debt service payments on past borrowing. But the fastest-growing and most unwieldy source of financial stress is the expansion of charter schools. The last dozen years have seen a historic decline in the number of children in Philadelphia's traditional public schools, alongside an unprecedented expansion of charter schools, which are independently managed but publicly funded.

The first four charters opened in Philadelphia in 1997. Today there are more

than 8o. In the same time span, enrollment at District-run schools has fallen from more than 200,000 to about 131,000. The District pays charter schools a per-pupil fee derived from the average cost of educating a student within the public system. But since any given charter draws students from dozens of traditional schools, where fixed costs account for a substantial portion of the total educational bill, the District pays out more than it saves from having one less child in its care.

This less-than-zero-sum dynamic informs a 2013 report by Moody's, a credit-rating agency, that cited charterschool expansion as a growing risk to the fiscal stability of urban school districts in general and Philadelphia's in particular. This year, the Philadelphia School District is paying some 34 percent of its operating funds directly to schools it does not operate. After debt-service payments, only 52 percent of the District's operating budget goes to support education in its own schools. And the District's red ink imperils the same charter schools that are driving so much of the spillage, since their management fees are pegged to the District's own increasingly constrained educational expenditures.

For the children, parents, and educators sticking it out in Philadelphia's public-school system, either by choice or for lack of it, the future is uncertain. Yet they have allies—of different stripes and ideological persuasions—in places ranging from City Hall to the kindergarten trenches. In the pages that follow, more than a dozen Penn alumni discuss the causes of this debacle, and the varied ways some of them are trying to fix it.

Schools Edition

eople are always saying education is in crisis,"

says Wendell Pritchett Gr'97.

"I'm a historian. And my response is, well, public education has *always* been in crisis. And that's partly because of funding, but it's mostly because we are constantly changing what we want from our schools."

When Pritchett was appointed to the School Reform Commission (SRC) in 2011 by Mayor Michael Nutter W'79, he joined the front lines of the struggle between what people want from schools and what they're willing to pay for. In broad strokes it's a familiar story: the Great Recession and governmental austerity have squeezed education funding across the board. But the finer details of Philadelphia's experience paint a more nuanced picture that holds lessons for other cities and states.

Though it has attracted less attention than New Orleans, where Hurricane Katrina literally cleared the landscape for the most dramatic expansion of charter schools in the country, Philadelphia has transformed its system of public education at a pace equaled by few other American cities. The hypothesis guiding the SRC is that what Philadelphians want from their education system is more choice, and that more choice will lead to higher quality. To that end, more than 30 schools have been closed in the last four years, and upwards of 80 new ones have opened over the last 10.

"This portfolio model presents an opportunity to experiment with different types of education so that we can test them and see what works for different kids," Pritchett explains. "And the goal should be to expand what works and to eliminate what doesn't work."

Most of the new schools are charters, but the District has gotten into the experimentation business too, both by creating new

campuses and attempting to orchestrate in-house "turnarounds" of existing ones. It's been a bumpy road. When the SRC voted to turn over 45 low-performing schools to a mix of for-profit and non-profit educational management organizations in 2002, the response was "mayhem and outrage," recalls Tim Field WG'01, who later served as the School District's deputy chief of charter, partnership, and new schools. The subsequent travails of that "diverse provider" model ultimately made it clear that Philadelphia had been lucky to have dodged the state's initial plan to turn over

the entire School District to Edison Education, Inc., which at the time was the nation's largest for-profit manager of public schools. After six years and disappointing results, the SRC seized six schools from outside operators, including four from Edison, which would eventually walk away from all 20 of its Philadelphia charters as it abandoned the charter-management business amid persistent losses.

Field was one of the architects of the District's next experiment, the Renaissance Initiative. It emphasized incorporating community input, via school-advisory

councils, into the selection and oversight of charter operators charged with overhauling low-performing schools. The Renaissance model also entailed the transformation of some schools into District-run "Promise Academies"—basically, an internal attempt to do the same thing.

Renaissance school operators work on five-year contracts filled with performance criteria designed to make them accountable. They also employ teachers represented by the Philadelphia Federation of Teachers, which made critical concessions in areas like seniority and site-selection that enabled the program to go forward. In this way they function more like partners than completely independent private entities. And since Renaissance schools inherit the same geographic enrollment areas as the schools they replace, they impose less of a cost on the system than wholly independent charters, which draw students in dribs and drabs from multiple campuses that must continue to operate at diminished capacity.

Field thinks that giving parents and community leaders a voice allowed neighborhood schools to continue feeling like neighborhood schools, rather than schools that had been "taken away" from their community stakeholders.

"It was a very controversial initiative at first," he says. "What I'm most proud of is we established this process with a lot of community awareness and input. And there have been strong results. The biggest key is that it's persisted. Seventeen-plus schools have been converted to charter schools. It's happened year after year in a climate of budget deficits; it's happened in a climate of changing leadership; and it's persisted because it's worked and because the community demand is there for it."

A December report by the School District's office of research and evaluation found improvements in school climate (as measured by the incidence of serious disciplinary problems) almost across the board at Renaissance schools. Math and reading outcomes varied by operator, with Mastery and ASPIRA posting substantial progress that largely eluded the five other operators.

The report concluded that early gains at Promise Academies have foundered due to "an unprecedented budget shortfall."

Field agrees with that assessment. "I would say the charter approach has been largely very effective where we've partnered with great operators," he says. "The internal turnaround has been perhaps less effective, in part because the cost of the program was significant and, when the District had financial challenges, it became very difficult to maintain that approach."

Meanwhile, the District has been eager to develop additional

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schools that hold themselves out as alternatives to its own traditional offerings.

"We have several schools that are now focused on project-based learning," Pritchett notes. "The Science Leadership Academy is one of them. The Workshop School is another [see "The Experimentalists," page 40]. We don't know at this point whether it's going to work in terms of improving educational performance, but I think we have a lot of data that leads us to believe that it will.

"The School District is a large bureaucracy, and it's justifiably criticized for being slow," he adds. "But at the same time,

there's also lots of innovation in the School District. So this whole charter versus traditional school thing is really overdone."

Perhaps the most neutral way to view charter expansion, then, is as one facet of an overarching strategy to shift authority away from the District's central administration and toward individual schools and principals.

On its face, this approach makes a lot of sense. "[As a principal] I should know my community, my student population, and my faculty better than anybody else," says Leroy Nunery GrEd'o3, who spent one year as Arlene Ackerman's second-in-command and another as deputy superintendent and CEO of the School District after Ackerman's dismissal in 2011. Indeed, virtually everyone believes that effective principals are vital to school improvement. [See "The Principals," page 36.] The tricky part is figuring out how to empower principals with real authority without crippling them with administrative responsibilities.

The guiding philosophy during Nunery's tenure was "earned autonomy." Principals who presided over good results were given maximal latitude. Poor performance begot tighter control from the central office—over everything from curriculum choices to school uniforms. The idea was to motivate school leaders to steer their own ships.

"That works if compensations are in line, if seniority systems are in line, and you have given school leaders and teachers the right support systems," Nunery notes. "You want more people to have autonomy to practice their professional wiles."

But "that's not what happened," he says. "We had a few schools that improved under this more regimented construct—so they should be moving up the curve. Supports would be pulled and applied elsewhere. And some people [within those schools] were like, 'Well, I *need* these supports."

Instead, the District's deteriorating finances have accelerated the extinguishment of central-administrative support. Partly that's because it's more politically appealing to fire middle-management bureaucrats than frontline educators. People don't take

to the streets to save inventory clerks. Additionally, the District's total student body has continued to shrink as charter enrollments rise—and the state eliminated the dedicated revenue stream that had previously helped school districts grapple with that costly transition. "That really had a major impact," says Pritchett. "If you're going to have a charter school framework—which the state of Pennsylvania has decided, not the School District—you have to have a clear scheme to fund it. And we don't now."

