Some Chicago schools are using the latest and fastest technology. But hundreds more lack what they need to live up to the district’s vision.
Moving the legacy forward

By Lorraine Forte
Editor & Interim Publisher

When Catalyst Chicago went to press with this issue, lawmakers in Springfield had finally passed a stopgap budget that will let schools open in the fall, in Chicago and in other districts that had sounded the alarm about possible shutdowns. After a year-long stalemate, the temporary budget will allow the wheels of state government to continue turning for a time. Low-income college students will receive long-awaited grants for tuition, road construction projects will move forward and social service programs will get an influx of much-needed cash.

But there’s no reason to breathe a sigh of relief, at least for longer than a few seconds. As one legislator aptly described it, the budget bill was nothing more than “a cowardly way to pretend we have done something”—conveniently before November, when all 118 state representatives and 40 of 59 state senators are up for re-election. A six-month budget only kicks the problem down the road and sets the stage for another stalemate in January.

With the bill, Chicago schools will get an extra $135 million in state aid and $205 million to pay toward teacher pensions, plus keep $74 million the district was projected to lose because of declining enrollment. The School Board also got the authority to levy another $250 million in property taxes to pay for pensions. The agreement, according to a story in the Chicago Sun-Times, came after back-and-forth between Mayor Rahm Emanuel and Democratic leaders, who initially asked for $650 million, and Gov. Bruce Rauner and Republicans, who wanted pension reform.

Even with the compromise, Chicago still must come up with another $300 million to close its deficit, and it’s unclear what the resulting impact will be on classrooms.

Further down the road, in 2017, the district’s pension bill for teachers will be $700 million.

Catalyst has reported on the annual budget crises in CPS, and the fight for school funding reform at the state level, since the publication was launched in 1990. The solutions over the past 25 years have ranged from the usual—one-time infusions of extra cash, accounting tricks, tax hikes—to the truly bizarre, as when, in 2006, then-governor-turned-federal-prisoner Rod Blagojevich proposed selling the Illinois Lottery to raise money for education.

It’s infuriating that our schools and colleges—not to mention our safety net of services for the most vulnerable, our parks, our roads, our public employees, every person and program that makes Illinois run—are left to rely on last-minute fixes rather than a real solution that would reform the state’s tax structure and funnel revenue to vital services.

What’s even more infuriating is that we, as citizens and taxpayers, have to tolerate lawmakers and a governor who repeatedly violate the public trust by refusing to acknowledge reality and fix our state’s fiscal problems.

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In a World Where Even Those children from the lowest-income households typically have their own cell phones, how real is the “digital divide?” As it turns out, quite real for children in Chicago Public Schools, as we report in this issue.

Schools in Chicago and elsewhere are turning more and more to ‘personalized learning’ models that rely on technology, which adapts as children progress through increasingly difficult lessons. CEO Forrest Claypool has called it “the future of education.” But in CPS, that future is hazy: Most schools, especially those in lower-income communities of color, don’t have enough up-to-date computers, reliable internet or trained teachers to fully integrate technology into the classroom.

Some lower-income schools have flourished with the help of outside fund-
Teacher Rozy Patel oversees a science lab assignment at Edgebrook Elementary. The school focused professional development on integrating technology into the classroom this past school year. Parent donations outfitted Patel’s classroom with microscopes and other supplies, freeing up resources for other necessities. [Photo by Max Herman]

The question of tech equity

District leaders want schools to integrate more personalized learning technology in the classroom. But many schools lack up-to-date computers, fast internet access and quality teacher training, compounding the tech disparities students face at home. PAGE 4

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ON THE COVER:
A student at Chicago International Charter School’s West Belden campus works independently on an online literacy program, while a small group of her classmates receive direct instruction. West Belden has embraced a personalized learning model that relies heavily on technology — a schoolwide transformation that’s been boosted by grants and teacher training from outside funders. [Photo by Max Herman]
Though it has adequate internet access, Ashburn Community Elementary is one of hundreds of schools without enough devices for one-to-one computing. [Photo by Stacey Rupolo]
The question of tech equity

Technology isn’t a silver bullet for learning, but schools can’t reap any benefit if they don’t have what’s needed to make the best use of it: fast internet, enough computers and trained teachers.

By Kalyn Belsha

The red-brick building of Ashburn Community Elementary School sits on a quiet street of bungalows, two blocks from the commuter rail line that cuts through the city’s Far Southwest Side.