After Tom Corbett took over the governorship in 2011, Pennsylvania decreased its contribution to the Philadelphia School District by some 13 percent, according to District budget documents—the first outright cut since the state takeover.

"So people were saying, cut [the central administration] because it's bloated," Nunery remembers. "I believed that there were a ton of inefficiencies, but to say it was bloated I think was wrong." It was an argument he says he couldn't win. In 2012, the School District's central-office full-time staff was reduced by 42 percent. Absent additional revenue or personnel savings, the current budget forecasts that another 30 percent will be cut in 2014.

The savings, Nunery and some others say, have come at a high cost. "With an enterprise as large and decentralized as an urban school district, one has to focus on the basics and ask the question: Do we have the right people, in the right roles, and with the right responsibilities?" says Penn Executive Vice President Craig Carnaroli W'85. "In other words, should we be asking principals to also take on the role of chief procurement officer, head of HR, and the director of IT? Or is it better to centralize those functions? Any large organization grappling with these issues can devolve into a kind of chaos if not resolved."

In 2012 Carnaroli led a group of business leaders charged by Mayor Nutter and the Pennsylvania Secretary of Education with analyzing the School District's operations and financial systems. As someone in charge of managing Penn's decentralized system of schools and centers, Carnaroli emerged from that six-month pro bono effort skeptical about the prudence of gutting a central administration that had already suffered systematic underinvestment.

"I have seen, as a general management rule in any business or enterprise, that when times are good you can afford to decentralize certain responsibilities," he says. "However, in more challenging times leaders take the reins, and advocate for greater centralization as a mechanism to contain costs.

"The financial challenges of the School District were felt in the classroom, obviously," Carnaroli continues. "But what is not as obvious is the impact on the administrative side. For example, financial and other operational IT systems installed in the late 1990s hadn't been upgraded due to lack of funding. The result is an operation that is not current, and reliant on cumbersome technology, and moving slower than the changing world around them."

Cumbersome is an understatement, to hear Nunery tell it.

"I'll never forget going into our transportation office," he recalls. "There were these giant maps of the city, and you had these pins and strings in terms of how they did bus routes." No one could tell him with certainty where any particular bus was, or how many tires the department went through in a year, or how many batteries were in inventory.

"The industry of K-12 has created enough of a body of information to know how many turns a bus should make in order to make the most efficient use of its rolling stock," Nunery

marvels. Yet the District's status quo amounted to "a highly analog version of operating in a digitized world."

It was a recurring theme, from the closet filled with toilet paper so old that it flaked apart when he touched it, to a floor at District headquarters weighed down with "shrink-wrapped pallets of books that had never been opened."

If Nunery started out with a desire to set the principals free, he ended up making anyone who wanted to order a single book go through him. "That's where autonomous management systems go awry. Somebody's got to be able to ask the question: Okay, you can have your autonomy, but before you order one more roll of Charmin, how much do you have?"

Carnaroli's group recommended creating a leadership structure featuring both a superintendent and a managing director to provide operational continuity. "You need that dedicated administrative leadership to continuously oversee and coordinate large-scale initiatives," he says. Given the relatively short tenures of contemporary superintendents, and the resulting whirligig of sometimes-conflicting action plans and vision statements, it's hard to argue. A restructuring of top management in 2013, driven by new deputy superintendent in charge of operations, suggests that the District got that message.

There is much to overcome. Nunery thinks antiquated systems are partly to blame for the District's disarray, but so is a sclerotic bureaucracy plagued by union work rules that handcuff even well-meaning civil servants.

"How do you create a customer-centered focus?" he asks. "What you find is that I think people desire to do it. I don't know that all of them have the *will* to do it. And they certainly don't all have or get the permission to do it—to innovate or create—because of one thing or another. In some cases, it is collective bargaining."

That was one lesson of the Renaissance Initiative, he says, which originally called for charter operators to use the District's facilities work force. That arrangement proved sufficiently costly and inflexible that "ultimately some of the operators wanted out," Nunery says. "We had to give them more flexibility to go out on their own and contract with a different provider" of ancillary services.

"The reason why this privatization thing has become such a norm," he remarks, "is because I think the general public doesn't see an efficient approach" to the allocation of basic materials and services.

Yet it is hard to dispute that privatization itself has introduced some of the biggest inefficiencies of all. And proposed legislation in Harrisburg may exacerbate the situation, by eliminating charter enrollment caps and permitting any accredited college or university to authorize new charter schools—a power that has heretofore rested solely with the District.

"I'm obviously not anti-charter—I went to work for a for-profit charter," says Nunery, who worked for Edison before coming to the Philadelphia School District. "But if you're the District, you're saying, 'How do I forecast enrollment? Do I build, or not?' [And] you don't have the ability to control the environment that you are responsible for, if quality is not as high" as it should be.

"Who's going to police it?" he continues. "Who's going to pay for it? It's still going to come out of the fact that you've got one empty seat in this classroom, and four in that classroom, and you can't just shut those classrooms down. So somebody's going to have to pay for that extra seat, and that leads to a permanent loss of revenue."

Ultimately, that loss of revenue will boomerang back to hurt

The Mayor

"Whether you're directly in charge of schools or not," says Philadelphia

Mayor Michael Nutter W'79—who is not—"my attitude has been: They're my kids. I pick up their parents' trash. I should have something to say about the quality of education that these children receive."

 $Since \ taking \ of fice \ in \ 2008, Nutter \ has \ struggled \ to \ do \ that-against \ fellow \ Democrats \ in \ City \ Council,$ against the Republican majority in Harrisburg, and against the hard realities of governing what is simultaneously one of the poorest and most heavily taxed populations of any big city in America. Amidst education-funding cuts at the state level, Nutter has had a mixed record in his efforts to increase local funding for the School District. "We already have a fairly burdensome tax structure here in the city," he says. "We have to be very, very careful about what we're taxing, even for good and appropriate purposes."

He claims credit for adding about \$155 million to the School District's annual budget during his tenure, noting that he has raised property taxes twice, the use-and-occupancy tax on commercial property, and parking fees and fines. His efforts to levy a city cigarette tax (which requires state legislature approval), and to convert a soon-to-expire 1 percent hike in the city sales tax from 2009 into a permanent source of dedicated school funding (which has met opposition from the City Council president, who wants to divert half of that money to the city's municipal pension fund), have so far not borne fruit. Nutter spoke with the Gazette about those and other challenges in November.

The 2010 Census showed Philadelphia gaining population for the first time in more than 50 years. But that increase masked about a 15 percent decline in the population of school-aged children, and an equivalent decrease in 35-to-44 year olds-essentially parents of school-age kids. What has your administration done, or what does it hope to do in the future, to try to retain families with children?

Part of the strategy to retain those folks is making sure that we have a high-quality education system with a variety of options—a system of great schools. And whether it's a District-managed public school or a charter school which is a public school-and some parents for whatever reason certainly want to avail themselves of a religious school or private school-my job is to make sure that we have as many options available as possible.

One of the taxes you raised was the use-and-occupancy tax, a tax on commercial property, 100 percent of which goes to schools. But the equivalent tax in New York City is more than double what it is here, and it's substantially higher in Boston and Cleveland as



well. Do you think there's room to raise that more without crippling Philadelphia's competitiveness in attracting businesses?

It is an absolute apples-to-oranges, grapefruits, and every other fruit you want to throw in, to try to compare the tax structures or tax sources between and among cities all across the United States of America. They're all very, very different. The point here is that many of our taxes are at a level that to raise them more would be, in many instances, debilitating. The one you mentioned, use-and-occupancy, I mean, you start to seriously negatively affect the economic climate. You'll initially generate more money, but if businesses move, ultimately you will have less money.