The principal, Jewel Diaz, is a veteran who’s led Ashburn since 2003, the year after it opened. Nearly all of her students are low-income children of color, and a survey the school conducted last year showed that dozens of them don’t have internet access at home. To make up for this, Diaz has tried to compensate at school.

But with a tight budget, Diaz says buying enough computers is like “trying to climb a different mountain” each year. Cuts are on the horizon, and new purchases for the coming school year will “go out the window.”

“Everyone should have the same playing field, but that’s just not how things work,” Diaz says. “So we find ourselves scrambling and being creative, trying to make sure our students have the same things as everyone else.”

Ashburn’s dilemma isn’t unique. Many Chicago public schools face similar problems, whether it’s a dearth of up-to-date computers, internet too slow to accommodate digital learning or a lack of teacher training on how to integrate technology into the classroom.

At a time when technology is becoming ever more deeply embedded in daily life and as a part of education, the digital divide in schools is particularly significant in Chicago. Nearly 90 percent of CPS students are low-income children of color, and are more likely than their peers to lack the latest technology at home.

Janice Jackson, the district’s chief education officer, recognizes the disparities. Despite the district’s ongoing fiscal woes, she hopes CPS will be able to shift resources to help level the playing field.

“Why should students in a selective school have access to real-time media, computers and technology, [but not] students who weren’t lucky enough to attend a selective-enrollment school?” Jackson says. “For me, it’s an issue of equity and providing more access for children.”
The ‘homework gap’

Children without internet access at home find it harder to finish homework that requires research—a digital divide known as the ‘homework gap.’ In parts of Chicago’s South and West sides, fewer than 40 percent of households have high-speed internet, compared to more than 80 percent on the North Side.

The ‘homework gap’

Access to Technology

The digital divide in schools compounds what low-income students often experience in their homes and communities. In the education world, the disparity is known as the “homework gap” because it limits students’ ability to complete their assignments outside of school.

Nationally, according to the Pew Research Center, some 5 million households with school-age children lack high-speed internet access at home, and they are disproportionately low-income, black and Latino. Among Chicago schoolchildren in sixth through 12th grades, about 8 percent lack any kind of internet at home, according to a 2013 report by the University of Chicago Consortium on School Research. About one-quarter of students said they lacked a high-speed connection.

Other studies confirm those findings. A Harvard researcher found that poor Chicago households with children were less likely than other households to have high-speed internet, according to 2013 data. And Chicago ranked among the 25 worst-connected large cities for poor families, according to the National Digital Inclusion Alliance’s analysis of 2014 data. More than half the city’s households that have an annual income of $35,000 or less don’t have any internet access at home.

Geography illustrates the disparity. In many North Side communities, 80 percent or more of households have high-speed internet, but in some predominantly black parts of the South and West sides, that drops to 40 percent or less, according to 2014 Federal Communications Commission data.

Since 2011, the Mayor’s Office has partnered with Comcast on a program aimed at closing the homework gap by providing $10-a-month broadband internet and $150 computers to low-income families with school-age children. Some 35,000 Chicago households have connected to the internet through the program—more than in any other city.

Comcast has also set up “learning zones” in Chicago over the last three years to provide students and others with free access to the internet and computers at community organizations in neighborhoods with limited internet access. One zone spans Bronzeville, Englewood and North Lawndale, while a second is in Edgewater, Rogers Park and Uptown. A third, added this year, includes Fuller Park, Washington Park and Englewood.

BUT WHILE THE DIGITAL DIVIDE IN HOMES IS EVIDENT geographically, the digital revolution in schools is not.

Even though most schools lack extensive, up-to-date technology, a Catalyst Chicago analysis of data from fall 2015 found that the disparities don’t fall along the usual lines of race, class and community often seen in CPS.

Schools in the same neighborhood sometimes offer students vastly different exposure to technology. In Little Village, Castellanos Elementary School got a shipment of iPads when it became a “welcoming school” and took in children displaced by school closings in 2013; now, the school has more than two devices per child.

But a dozen blocks away at Spry Community Links High School, there was one device for every two students last fall. Since then, Principal Francisco Borras says, the school won some Chromebooks as a finalist for a competitive technology grant and purchased more. But to get to his desired ratio of one Chromebook per student, Borras is hoping another private grant will come through. “There is still overwhelmingly a need for access to technology,” he says.