The school district has closed 33 public, mostly neighborhood schools during your tenure. These schools primarily exist to serve the children who attend them, but they can also play critical roles in fostering social and economic well-being in the communities they serve. What has your administration done to address the loss of that public amenity in neighborhoods that have been affected?

When you have 70,000 vacant seats across the School District because children have moved-not out of the city, but moved to other educational opportunities, mostly charter schools-those buildings, many of which have an average age of 65-plus years [and] a 25 or 30 percent utilization rate, that is unsustainable. You still have to heat it. You still have to light it. You still have to clean it. You have to protect it.

And if the educational outcomes are not where you want them to be, then you have to have the maturity to say that this is a school that is not serving children well. I understand it's a community resource. But if it's not serving children well, which is the point, then it shouldn't be open. We're going through a process now of reuse and sales. We'll figure out what the proper reuse is for those buildings. But at the same time, many of those students have merged into other schools, and additional resources have gone to those schools. So, I mean, don't fall in love with the building. The building is not what educates kids.

What do you believe is the most critical thing that needs to be done to improve the state of public education in Philadelphia that you don't have the power to do?

Create a student-weighted education funding formula statewide so that we have a proper and appropriate distribution of funding all across the 500 school districts, but certainly especially for Philadelphia ... The Commonwealth of Pennsylvania has a constitutional obligation to provide a fair and efficient education for students all across the Commonwealth. And the fact of the matter is that Pennsylvania as a state has been decreasing, in terms of overall percentage, funding for education-not just here in Philadelphia but across the Commonwealth. This interview has been edited and condensed.

independent charter schools too, since they are paid according to the District's per-pupil cost for its own students.

"Charters have already realized that unless they can uncouple themselves from that per-pupil funding formula, which I don't think is going to happen, the weaker ones are more likely to be imperiled," Nunery points out. "Last year, it signaled to me something when a couple of the for-profit providers said, 'We are not going to do any more new charters.'

"Those are canaries in the coalmine," he adds. "The ability to generate a social good, a public good like education, costs a lot more than the nominal amount that people get today."

Pritchett echoes that sentiment. "I'll tell you what I frequently say to people when they want to engage in conversation about what's going on at the School District," he remarks.

"We're struggling with a lot of things. Resources aren't the only answer, but we clearly need more resources. And then I say to them: If you're serious about improving public education, I urge you to call your state legislator and your councilman and tell them that the School District needs more resources. And then I say one more thing-which always changes the conversation. I say, if you're really serious about it, you should tell them specifically that you're willing to pay more taxes to support public schools in the city of Philadelphia. Usually when I say that, people hem and haw about, well our taxes are too high already. And so that might very well be, but if we're serious about public education then we have to pay for it. And so my takeaway from those conversations is to wonder how much public support there is for public education."



elen Gym C'93 GEd'96 has worn a lot of hats in the last 20 years. She's been a Philadelphia public school teacher. She's been an education journalist. In 2005 she helped establish the Folk Arts-Cultural Treasures Charter School in Chinatown—in what would have been the footprint of a baseball stadium whose construction she had campaigned to prevent ["Alumni Profiles," March|April 2008]. But these days she sees herself first and foremost as a parent.

She's hardly a typical one. As the founder of Parents United for Public Education, a group that grew out of her frustration with her daughter's elementary-school experience in West Philadelphia, Gym is an advocate with inexhaustible energy and sharp elbows. She's a regular presence at School Reform Commission (SRC) meetings. In 2007 she helped coax City Council into increasing the portion of property tax revenue that goes to the School District—a move that netted more than \$20 million. No issue is too small to spur her into action. A 2011 budget crisis found her testifying before City Council, demanding to know why the SRC had approved \$4.7 million in textbooks for an 18-day summer school program, among other things.

In recent years, Gym has emerged as Philadelphia's most forceful critic of "school reform"—Philadelphia's own version of Diane Ravitch, the architect-turned-apostate of the national movement to promote school "accountability" as measured largely by student performance on standardized tests, and implement market-based alternatives like vouchers and charter schools in the name of expanding parental choice.

"The District has been crippled by a lack of resources, no doubt," Gym wrote on the eve of an SRC vote to close 24 public schools last year. "But it has been mortally wounded by a lack of vision to combat a relentless effort by corporate education reformers to declare the death of the neighborhood school."

In Gym's view, an "unfettered choice movement," coupled with a funding scheme in which the School District pays charter operators a per-pupil sum that outstrips the savings it can realize, is undermining the very choice most parents want (but few can afford to move to the suburbs to get): a quality neighborhood school that they don't have to win an enrollment lottery to send their kids to, where flavor-of-the-month pilot programs aren't allowed to eclipse the nuts and bolts of a solid education.

Parents United has a "very basic mission," she says, "which is essentially to say that whenever you open up a school, that it has a certain level of resources and programs that are promised to the children and families who are in that school. Like, there's got to be a bottom."

A few weeks into the current school year, she turned that "bottom" into a new advocacy front aimed at the state level.

"There are a number of provisions within the state code that outline some mandates for schools to follow," she notes. "For example, that guidance counseling shall be integral throughout the school system, and that guidance counseling services shall be an integrated and comprehensive part of, quote, 'each school entity.'

"And a provision within the state code says that anybody who believes that there's a curriculum deficiency can file a formal complaint with the state department of education, and that the secretary of education must investigate each complaint," she continues. "And we actually want that."

Within a month, Parents United, working with the Public Interest Law Center of Philadelphia, had helped upwards of 800 parents file official complaints. They addressed issues ranging from deficiencies in art and music instruction, which is statutorily mandated for every child in every year of elementary school; to high school classes packed with more than 40 students; to so-called "split classes," in which pupils from multiple grade levels are combined within single classrooms to save money. "We've got split classes for children who are going to be taking their first Keystone exams," Gym said in the fall, referring to Pennsylvania's high-stakes standardized tests, which begin in third grade, "and half of the class is in second grade."

Bottom line: "We think that the level of resources is not just disgraceful, it actually violates the Pennsylvania state code."

Some of those complaints appear to have gained traction. In January the state Board of Education notified Parents United that an investigation had revealed several schools to be out of compliance with regard to school-nurse staffing, and that several nurses would be restored (with unspecified funds). Gym also claims some credit for the state's late-2013 release of \$45 million in federal funds to the School District, which used the money to ameliorate counselor and special-education shortages as well as split-grade classrooms. Yet the one-time nature of that cash infusion fails to address the underlying problem.

Pennsylvania is currently one of three states that doesn't distribute school funding according to a set student-weighted formula. One was implemented in 2008 under then-Governor Ed Rendell C'65 Hon'oo, but it was removed from state law

soon after Republican Tom Corbett succeeded Rendell in office. Consequently, individual school districts are unable to predict future revenue, which now rises and falls on the strength or weakness of their legislative delegations. Philadelphia has fared poorly under this regime. Had the formula still been in place this year, according to John Myers, a school-funding consultant who helped to create it, the Philadelphia School District would have received \$360 million more from the state—enough to turn its \$304 million deficit into a surplus.

Gym is by no means the first Philadelphian to charge the state with dereliction. In 1998, Rendell and then-schools superintendent David Hornbeck L'71 sued Pennsylvania for inadequately funding the city's schools. Hornbeck then threatened to close the schools if Harrisburg didn't help resolve an \$85 million deficit. The ultimate result was a state takeover of the city's school district in 2001, and the replacement of its school board with the state-chartered SRC.

The prevailing view among state lawmakers then and now,

Hornbeck told NPR this past November, was that "putting money in Philadelphia was sending money down the rat holeand they really did use that kind of language on a routine basis." Inefficiency and waste, they maintained, not inadequate resources, were what ailed Philadelphia's traditional public schools.

If measuring the performance of teachers and schools is a deeply contentious issue (See "Getting Teacher Assessment Right," page 39), evaluating an entire district is even more fraught. Nevertheless, a recent study by Matthew Steinberg and Rand Quinn, assistant professors in the

Graduate School of Education, suggests that Philadelphia actually gets more bang for its limited buck than other high-poverty districts in the state. While spending an average of \$1,891 less per student than 24 districts with comparable student populations-and despite facing a funding "adequacy gap" of \$5,478 per student (a calculation derived from factors including the proportion of children in poverty, special-education students, and English-language learners)-Philadelphia posted slightly higher percentages of students achieving proficiency on standardized state math and reading tests.

Be that as it may, the narrative that traditional public schools are failing still dominates debate—which is hardly surprising given that one out of three Philadelphia public-school students fails to graduate high school on time (though 10 years ago it was an even worse one-out-of-two). Gym fears that the mode of permanent financial crisis has driven the SRC into a desperate mania for alternatives whose short-run savings conceal long-term costs.

While she remains proud of helping to found Folk Arts-Cultural Treasures, Gym laments what she feels is a reckless expansion of the charter school sector.

"I think there are some really beautiful charter schools in the city of Philadelphia that live up to their mission admirably, and bring a lot of vibrancy to the city. But I also think that there's a number of public schools that do that, too," she says. "I think we've hit a tipping point. I think that charter schools are a supplement to public education—that they are in addition to. But right now we're seeing them as in lieu of."

The danger of that, she warns, is already becoming apparent. This year saw a federal trial against the founder of four charter schools charged with defrauding them of \$6.7 million in taxpayer money. The founder was acquitted on six charges, but the jury was only 9-3 in favor of convicting her on 54 others, on which she will now be retried. And October saw the closure of Solomon Charter School, which had been authorized to operate a cyber school for 6th through 11th graders but also enrolled 200 elementary-school students to attend traditional classes in a building that also housed a sex-offender clinic.

"I'm not a big fan of the 'open them up, close them down' approach to school governance," Gym says. "It's a terrible model ... I think that there are terrible charter schools out there, too. But when they do close, I don't think it's a victory. It's sort of like: Well, that failed. That failed massively. And these children who were given these promises are now out on the streets.

> They're angry. Their parents are angry. They feel like a public trust got violated."

> Gym is a staunch critic of the prevailing rhetoric around school choice, which holds that the best way to give parents and pupils more say in public school systems is to enable them to opt out, voting with their feet for charter schools. In her view the best way to give parents more say is to actually give them more say.

> Elaine Simon GEd'71, co-director of Penn's urban studies program and a specialist on school issues, points out that the exit option is only one of the ways consumers can exert leverage in the marketplace,

and not necessarily the most powerful one:

"If there is the exit option, then the school doesn't necessarily know what was going wrong and can't necessarily respond to it. There might be a lot of different complaints that people have, and it's too complex. So the other option is to give people voice-to give people some other opportunity to express their views, and to actually respond to their views," she says. "If people still don't like it, they can exit, but if they are able to have a voice ... they will have more choice" about how their school functions than a simple binary option to take it or leave it. (To learn about the how increased parent control has shaped public schools in another big American city, see "A Tale of Two Teachers Unions" at thepenngazette.com.)

That idea resonates with Gym's approach to advocacy. Philadelphia's schoolparent-in-chief would like to see more innovation, more transparency, and-after 12 years of state control—a locally elected school board. But perhaps what she wants most for the city's school system is resiliency.

"People think that they can assail public institutions-subject them to all kinds of manner of experimentation-and that they'll still weather it," reflects Gym. "But schools and school systems-public school systems in particular-are very fragile institutions. They can be starved into dysfunction. They can collapse from within. And that is very significant and very, very difficult to recover from."



a newcomer who wandered into the principal's office at Albert M. Greenfield School in the last week of October, two hypotheses might have sprung to mind. Either the public elementary and middle school had been commandeered by a conspicuously bearded standard-bearer of Red Sox Nation, or Dan Lazar GEd'o7 GrEd'11 really wanted to be a Civil War reenactor for Halloween.

Several things jump out about Lazar's leadership style—the office door that rarely closes, the broad and very public window from which he removed the Venetian blinds soon after taking the helm in 2009—but on the eve of World Series Game 6, the vaguely experimental character of his whiskers suggested an act of homage by a lifelong Fenway fan.

The truth, as is often the case in Philadelphia's public-education system these days, was considerably less carefree. Lazar had stopped shaving in June as a "silent protest" of the School District's budget for the coming academic year. From the universal dismissal of assistant principals, to lost teachers and counselors, to school offices lacking so much as a secretary to answer the phone, Greenfield and every other city school faced the prospect of sliding from mere austerity into something more like an abyss.

Greenfield serves a catchment area centered on the wealthy Rittenhouse Square neighborhood in Center City. A substantial number of its students live elsewhere, matriculating through the District's "voluntary transfer" process. The result is a diverse student body that is simultaneously one of the most affluent in the Philadelphia School District and one that reflects the city's stark economic reality. Sixty percent of Greenfield's pupils are considered "economically disadvantaged," versus about 80 percent in the city as a whole.

"There are three aspects to my mission," says Lazar. "To create a school where children learn as I would expect my own children to learn ... to create a place where parents feel comfortable that they can be part of the school and have a say in the school; and to create a place where my teachers feel like they can innovate

and try new things and experiment and fail, and learn from those failures and provide quality education to kids."

Building trust with parents is the linchpin for Lazar. He wrote his dissertation on it.

"Oftentimes the interactions that parents have with schools in an urban setting tend to be ones of a negative nature, because it's around issues with a child's behavior," he says. "So [I'm interested in] how the District helps schools to create an environment that is, number one, physically inviting, and also inviting on a person-to-person level. How do we create situations where we get parents in to celebrate kids?"

Before he came to Greenfield, he was a principal at Clara Barton, a K-2 school in North Philadelphia where virtually the entire student body qualifies for free or reduced-price lunch.

"We had a winter concert. We did Grandparents Day in February. We did Muffins

for Mom on Mother's Day. We did Doughnuts for Dad on Father's Day," Lazar recalls. "Because we were a very diverse culture, we had International Food Day ... the kids taught each other about their culture and where they come from. And parents came in and brought food, so that there was an opportunity for them to share who they were with the teachers and the school community."

You won't find any of those things on official curricula, or the standardized tests which determine an increasing portion of students' fates—not to mention those of teachers and entire schools. But Lazar thinks they're critical: "It's how you create buy-in."

And parental buy-in can make a difference not only in fostering a wholesome school culture, but in getting an upper hand—however fleetingly—in a system of District-wide bureaucratic controls that often seems inimical to the children it purports to serve. In his dissertation, Lazar describes starting out one year with kindergarten classes just shy of the 30-student maximum stipulated in the District's teacher contract. (It is worth pausing at this point to imagine 30 5-year-olds, many without preschool experience and some lacking English fluency, in the care of a single teacher charged with teaching them all to read. That thought exercise may illuminate why 22 states have laws capping kindergarten class sizes anywhere between 18 and 25 pupils, according to the Education Commission of the States.)

After consulting with his kindergarten teachers, Lazar decided to enroll *more* kindergarteners, deliberately exceeding the allowable limit. In a letter to parents he explained his rationale: if class sizes remained above the 30:1 ratio in October, the District, through its annual "leveling" process, would assign an additional kindergarten teacher to Greenfield. As long as parents were willing to suffer overcrowded classrooms for five weeks—and trust Lazar long enough not to go over his head with formal complaints—class sizes would shrink dramatically thereafter. After some further wrangling, Lazar was able to deliver.

Lazar has taken advantage of parental involvement to drive curricular changes as well. In 2012, after a year of research and

parent powwows around the goal of teaching algebra in eighth grade, Lazar made Greenfield the only school in the district to implement the Singapore math curriculum. He connected with the principal of Folk Arts-Cultural Treasures Charter School, a school founded to serve Asian-Americans and Asian immigrants in Philadelphia's Chinatown (See "The Activist," page 34), which also uses Singapore math, and with the help of a foundation arranged for two years of coaching for his teachers.