The district tries to help needier schools by offering them donated equipment, a lower-cost leasing program and shopping events where schools can buy repurposed technology from within CPS.
But more than three-quarters of schools — 395 of 515 — still had less than one device per student last fall, whether a desktop, laptop or tablet, according to a Catalyst analysis. (The data doesn’t indicate the age of the devices and does not include charter schools.)

Principals have control over their technology purchases and not all believe one-to-one computing is necessary. But educators at low-income schools often say they would prefer for students to have their own device. CPS officials say they are working on a new technology plan that will support one-to-one initiatives. “I believe that sharing is good, but it’s not good when it comes to technology,” Diaz says. “The student needs to have access to information quickly.”

WEALTHIER SCHOOLS CAN RELY ON DONATIONS from parents or “friends of” fundraising groups to buy technology. Some schools, like Disney Magnet School in Uptown on the Far North Side, look for corporate partners. Disney Principal Kathleen Hagstrom says school leaders have to have a business perspective. “It’s up to individual schools to figure out how they’re going to get the resources,” she says.

But low-income schools are left to compete for a limited pool of foundation and nonprofit grants to offset the costs.

Some private funders specifically target low-income schools. But competition for these grants is tough and some funders are looking for schools in neighborhoods they consider a “good investment.”

One donor is kCura, a Chicago legal software company that’s awarded $250,000 technology grants to four schools over the last three years. This year, Funston Elementary in Logan Square beat out 56 other applicants, including Spry. kCura’s Dorie Blesoff says Funston stuck out because of its strong administrative leadership, involved community and ability to do “more with less.”

“We really have had no extra money for any type of technology this year, so this is enabling us to purchase things that otherwise our students literally would not have,” says Funston’s principal, Julie Hallums. The grant will pay for teacher training and an iPad or Chromebook for nearly every student.

But schools sometimes struggle to articulate well-thought-out plans that funders are looking for. “A lot of times, what we see is they don’t have that vision for themselves because there has not been an opportunity for them in the past,” says Trevor Drewry, who until recently oversaw workplace engagement and corporate giving at kCura.

District officials say they’re working to expand this program and are looking to bring in more companies interested in supporting schools in this way.

THE MORE COMPUTERS AND OTHER DEVICES a school has, and the more students use them, the more internet bandwidth is needed. But many Chicago schools lack adequate connectivity.

Three years ago, the federal government launched ConnectED, an ambitious program aimed at bridging the digital divide for students in low-income schools, including those in rural, web-isolated areas.
Noting that just one in five U.S. students had access to high-speed internet in their schools, President Barack Obama called for targeting and increasing federal E-rate funds to bring faster broadband to 99 percent of students by 2018. E-rate reimburses schools and libraries for spending to upgrade internet connections and pays their phone and internet bills. High-poverty and rural schools get more money.

The ConnectED initiative has had some success nationally. According to EducationSuperHighway, a nonprofit that advocates for better internet access in schools, 77 percent of the 6,800 districts that paid for broadband with E-rate last year met the federal government’s recommended target for internet connectivity. That’s up from 30 percent just two years prior.

But Chicago is not meeting the federal target for internet access of 100 kilobits per second per student — the minimum bandwidth experts say is necessary for digital learning. According to a Catalyst analysis of CPS data, 41 percent of 515 schools don’t meet the target, and just over half of those are among the city’s highest-poverty schools. (Data do not include charters.)

Chicago applied for $23 million in E-rate funds to upgrade internet connections in schools this year. But in the face of ongoing financial troubles, CPS didn’t finish the work it had proposed, and got just $3.8 million for upgrades in 50 schools. CPS has asked the federal government for an extension to finish the work so it can get the rest of the money. Without that permission, the remaining $19.2 million will disappear.

The 50 schools were chosen based on the age of their internet infrastructure, district officials said. Schools that had more problems with connectivity in the past or had an online learning initiative got higher priority.

Shoop Academy of Math, Science and Technology in Morgan Park on the Far Southwest Side was one of the 50.

Principal Salik Mukarram says his school needed better internet to accommodate its growing technology inventory.

When Mukarram arrived at Shoop three years ago, the school had just one laptop cart and a computer lab of out-of-date, often-broken machines. This year, the school has about 210 devices — or about one for every three students — including iPads and Chromebooks.

“No we can have every device on and we don’t have to worry,” Mukarram says. “We can go full-blast and I know our building can handle personalized learning or web-based programs.”

Connectivity problems are especially common in older schools, something teacher Jason Pitak has seen at Belmont-Cragin Elementary, parts of which date back to 1920.

“Some areas of the school are dead zones,” Pitak says.

To reach the federal government’s even higher internet connectivity goal for 2018, significant investments will be needed. Catalyst found that just one in eight district-run schools met the government’s higher target of 1 megabit per second per student last fall.

CPS officials plan to upgrade connectivity at all elementary schools and to apply next year for an additional $8.8 million in E-rate funds for better broadband routers. High schools
Closing the digital divide for all students

A teacher and former Chicago Public Schools student says technology can be a game-changer for ‘young people who need opportunity the most.’

By Jose Frausto

I attended a neighborhood public school in Chicago where, from a very early age, I felt the difference between technology haves and have-nots.

As a teacher in the system, the impact of the same, persistent gaps are even more apparent — and troubling. According to a 2013 University of Chicago study, so-called “at-risk” youth in our city are less likely to use technology than their more affluent peers. The same report suggests that increased technology use is correlated with improved student outcomes, stating that “students in schools with higher-achieving students use computers and the internet more than other students, as do those who attend selective enrollment high schools.”

Why is it that, in an era of mobile computing, “freemium” apps and high-speed internet, our poorest students still lack access to the basic technology and tools they need to help them succeed?

Like many low-income public schools in Chicago at the time when I was growing up, my elementary school had a single computer lab equipped with desktop computers. And that lab wasn’t for everyone — it was only used by students who needed to do remedial, catch-up work. The first time I used a computer wasn’t until eighth grade, through a program for high-potential students that was designed to provide us with some exposure to technology before we entered high school.

I went on to enroll in Whitney Young High School, a selective-enrollment school. Suddenly, technology was everywhere. We had two computer labs, a TV production lab and a media lab. It was an amazing transition that made me feel empowered and trusted. For the first time, I was in control of where my future was going — because I had the right tools at my fingertips.

This is where my passion for education began, and part of what drove me to become a teacher. I knew — even then — that if more students had access to these kinds of resources and experiences, it could be a game-changer for their future even if they came from impoverished backgrounds.

For the past 13 years, I’ve been teaching at Enrico Tonti Elementary School in Gage Park, a school that has the luxury of providing our students — most of whom are lower-income Latino children, a third of them English-learners — with access to technology. For many of our children, school is their best opportunity to learn how to use technology.

To offset tight budgets, we have applied for grants and other assistance whenever possible. The effort has been worth it. And Tonti has experienced academic success: Our school is a Level 1 school, and our test scores, especially in math, are higher than the national average on the NWEA, the major test the district administers each year.

Students use technology during the day to work on self-paced learning programs tailored to meet their current academic skills and help them achieve their potential. Starting in kindergarten, students learn how to handle devices, type and even code. Eventually, students learn to create digital content, and by fifth grade, they design their own websites. In a survey we gave, nine out of 10 students said that they pay more attention and focus better when using technology.

Enrico Tonti is proof that technology can help students succeed.

Although our school district has come a long way since my time in elementary school, there’s still more we can and must do to narrow the technology gap. In a city where poverty and crime are closely linked, we must find ways to engage those of our young people who need opportunity the most. It’s the only way to bend the curve of systemic poverty and make our city safer and more prosperous.

Of course, technology is not an end in and of itself. It will not address the range of social and educational challenges our children face, inside and outside schools. But we must be aware of the message we are sending to our students if we fail to address the access barriers that exist within our system. Let’s be sure we are not forgetting our city’s most vulnerable youth, and that we are equipping them with the tools they need to succeed.

We’ve made some progress since my years as a student, but our work is not finished.

Jose Frausto is a technology teacher at Enrico Tonti Elementary School, chosen as an Innovative School of the Year by CPS. He also contributes to the Smarter Schools Project, a national forum highlighting the positive use of technology in the classroom.

We will continue working to upgrade our schools so that each of our students has access to high-speed broadband, 1:1 technology and computer science education, among the other essential resources that a 21st century education requires,” CPS spokesman Michael Passman said in a statement.

Even with more computers and better internet, schools still need teachers with the right training to incorporate technology into their classrooms.

Yet the vast majority of schools lack a technology coordinator to implement digital learning and oversee technology. Just 125 schools had full-time technology coordinators as of this spring. A majority of those schools offer special programs focused on math, science and technology, or a selective program for higher-achieving students. In other schools, staff pull double duty to juggle technology responsibilities.