If Lazar was already hustling for grants and supplemental funding back in his clean-shaven days, "This year is like no other," he says. Two months after the "doomsday budget" was passed, he found himself in a front-page *New York Times* story sparked by a letter he sent to Greenfield parents asking for a \$613 donation per student, to replace the \$355,000 his school would be losing.

"It's not something that I was happy about

doing," he says. "At some level I have a huge issue with parents having to put out more money. We already pay taxes. Shouldn't we be able to adequately fund schools through our state taxes, through our federal dollars, through our city taxes, our property taxes?"

But the more affluent parents were "pushing" him to do it. Many of them view Greenfield as the only viable alternative to private school. (To learn about one Penn alumna's crusade to coax such parents into a less-affluent elementary school in a gentrifying neighborhood one mile to the south, see "The

Parents-to-Be," page 38.) Lazar made the appeal, took the blowback that one might expect from an action that unavoidably increased the gulf between Philadelphia's haves and have-nots, and was "extremely humbled" by the response of families across Greenfield's economic spectrum. Some gave the full \$613 even when Lazar urged them to limit their donation to what they could afford. Second-grade girls sold rainbow rubber-band bracelets. One student spent the last chunk of the summer selling lemonade.

Lazar was able to rehire support staff for the school office and library (shuttered school libraries have become the new normal in Philadelphia), restore some after-school programming, and obtain a school nurse for two additional days per week.

Thomas Koger GEd'89 didn't have that option.

Koger, the principal of South Philadelphia's Stephen Girard Elementary, has an appealingly simple way of describing his job.

"In the morning, someone comes to you and says, 'Here is my child. They are yours until you bring them back to me,'" he says. "You are responsible for the education of that child, for the well-being of that child, for the health of that child. While they're with you, they're your child. When I walk in that building, I have close to 600 children."



That buck-stops-with-me attitude is what every parent wants to hear from a school leader. But it obscures an equally simple truth, which is that no school leader can shoulder that responsibility absent a budget and administrative support capable of bracing the weight.

Girard Elementary is two miles and a world away from the affluence of Rittenhouse Square. Its student body is ethnically diverse—about half African-American, a quarter Asian, and the remainder a mix of Latino, white, and other—but economically

monolithic. Ninety-six percent of its pupils come from low-income households. So when Koger faced the District's severe cuts this year, appealing to parents for cash was not an option. And when he talks about his response to the crisis, one of the most striking things is how often he was already having to look outside his building, and the District, for help.

Eight years cultivating a positive relationship with his staff has gone part of the way. "They are doing things that in the past they

would have gotten paid for, that now they aren't," he says. Yet the unavoidable fact is that educators need money and supplies to educate children, and Koger is perennially scrambling for both.

Before the current school year, Girard got a fresh coat of paint and a spate of colorful murals courtesy of Digitas Health, a Philadelphia-based healthcare marketing firm. A partnership with Diversified Community Services, a local community organization, provides after-school programs. At an art gallery Koger met someone from a local Rotary Club chapter; soon that organization was buying dictionaries for every third- and fourthgrader, and software licenses to bring a supplementary literacy program to the school. Koger, who began his career as a music teacher, gets handed-down violins and classical-music instruction from a program that originated in Lower Merion High School.

when Lazar asked parents for \$613 per student,

it made The New

York Times.

The list goes on. But charity can only go so far.

"We try to give them a full quality educational experience. But quality has to be funded," Koger says. "When we talk about the quality experience for students, we're talking about a setting where students can receive attention; their needs are being met. There was a time when schools had social workers to support families. They had a parent person to support families and the concerns of parents. The class size was reasonable for teachers to give students the attention they need."

In Koger's view, 18 is an "ideal" size for a kindergarten class, and 24 is doable for older children. "In other worlds, that does exist," he says. The average class size in nearby Lower Merion, for instance, is 21. But Lower Merion is able to martial upwards of \$25,000 to educate each one of its students, compared to roughly \$12,000 in Philadelphia (approximately \$1,500 of which goes to service debt). For a typical class of 21 students, that adds up to a meaningful amount. It would support a full-time music teacher plus a science teacher, for instance. Lower Merion is the highestspending district in Pennsylvania, but the urban/suburban divide looms large in the greater Philadelphia area. Pennsylvania Department of Education data indicate that the average funding gap between Philadelphia and the three surrounding counties exceeds \$3,000 per student. In suburban districts, average salaries are 19 percent higher than in Philadelphia, according to the Pennsylvania School Boards Association, which is one factor behind the "cherry-picking" of the city's best teachers. "Movement [of teachers] from Philadelphia to suburbs is about four times the reverse," notes Richard Ingersoll G'88 Gr'92, professor of education and sociology at Penn's Graduate School of Education.

Recruitment and retention of a talented workforce is another thing that concerns Koger and Lazar, though both feel that they've been able to build good faculties within the limitation of the "50 percent site selection" rule that applies to their schools (and most others in the District), whereby principals have discretion over half of new hires, and the other half are determined by seniority.

Koger and Lazar have a similar approach to accessibility on the job. They have generated high levels of confidence among their teachers and satisfaction among parents, according to the District's school-specific teacher and parent surveys. Each professes love for his job, and a sense of purpose specific to the challenges of urban public education. But both men lament having to carry out that mission without adequate resources.

"It's hard to encourage innovation," Lazar says, "because it takes money—something we don't have right now."

Midway through the fall, Pennsylvania Governor Tom Corbett released a one-time sum of \$45 million—which had actually been earmarked for Philadelphia by the federal government—to the Philadelphia School District. Lazar's wife phoned his office when she heard the news. "Oh, you can shave now!" she told him, as he remembers the call. "Are you kidding me?" he replied.

"If we were back at funding levels of where schools were last year, I think I would probably shave," he says now. "Was it the best thing in the world? Absolutely not. But did it allow us to purchase people to service kids in schools? Much more so than this year.

"And if I made the decision to not shave until schools were what *I* would consider adequately funded," he adds, "I would be tripping over it."



the end of an exhausting week in early November, lvy Olesh C'05 checked the Facebook page of Friends of Chester Arthur (FoCA), the non-profit organization she helped launch four years ago to support her neighborhood elementary school. Immediately, her exhaustion gave way to a "pretty emotional" moment.

A mother of a new kindergartener at Chester Arthur School, the K-8 public school in the city's gentrifying Graduate Hospital neighborhood, had written that her initial anxiety about the school there was "totally gone" after a great first couple of months. And in another post, the parent of a 3-year-old had noted that after meeting the principal and going to an open house, Chester Arthur had moved to the top of her list—though she'd considered herself a "hard sell."

"I love to hear people are having a great experience," Olesh says. "It validates a lot of the work we've done to promote the school and help the teachers and the principal. And it gives us some faith that this is a good choice for families."

While the conventional wisdom among young professionals in Philly has been to flee to the suburbs when their kids reach school age (or send them to private school), Olesh and her husband, Matt Olesh L'07, feel committed to the city. Believers in the merits of public education, they joined up with other like-minded neighbors four years ago to talk about ways to support Chester Arthur.

While neighborhood groups like this exist throughout the city, FoCA is different in that its members have mostly consisted of parents whose children aren't yet school age. Olesh, the group's president, founded FoCA before she even got pregnant with her first child, who recently turned three. Because of that "outsider" status, the founding members knew they had to be cautious.

"We didn't ever want to go in saying, 'You need to do x, y, and z for us to send our kids to school there,'" Olesh says about their approach to Chester Arthur's principal. "It was more: What are your goals? What are your priorities? How can we help you achieve those goals?"