Training on how to use technology is especially critical in lower-income schools. Children in these schools are more
Ed Tech Spending

CPS schools that bought ed tech products in 2015 spent an average of $30 per student, but the impact on achievement is still in question

By Melissa Sanchez

When Microsoft co-founder and billionaire philanthropist Bill Gates spoke this spring to a packed ballroom of school leaders, education technology entrepreneurs and investors, he issued a startling assessment, given the audience: Ed tech has not moved the needle on student academic outcomes.

“Although there are examples of classrooms and software packages doing a good job today, we really haven’t changed the outcomes,” he said at an ed tech summit in San Diego in April.

Gates’ statement was an admission that the billions spent on educational technology in recent years have done little to close the achievement gap between wealthier, mostly white students and lower-income students of color.

But, school district leaders nationwide continue to roll out more technology, in the hope, shared by Gates, that the tech revolution will bear fruit. Hundreds of start-up companies have cropped up in major cities, including many in Chicago, to create, test and sell software and other products in a market that by some estimates is worth $8 billion.

In Chicago, district officials say that schools spend some $27 million a year on ed tech products. That figure is an underestimate because it doesn’t take into account the outside, private dollars that supplement school-level purchases.

Adaptive technology that’s popular in personalized learning programs can make it easier to teach students who are in the same grade but at radically different academic levels.

Chicago Public Schools CEO Forrest Claypool calls personalized learning “the future of education” and plans to offer incentives to schools to adopt the approach next year, though it’s unclear what those incentives will be given the district’s fiscal woes.

But there are questions about how much stock schools should put into expensive software and products that are largely unproven in terms of academic benefit. Skeptics also worry about the influence of local and national nonprofits and wealthy individuals who support the trend, many of whom made their fortunes in technology ventures and are involved in the increasingly controversial charter movement.

Carol Caref, a researcher with the Chicago Teachers Union, worries that the encroachment of more technology into classrooms will come at the expense of teachers and aides. “We’re not [against] technology,” Caref says. “But I am concerned about the direction education is going and the impact this has on the development of students as people.”

CHICAGO’S EXPERIENCE SO FAR bears out at least some of this skepticism.

A Catalyst Chicago analysis of a CPS spending database shows that nearly every district-run school bought some type of ed tech product in the 2014-2015 school year, spending an average of $30 per student — up from $19 four years earlier. Some 284 companies sold products to CPS, mostly to individual schools. Elementary schools tended to spend more than high schools.

Yet there is no clear connection between spending and achievement. And many schools sink money into costly products one year, only to discard them the next.

Bogan Computer Technical High School, for example, spent $53,000 in the 2014-15 school year, but then slashed ed tech purchases after staff realized they went overboard.

“I could see where it’s tempting to say ‘Oh, this program will solve my [achievement] problem’ but it won’t,” Principal Alahrie Aziz-Sims says. “I can say most of the [instruction] that I see that’s high-quality from teachers in classrooms has nothing to do with a program.”

Researchers and those who promote education technology echo her sentiment, saying that the products are tools that are only as good as the teachers who use them. “Technology alone doesn’t solve this,” Gates said at the April summit. “It’s a combination of great teachers using the technology in the right way.”

Dilara Sayeed, chief education officer for the Golden Apple Foundation, wrote her 2015 doctoral dissertation at Harvard University’s Graduate School of Education on ed tech in CPS. She says principals are inundated with sales pitches and struggle to figure out whether any one product would be useful for students.

Sayeed found that companies with the most aggressive sales teams got the most business.

“Their products could have been great. But in terms of how many schools a company was in, it came down to how much money you had for salespeople and business, or how excited one teacher was about a product demo and their level of influence with the principal,” she says.

Since few companies publish list prices for their products, price-gouging is a risk. To avoid this, principals often spend extra time calling up colleagues to compare prices.

“I worry about the person doing the purchasing who does feel bad about questioning a line item to do a roster sync for $500,” says Marcos Alcozer, director of technology at Intrinsic Schools'
campus on the Northwest Side. Alcozer says he's written similar coding language to merge student rosters in 30 minutes.

“So $500, or essentially $1,000 an hour for an engineer, is ridiculous,” he says. “But it’s very unlikely that people know that stuff.”

In fact, price-gouging has become a national concern. The Bill & Melinda Gates Foundation is now funding a group to help districts share information about technology prices. Its first target, ironically, is a product made by Microsoft’s chief competitor: the Apple iPad.

UNLIKE SOME OTHER DISTRICTS, principals in Chicago have autonomy over what technology they purchase. But to help them make better selections, CPS is researching whether there are any correlations between popular ed tech products and higher achievement for students. But there’s no timeline for when this research will be finished.

Meanwhile, schools have only a “preferred vendors list” covering products that meet certain technical standards (for security, student privacy and internet bandwidth requirements), but without any standard for academic quality. Other efforts, including an interactive catalog where principals and teachers could write and share reviews of products, have stalled in the wake of administrative turnover.

Shawn Jackson, CPS chief officer of leadership and learning, says that “there’s a sense of urgency, but we need to do this right. When you start putting it out there as best practice you have to make sure you’ve done your due diligence.”

In the vacuum of CPS guidance, the nonprofit LEAP Innovations has emerged as a go-to source for information and training on personalized learning — and money to pay for it. “They were able to offer something that the district couldn’t offer — a space to do this research and development,” says CPS Chief Education Officer Janice Jackson.

Phyllis Lockett, a well-known figure in Chicago’s education reform community, started LEAP in 2013 and recruited high-profile financial and corporate executives for its founding board, including then-BMO Harris Bank President and CEO Mark Furlong, who would go on to become a School Board member.

Lockett previously headed the pro-charter group New Schools for Chicago, once known as the Renaissance Schools Fund. In a statement, Lockett explained why she launched LEAP: “While there has been important work done by the education reform community, change is not getting to our classrooms and our students quickly enough. What we’re proposing isn’t simply a new program — it’s to transform the education model, from one-size-fits-all to personalized paths for each and every student.”

LEAP is based in 1871, a tech incubator at Merchandise Mart that’s also home to several ed tech startups and some of their investors.

The organization’s most exclusive program gives schools more than $300,000 in “Breakthrough” grants to launch personalized learning schoolwide. The program is the regional version of the Next Generation Learning
Challenges, a national initiative with backers that include the Gates, Hewlett, Broad and Michael & Susan Dell foundations, among others. The Chicago Public Education Fund also supports LEAP.

“Breakthrough has opened our eyes to innovative approaches to teaching and learning,” said Lovett Elementary Principal LeViis Haney during a May ceremony in which the Austin school was named a grant winner. At Lovett, students in second through fifth grade use a personalized learning model that's familiar throughout LEAP schools.

LEAP’S “PILOT NETWORK” is a sort of stepping stone for schools that want use personalized learning and eventually go on to compete for the Breakthrough grant. The program provides teacher training that schools can't get anywhere else and ed tech proponents say is critical.

To participate in the 18-month Pilot Network, schools must apply and pay $25,000. Lockett says that's only a third of what it costs to provide the training and other supports, but some principals say that price tag is still unrealistic given cuts to school budgets.

The companies whose products are part of the pilot program gain a competitive edge with schools, something LEAP touts in its promotional materials: “Last year, 86 percent of Pilot Network school teams adopted their edtech product after pilots ended.” Though Lockett says personalized learning doesn’t require technology, so far, every one of the two dozen or so pilot schools have used it.

In a report released this winter on the first-year results of the Pilot Network, LEAP credited ThinkCERCA and Lexia Reading Core5 — two literacy-focused technology products chosen by schools — with “closing the achievement growth gap” on the NWEA for low-income students by 45 percent. The two products were already growing in popularity, with contracts at 122 schools totaling more than $900,000 last year. And the companies are backed by big investors with deep ties to Chicago’s political elite, who sit on the board of the high-powered Public Education Fund.

Lockett says there’s no potential conflict of interest because the Fund’s donations to LEAP are for its Breakthrough program, not the Pilot Network.

LEAP declined to provide information about products that failed its vetting process, saying “there are many reasons” they don’t make it into the pool offered to pilot schools. “It would be unfair to make those names public and have the public make inferences about why they were not selected,” Lockett says.

The district is now planning to launch its own version of LEAP.

“Our goal is to take what they’re doing and put it on a broader scale,” Jackson says. “Obviously anything we would do, the public would have access to that data.”

Kalyn Belsha contributed to this story.
The building blocks for digital learning

Schools that have embraced technology in the classroom have much in common. But the one element that’s indispensable is cash.