Like many Philadelphia public schools, Chester Arthur certainly needed some help. But Olesh thought it had "great bones" and was ripe with potential.

"The first time Matt and I walked into the school and through the halls, we looked at each other and said, 'I don't understand what everyone's so freaked about," Olesh says. "It looked like the schools we went to. It was orderly and safe and there was artwork in the hallways. And we got to know the teachers a little bit and they were all really great and loved doing what they do. We were just like, 'Wow, it's amazing how you don't know this kind of stuff unless you're really involved and engaged."

What frustrates Olesh are the "blanket assumptions" that lead some families to write off the school without ever having gone inside.

FoCA has raised funds to buy school supplies for teachers, endow a drama program, and sponsor a civil-engineering club. It played a key role in building a new playground for the school, the first phase of a more ambitious effort to turn the asphalt schoolyard into a landscaped haven for students and community members. FoCA has also set up a volunteer tutoring program and sat at the table for the hiring of new principal Kim Newman GEd'05 GrEd'11.

What frustrates Olesh are the "blanket assumptions" that lead some families to write off the school without ever having gone inside. The key now, she says, is to get people in front of Newman, so that the principal can sell prospective parents on the school's virtues—which are that a strong neighborhood school benefits everybody in the community, from the young, mostly white families who have moved there in the last few years to the African-American residents who have called the neighborhood home for generations.

In the recent past Chester Arthur's students have almost exclusively come from low-income, African-American families. Current enrollment data indicate that more than 95 percent of its student body is economically disadvantaged. Yet Olesh believes the school is "on the cusp" of attracting an influx of affluent Graduate Hospital residents.

"We've seen a school go from one that so many families would never have even considered to now one that many families would send their kids to," Olesh says. "And yes, that's because we've been able to do a lot of great things. But really it's because we've been able to convince people to just step in the door and see what's happening there." — Dave Zeitlin C'03

Getting Teacher Assessment Right

A good education is shaped by a great many things, but research indicates that the most important school-related determinant of student achievement is teacher quality. That idea lies behind two of the most common mantras among contemporary education reformers: that the US needs to do a better job recruiting the best and brightest into the teaching profession; and that school systems need to do a better job measuring teacher effectiveness, so that good teachers can be rewarded and bad ones either improved or guided out of the profession.

Those complementary goals have a lot of intuitive appeal. But to understand why the devil is in the details, look no further than Brian Cohen C'07 GEd'09. Cohen, who taught high-school math in the Philadelphia School District for four years before moving to the public Brooklyn School for Collaborative Studies this year, is a big fan of using technology and statistics to improve teacher effectiveness. But he's an outspoken critic of the way teacher performance has been measured by the "value-added assessment" systems in both places, which rely heavily on student performance on standardized tests.

"It's interesting to think about this as a math person, because I love using data," he says. "When I have students not doing homework, I track it for a few days, and I say, 'Guys, remember the day where you felt really confident? All of you did your homework the night before! And this day where you weren't confident—only 30 percent of you did the homework.'

"So when I look at test scores, you would think that a math person would say, 'Oh that's great, because I have that data to work by."

But his classroom experience and his reading of the research literature have soured his view of value-added assessment, which attempts to isolate the impact of teachers on student performance by tracking the academic progress of individual pupils over time—while factoring out the influence of characteristics like race or socioeconomic status.

Cohen, whose Making The Grade blog (bncohen.com) explores the intersection of classroom teaching and education policy, has two main beefs with value-added assessment. The first is illustrated by an analysis that fellow New York math teacher and education blogger Gary Rubinstein ran on value-added data for 18,000 New York City teachers, three years' worth of which was published by the *New York Times* in 2012, to the consternation of many teachers. In a graph that got a lot of attention, Rubinstein plotted individual teachers' scores from one year on the x-axis, and the following year on the y-axis.

"In theory, you would think that teachers who scored really well one year would do really well the next year, as long as they're in the same school," Cohen says. "So it should have a linear correlation. But the graph shows, like, the worst scatterplot you could ever see. The linear correlation factor is like 30 percent—which to me makes value-added-modeling completely invalid."

There are sound reasons to cast a critical eye upon current statistical measures of teacher effectiveness. One is that standardized tests are blunt instruments for measuring student performance, and even blunter ones for assigning responsibility for that performance to teachers. A test is unlikely to reveal, for instance, whether a student's wrong answer stems from

reading problems, algebraic incompetence, a flu infection the week his class covered the material, or a teacher's decision not to cover it at all. Another cause for doubt is that even though teachers are the most important *school-related* determinant of student achievement, non-school factors such as parental achievement levels and family income have repeatedly been shown to matter much more. Even the most ardent proponents of the teacher-quality factor estimate that it is responsible for between 7.5 and 20 percent of the total variation in student achievement. The relatively small influence of teachers may help to explain the high volatility of their effectiveness scores from one year to another.

Cohen's second criticism has to do with the lack of transparency around the value-added formulas themselves.

"I'm actually in an email conversation right now with someone with the New York Education Department, because I want to know what their formula is for how they calculate the [student] growth," he says. "The formulas are not public, and no one seems to know how to explain them." He's also puzzled by some of the things he *does* know about how he's evaluated. For example, despite the fact that he teaches math, "20 percent of my evaluation is being based off [my students' scores on] the *English* Regents Exam, which to me makes no sense whatsoever."

Noting that an inconsistent and opaque system of employee evaluation is likelier to repel than attract the nation's best and brightest college graduates to teaching, Cohen worries that value-added assessment is doing more harm than good—even in comparison with union contracts that emphasize seniority in decisions about placement and pay. "When people say, it's better than the current system, I would disagree ... How do you get [new teachers] to stay if you keep bashing them?"

Claire Robertson-Kraft C'O4 is the research director of Operation Public Education (OPE), a Penn-based organization that helps states, districts, and charter schools develop new approaches to teacher evaluation. She's an advocate of value-added assessment whose research focuses on the impact these new systems have on teachers' motivation, improvement, and retention.

A survey she conducted of about 4,000 teachers tried to tease out the factors that determine whether these evaluation systems lead to teacher improvement or alienation. Robertson-Kraft's goal is to help policymakers get teacher-evaluation right—to create a tool that doesn't merely reward and punish teachers, but helps them become more effective.

"If these systems are going to work," she says, "it's incredibly important that these teachers feel like they have a voice—both in their creation and the way they're implemented in schools."

In a 2010 policy paper, Kraft-Robertson and OPE director Theodore Hershberg, professor of public policy and history, and director of the Center for Greater Philadelphia, recommended that value-added models use multiple years of data when attempting to estimate teacher performance, that they statistically account for the fact that multiple teachers contribute to a single student's growth, and that they be designed to dovetail with professional development efforts.

The authors also recommended that value-added models be deployed in tandem with in-class observation of teachers.

"Effective teaching is complex," they noted, "so no educator should ever be evaluated solely on the basis of a single measure, not even one as robust as value-added assessment."

The Experimentalists

On the first Thursday of November, two months into one of the most chaotic and financially precarious school years in recent Philadelphia history, Nora Chambers GEd'12 sat in a large, windowless classroom above a lifeless block of South Hanson Street in West Philadelphia.

"I remember one of my classes at the start of my master's degree," she mused. "A teacher asked, 'Do we rebuild the schools, or do we burn them down?"

Chambers, a math and special-education teacher who came into the profession through Teach For America, has worked within Philadelphia's public school system as well as in one of the city's charters. But that old question has returned to the front of her mind this year, because her new workplace grew out of the same radical sentiment.