By Kalyn Belsha and Melissa Sanchez

Six years ago, Chavez Multicultural Academic Center joined a district pilot program aimed at giving students more time in school in order to improve their academic performance. The pilot gave Chavez, located in the Back of the Yards neighborhood, an extra 90 minutes for its school day and a computer for nearly every student.

Many teachers worked the extra time for a lower hourly wage, paid through the YMCA, so they could help students master the new software for math and literacy that the program provided.

A year later, Chavez moved up to the district’s highest academic rating. So when the pilot ended, Principal Barton Dassinger and his staff decided to keep it going. Dassinger used part of the school’s discretionary budget to pay teachers at their union rate for an extra hour of work four days a week to continue helping students use the software.

Over time, teachers began to incorporate it into lessons during the regular school day.

Chavez is now considered a “model” neighborhood school for personalized learning, which aims to give each student unique lessons based on their abilities and relies on technology that adapts as students move through progressively challenging lessons. Dozens of educators from Chicago and across the country visit Chavez each year to learn its strategies.

This personalized learning approach is part of a growing national trend that CPS wants more schools to adopt.

There’s a big roadblock to that, however: Money.

Like Chavez, other schools that are considered models have gotten hundreds of thousands of dollars in outside grants to train teachers, buy technology and even purchase new furniture to outfit classrooms. These schools also tend to have veteran principals and less teacher turnover. Some have longer school days or have transformed schedules to carve out time for teachers to collaborate on lesson planning and get coaching.

Many model schools also have received extensive teacher training and funding from LEAP Innovations, a Chicago nonprofit that helps schools vet products and implement personalized learning. Through their signature program, Breakthrough Schools, they’ve committed to give $4.5 million to 22 schools.

This fall, the district says it wants to follow in LEAP’s footsteps by providing training and technology to a small group of principals and teachers from schools that want to implement personalized learning. But as CPS faces one of the worst deficits in its history, the district has yet to provide any details on how it plans to pay for the support.

Even so, the district is now drafting a personalized learning framework to encourage principals to consider the model. It’s also looking to hire an “executive director of personalized learning,” and plans to open a model classroom in Dyett High School when it re-opens this fall.

“We want to create not only an overall vision and framework for personalized learning, but we want to help principals and teams identify entry points, if this is a direction that they would like to go,” says Chief Education Officer Janice Jackson.

Catalyst visited almost a dozen neighborhood and charter schools that are implementing personalized learning programs. Here are some of the key trends they have in common:

**FLEXIBLE LEARNING SPACES.** One of the most visually striking characteristics at some schools are the big, open spaces — taking the place of smaller, traditional classrooms — filled with large numbers of students who work in small groups or on their own, under the direction of two or three teachers. Perhaps the best example is Intrinsic, a charter middle and high school in the Northwest Side that opened in 2014 with this type of layout. The furniture, too, is non-traditional, including desks with wheels that students can easily move around.

During a visit to a ninth-grade Eng-
lish class, about 60 students were split into four groups in one of the spaces. The groups rotated every 30 minutes among a team of three teachers, each of whom taught different aspects of that day’s theme: dystopias and utopias. Students in the fourth group read independently against a back wall.

“At other schools the teacher is always there but sometimes, because there are so many kids, they can’t pay attention to everyone,” said student Alexander Hernandez. “But here, they have time to be with every student.”

Every student at Intrinsic has a Chromebook that he or she can take home. But even though technology is an integral part of learning, it isn’t used all the time in every class. One group in the English class worked the old-school way: writing their analyses and annotations of a text by hand on printed handouts.

“When we first started [the school] we had almost no paper. But what we’re realizing, in reading especially, is that physically highlighting a piece of paper and annotating text seems to work for kids better,” recalls Intrinsic founder, principal and CEO Melissa Zaikos. “We still make a lot of copies here.”

Their experience echoes research suggesting that people absorb information better when it is read in print. One recent, small-scale study found that adults who read a short story in print recalled information more accurately than those who read the same story in digital form.

**LETTING STUDENTS WORK AT THEIR OWN PACE.** It’s not uncommon to see students of varying ages and grade levels working in the same classroom in these schools. Students advance as they master skills, rather than simply progressing according to a set calendar. That could mean a third-grader who is struggling with reading gets extra phonics help with a first-grade teacher, while advanced students travel to a selective-enrollment high school to take math classes.