The Workshop School is the Philadelphia School District's newest high school, and by any measure its least conventional. Founded by three alumni of the Graduate School of Education, along with longtime high-school math and science teacher Simon Hauger, it is a non-selective-admission school offering a projectbased curriculum to about 90 pupils. It began as a two-year pilot program called The Sustainability Workshop, which the School District permitted two small cohorts of seniors to substitute for their final academic year. In 2013 it moved from the Navy Yard to the former premises of the West Philadelphia High Automotive Academy and became an official school, with 66 freshmen and a couple dozen 10th to 12th graders. They are overwhelmingly African American, economically disadvantaged, and-because the school enrolled its first cohort after the deadlines for magnet schools-academically similar to their peers at Philadelphia's mostly uninspiring neighborhood high schools.

The gulf between Chambers' new school and her previous ones is more like a chasm. A sheet of paper taped to the office door lays out the daily "Un-bell Schedule," which governs a carefully curated choose-your-own-curriculum in which students spend big chunks of time on things like rebuilding car engines or creating teen-smoking-cessation programs. Instructors team-teach subjects like the carbon cycle in place of standard freshman biology. Downstairs, the shop-class area features a 3D printer, a laser cutter, and other tools more commonly found in high-tech engineering "maker spaces." The school's innovative model has attracted high-profile support. The Gates Foundation-affiliated Next Generation Learning Challenges initiative provided \$450,000 to help cover start-up costs, and the locally based Philadelphia Schools Partnership pitched in \$1.5 million spread over four years.

Before Chambers and I sat down together, a squealing smoke alarm emptied the building. As the students filed out—with a remarkable lack of drama—a diagnosis came from someone I initially mistook for a puckishly self-confident senior but turned out to be a teacher dressed in one of those gag T-shirts printed to resemble a tuxedo. His students were building a recording studio, he said. Sanding dust had triggered the siren.

Later, Chambers pulled me into a venue that further encapsulates The Workshop School's ethos. Except for a narrow corridor along one side—just big enough for a student-teacher meeting—



the entire room was absolutely crammed with school desks, wall to wall and stacked one atop another, right up to the ceiling.

"We don't really use desks," she laughed. "There were 40 in each room when we first came in, and we took them out and replaced them with tables. The tables move very freely, so there's a lot of different formations [for small-group collaboration]. Students have a lot of freedom of movement here."

The Workshop School Principles are posted on walls throughout the building. Number one is "Put the work first"—expressing a philosophy that "authentic problems" should define the curriculum and dictate what skills students need to develop. Number two is "Trust students to make decisions," which bespeaks an emphasis on requiring students to make, explain, and justify as many decisions as possible, which is what they'll be expected to do as working adults.

"When you ask students to do real work, it totally changes the dynamic," says cofounder Michael Clapper Gr'08, who taught social studies at West Philadelphia High between 1997 and 2002. "No one goes into teaching to argue about whether you can go to the bathroom, or to argue about whether you've effectively identified which things are in bold in the textbook. You go into teaching because you believe in kids, and you believe in their possibilities.

"What I want each kid to graduate with is two or three memorable projects that show not just what they can accomplish academically, but the change they can make in the world," he continues. "We hope that over a four-year period each kid can walk away and say: 'A few less teenagers in West Philadelphia smoke cigarettes because of me,' or, 'A few more people in my neighborhood have access to fresh fruits and vegetables because of the

actions I've taken.' And if you've done work like that, the academic stuff follows right along—you can't accomplish any of those tasks without reading, writing, arguing, deliberating, analyzing, calculating."

Yet the final part of The Workshop School's credo, "Learn from setbacks," is the most revealing—and, judging from the fact that the founders had to substitute *setbacks* for their original *failure*, the most provocative:

Failure is an indispensable part of all innovation. When students design or build something and it fails, everyone can see that it failed; there is nothing abstract or removed about it. The most important part of the learning process is what happens next: trying to figure out why it failed and what can be done to fix it. This is how students learn to be resilient.

"Schools, and school culture, are extraordinarily averse to failure of any kind," says co-founder Matt Riggan Gr'o5. "We treat it as this terrible thing that everyone should avoid. And that has a lot of impact on how students deal with adversity."

Riggan and his colleagues court failure. They consider it rich soil for cultivating

academic discovery and, just as critically, emotional fortitude.

"There's lots and lots of interest in education now in what they're calling non-cognitive outcomes. Angela Duckworth's [Gr'o6] stuff on 'grit' is the banner for that," Riggan says, referring to the Penn assistant professor of psychology who snagged a MacArthur "genius grant" last year ["Character's Content," May|June 2012].

"How persistent you are, how you deal with failure, and how you handle adversity are all really important to long-term outcomes," he continues. "You could do it the traditional school way, and say, 'Oh, grit's important, so now we're going to have Grit Class.' Which I am sure people are doing. Or you can design work that puts students in positions where some of their stuff is going to fail and they have to learn from it."

What makes The Workshop School's embrace of failure doubly interesting, within the context of Philadelphia and the broad backdrop of public education more generally, is that its own success is anything but assured.

a way, failure lies at the heart of The Workshop School's creation story. Before he joined forces with his GSE pals to create this place, Simon Hauger ran an after-school science-fair club at West Philadelphia High. After starting out small—building audio speakers and electric go-karts—the kids converted a Jeep Wrangler into an electric vehicle that won the citywide science fair. At the state competition, the judges expressed skepticism that poor black kids from West Philly were capable of the work, dismissed them after asking a single question, and, somewhat perplexingly, awarded them fifth place.

An incensed Hauger berated the head judge, who responded airily that sometimes students need to learn that life is not fair.

"My eyes were boiling," Hauger recalls. "One young man's father is dying of AIDS. His mother's a crack addict. He's been bounced from foster care to foster care. Another young lady had a horrific story." Life's unfairness wasn't a lesson they needed a science fair to discover.

After that, Hauger found a "competition that was not subjective": the American Tour de Sol Solar and Electric Car Rally. In 2002 his pupils converted a Saturn coupe into an electric car that bested a field of 40 teams, including one from MIT.

Over the next couple years, Hauger and his students built a hybrid sports car using a chassis ordered off the Internet and a Volkswagen engine that could run on biodiesel. They won the Tour de Sol twice more. In 2008 they set their sights on the X-Prize, a \$10 million global competition to build a low-emissions vehicle capable of achieving the equivalent of 100 miles-per-gallon and amenable to mass production. Hauger quit his day job to raise money and work with the students on it full-time.

He vividly remembers a day when Bobby Braun, then the chief technologist at NASA, came to visit. After expressing admiration, Braun made an observation that would crystallize much of the thinking Hauger had been doing with Clapper, Riggan, and Aiden Downey GEd'97 Gr'07, The Workshop School's fourth founder.

"He said, 'When I was a younger member of NASA back in the day, I was a part of the Rover mission," Hauger recalls. "He said, 'We ran into failure every day.' And he looks up, and looks around, and he says, 'I imagine you guys are, too.' And we were like, Are we allowed to acknowledge that?"

Then Braun said something else: "If you're not running into failure on a regular basis, you're basically baking a cake."

"And what do you learn by following a recipe?" Hauger asks now, three years after coming up short in the X-Prize contest. "The lowest level of any intellectual endeavor, right?"

The seed for The Workshop School was planted. The hard part was about to begin: How do you take authentic project-based work, and a thirst for the lessons taught most profoundly by failure, and move them into a public-school day in a cashstrapped district at a time when educational accountability is determined increasingly by success on standardized tests?

The Workshop School's spin on project-based education is to have a future, it will depend to no small extent on how many teachers can run a class as intuitively as Michael Clapper. Clapper still teaches social studies to ninth-graders, but it's hard to imagine that it looked this way 15 years ago at West Philadelphia High.

A typical morning in late November found him standing in front of a Smartboard, checking to make sure all of his students had logged into GoogleDocs on their Samsung Chromebooks to download a research template. A hydroponic vegetable system hissed like a running toilet in the far corner of the room-a legacy of last year's seniors at the Navy Yard, whose investigation of inner-city "food deserts" lives on in the form of lamb's tongue lettuce arcing toward a corner window. Clapper's students were gearing up for C-SPAN's StudentCam contest, which offers \$100,000 in prize money for the best five- to seven-minute documentaries meant to persuade Congress to take up a legislative issue.

"It's a great fit for us, because the students will have to research an issue that's important to them, interview experts, and produce a convincing short film-which involves a lot of skills in itself," Clapper told me before class began. "And then I get to slip in the social-studies bit. You know, how does a bill become a law? How does Congress actually work?"

Now that he was lowering the boom on his students about just how much work they'd need to do to grab a chunk of that prize money, though, Clapper was-as he'd predicted to me, with a perverse sort of glee, moments before—"getting it right between the eyes."

The 13 students in his class were supposed to have closed their laptops after a six-minute break, but one couldn't take her eyes off her Twitter account.

This kind of thing must happen about 100 times a day. Before the break, I'd watched another student toggle her attention between video-production shoptalk and Facebook status updates as suavely as an earlier generation of students used to pass folded parcels of gossip.

Like it or not, managing digital distractions is part of all teaching now. Ask any Penn professor. I've attended classes from which laptops were banned, and I've taken a seminar where a fellow student surreptitiously watched Phillies games six feet from a professor who maintained an air of indifference-feigned or otherwise.

Clapper plucked the offender's laptop off the table and playfully composed a Tweet. "Having a great day in high school," he proclaimed aloud as his fingers clacked the keys. "Love my teacher and my school!"

"Wait!" blurted his victim. "Add #teachertweet!"

Then, as if on cue, the class settled down. They answered Clapper's query about why he wanted them to cite articles from The Washington Post and The New York Times, and began proposing topics: obesity, gun control, student loans.

"School closings!" one young man exclaimed.

"Well, what can Congress do about that?" Clapper asked. "Remember, this has to be an issue the United States Congress would take up."

"How do schools get money, anyway?" the student asked.

Clapper ran down the basics-typically about 50 percent local property taxes, 40 percent state funds, and 10 percent from the federal government. "So you'll need to focus on federal funding, since this is the US Congress," he said, and a purposeful mood slowly cemented its grip on the classroom.

To watch Clapper in action—peppering his instruction with inside jokes, persuasively telegraphing amazement when a student hits on a personal eureka moment, picking just the right moment to rein in and redirect a runaway digression—is to be reminded of how much subtlety goes into great teaching. It also bespeaks a drive to create a school culture that contrasts sharply with the highly regimented approach associated with the most influential innovator in urban public education in the last decade, the Knowledge Is Power Program network of charter schools, co-founded by Dave Levin and Mike Feinberg C'91 ["Alumni Profiles," Nov Dec 2000].

"A school shouldn't be expected to create people who can sit at desks and copy notes and take tests," Nora Chambers says. "I think a lot of schools in Philadelphia are getting press because when people walk into the classroom, students who have been traditionally considered unmanageable and unruly are sitting down and facing forward-and that's, like, amazing. I think that's

just a horrible expectation to have of children and schools. I think that that's standing in our way of what a good student looks like, is keeping us from making progress."

Many of the students who've opted for The Workshop School appear to appreciate the change.

A week before Clapper theatrically purloined her laptop, that young woman expressed gratitude for the school's small size, pride in a project she'd done on the effects of stress on teen mothers, and unexpected joy for an auto-mechanic class in which she was learning about aerodynamics. Eleventh-grader Josh Pickford marveled at how the lunch hour can seem to intrude upon his project rebuilding a car engine, instead of the other way around.

"You're just working and having fun at the same time while you're learning more stuff," he told me. "So when they say it's lunch time or whatever, you're like, I want to finish! I want to see what else I can do!"

Tajair Delbridge, a wiry freshman who'd like to be a professional basketball player, appeared to be further along toward his secondary aspiration of a career in architecture. For the first round of student exhibitions in late November, he displayed a bridge he had built out of 28 popsicle sticks and a few feet worth of 1/8-inch-thick wooden rods. He'd wanted

to model it on a Wichert truss, but had settled on a Fink truss since his materials wouldn't bend easily into arched segments. To test its strength, he had suspended a bucket from the span and poured sand into the bucket. He never managed to discover the bridge's full carrying capacity. When he pushed the load past 115 pounds, the bucket broke.

he Workshop School seems to be doing right by Tajair Delbridge.

"The middle school I went to, we just sat at a desk and just wrote on paper all day. At this school, we actually do hands-on stuff-to learn math, we actually build stuff," he says. "They give us more control of our time in school, but it's up to us to get it done. They teach us, but we have to turn it into a learning experience."

One of the challenges the school will face is converting that experience into measures of student assessment the city and state can accept. Students can hardly be expected to pass standardized tests pegged to classes that don't exist here-like, say, ninth-grade biology, which these students approach through a unit on the carbon cycle and a project investigating how food and sleep affect their bodies. So Riggan is working on "a system where the assessment is just baked into the work."

"Every one of these students at this point has an online portfolio of all their project work, which has been assessed using rubrics that are pegged to national standards," he explains. Whether The Workshop School ultimately succeeds or fails, such a tool could be useful to other schools, and could have a salubrious influence on the increasingly contested debate about school accountability. (The state and district are giving the school ample leeway in developing such a model, Riggan says, but in the meantime the students will have to take at least some of the same state standardized tests as their peers in other schools.)

Ultimately, Riggan believes schools should be held most highly responsible for outcomes after graduation. The Workshop School's goal, he says, is not single-mindedly focused on college. "We have some really terrific students who want to go into the work force. We have students who frankly need to-they're supporting families," he says. "So having a good career option is fine. But we want everyone to graduate having been accepted to college. The career should never be the thing you go into because you don't have any other choices."

It's still early, but data from the pilot years is promising. Riggan says that all the students in the first two cohorts graduated, and more than 90 percent were accepted into at least one college. Of those in the first cohort who attended, he says about three-

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quarters are still enrolled after one year. (According to recent research by Robert S. Feldman and Mattitiyahu S. Zimbler of the University of Massachusetts-Amherst, about 30 percent of first-year students at four-year colleges, and 45 percent of students at two-year colleges, do not return for their sophomore year. Poor and minor-

going to jump up and down and say we've got it all figured out," Riggan allows, "but it was certainly enough to make us feel like we were onto something."

ity students are at greater risk for dropout.) "It's really small-scale, and we're not

Walking the cinderblock halls and observing classes in this unlovely building, it is easy to share his optimism. For the moment, at least, a spirit of hope and purpose dwells here.

Yet it is also easy to wonder how long its founders can sustain that. The Workshop School may be rooted in the conviction that what ails urban public education is primarily a matter of pedagogy. But even if its roots are planted in School District soil-in compliance with union contracts and the rest-they are fertilized by a windfall of outside money that any other school in Philadelphia would kill for. In addition to its two big grants, the school has raised a considerable amount through its own 501(c)3 organization. It all adds up to a level of funding that, on a per-student basis, dwarfs the University's financial support of the nearby Penn Alexander School, which has played a critical role in limiting class sizes at what has become the District's most envied neighborhood elementary and middle school. (Visit thepenngazette.com for a summary of Penn's work with the School District.)

It is an open question whether The Workshop School's model can accommodate the class sizes that may be necessary to balance the books when the grant funding inevitably tapers off. Or whether the barebones administrative budget they've adopted to concentrate maximal resources on teaching will withstand the expansion of the student body. Or how much luck they'll have replacing broken Smartboards or obsolete student laptops.

The Workshop School's visionary founders face these questions with the confident expectation that their own experimental setbacks will ultimately form the basis of lasting resilience. But making the most out of failure might not be the most daunting prospect. Coping with success might prove trickier, because it will deliver them back into the straits that have proved so perilous in Philadelphia: being one school among many in a district richer in hope than resources.