At Belmont-Cragin Elementary, some students will get a chance to work on their own personal projects. Earlier this winter, the staff emptied out an old computer lab and converted it into a “maker’s space.” The room has large tables for students to build projects with materials like Lego blocks that teachers have won through private grants. Teacher Jason Pitak is also applying for another grant to buy a 3-D printer.

The idea, he says, is to give advanced students in the middle grades the chance to finish their weekly assignments early and spend Fridays in this room working on projects.

“Instead of them being bored and causing problems because they’re done with their work, what if we gave them the schedule for the week on Monday?” Pitak said. “They knew the assignments they had to do. Kept on track, did their work. And then on Friday, they had time to work on an interesting project.”
Dassinger’s massive spreadsheet at Chavez is famous among principals — one described it as “mad genius” — and even impressed CEO Claypool on a recent visit.

which students need to move where.

Four instructional coaches help teachers plan and can step in to conduct lessons when teachers are observing one another. The school also dismisses students early on Wednesdays to give staff another 90 minutes of planning time.

During this time, says special education teacher Whitney Sullivan, “I can see what’s coming up in social studies and see what supports teachers need.”

CREATING PROFILES OF STUDENTS. Many schools create individual profiles that list students’ academic strengths and weaknesses, outline how they prefer to learn and set goals for improvement. At Chicago International Charter School’s West Belden campus, profiles are developed after teachers hold conferences with students and parents weigh in.

In one example, David Diaz, a fifth-grader, told his teacher that he likes to build with his hands and do research on his own. He also prefers to show what he knows using technology, like creating a slideshow on his Chromebook. David says his positive attitude is a strength, while math and staying focused are areas he’s working on. David’s parents also let his teacher know that he sometimes chooses books that are too easy. His teacher urged him to pick books that are more challenging — “like Divergent and Hunger Games,” David says.

USING DATA TO IMPROVE TEACHING. Schools that commit to personalized learning often navigate complex sets of data as they try to understand how well students are performing.

Dassinger’s massive spreadsheet at Chavez is famous among principals — one described it as “mad genius” — and even impressed CEO Claypool on a recent visit. It includes student demographics; metrics like attendance, grades and test scores; and how well students are doing on ed tech programs. It also groups students into five categories, based on how likely they are to drop out once they get to high school, giving teachers a more nuanced picture than the district’s metric, which simply shows whether or not students are on track to graduate on time.

The Chavez principal updates the spreadsheet every few days and shares it weekly with teachers, who use it to tweak their instruction based on students’ achievement. Students keep track of their achievement data in a folder, and the school is working to make this available to them electronically.

Counselors use the data in meetings with families the summer before students enter seventh grade, so they can discuss high school options. The admissions criteria for selective high schools rely heavily on seventh-grade performance.

“We talk to kids about what schools they’re interested in and track it to see if they can get in,” Dassinger says. “If they test well but their grades aren’t good, we can plan for that.”

The school wants to do for low-income families, he says, what wealthy families can do with pricey private coaches.

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likely to experience “passive” technology use, such as sitting at a computer to work on a reading program or complete an online worksheet, says Katrina Stevens, deputy director of the U.S. Department of Education’s Office of Educational Technology, who spoke at a May panel for education reporters.

Schools with trained staff can use technology in more creative ways, like connecting online with scientists or other professionals, or teaching computer science to students.

The federal government has highlighted the need for better educator training — something that was encouraged through the ConnectED initiative. And the 2013 Consortium report on technology use in Chicago schools underscored the need for “ongoing professional development and professional learning communities for teachers” in technology.

Consortium researchers found that teachers at magnet and selective-enrollment schools felt more supported in their efforts to integrate technology into their teaching, compared to teachers elsewhere. And they were more likely to believe their schools were doing a good job preparing students to use technology proficiently.

Diaz, the Ashburn principal, encourages teachers to develop lessons to go along with educational software programs so students aren’t being told to “just go on” the computer.

For example, one seventh-grade teacher in her school uses the foundations of ThinkCERCA, a popular online reading program, to teach her students about building arguments.

Last school year, the teacher took her students to visit Chicago’s federal court building and Northside College Prep’s debate team, and then held a mock trial so students could practice what they’d learned. “There has to be teacher interaction first for the program to work,” Diaz says. “To avoid passive learning you have to look at blended models that empower students and educators. You need to integrate effective teaching.”

Melissa Sanchez contributed to this story.
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