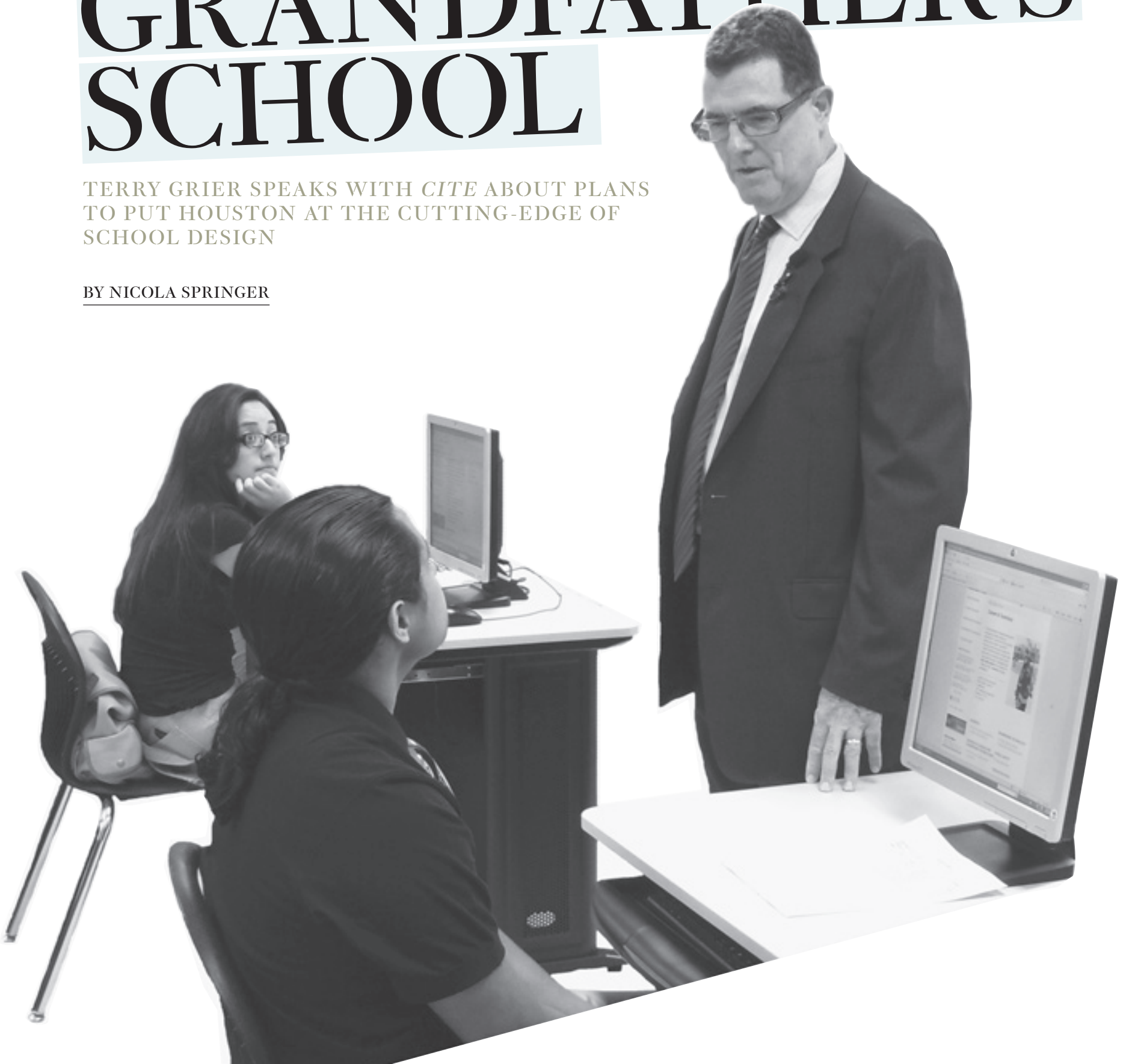


NOT YOUR GRANDFATHER'S SCHOOL

TERRY GRIER SPEAKS WITH *CITE* ABOUT PLANS TO PUT HOUSTON AT THE CUTTING-EDGE OF SCHOOL DESIGN

BY NICOLA SPRINGER



Terry Grier, the superintendent of the Houston Independent School District (HISD), spoke with Nicola Springer on March 4, 2013 to discuss what will be built with funds from the \$2 billion bond passed in November 2012. Though experiments in education are taking place in public schools across the country, no district on the scale of HISD (270 campuses, 204,000 students, and 30,000 employees) has undertaken a campaign to build “21st Century Schools” and implement “blended learning” curriculum reform. In the interview, Grier explains what Houstonians should expect and what he expects out of Houstonians.

NICOLA SPRINGER: We understand that you’ve talked extensively to consultants and architects about what you want to accomplish with the 2012 bond and visited schools around the country. What has influenced you most, what buildings inspire you, and what helped create your vision for that bond?

TERRY GRIER: First, I didn’t want to build our grandfathers’ schools. If we expect these schools to last another 50 to 60 years, we don’t really know what the future holds. With what’s happening with technology today in our world and what will continue to happen, we have to try to rethink from a futuristic lens what space and facilities ought to look like.

In addition to being warm and inviting places where kids want to come to learn, you have to think about the functionality of the space you have. Next year we are recommending to our school board that we give all of our kids in grades 9 through 12 a laptop computer to take home—24/7 education on the fly.

Sadly, our infrastructure right now won’t allow us to do that, but in about half of our high schools it would take another year to redesign the inner workings of our web design and support structure so we can spread it out in all 45 of our high schools.

If you think about what's happening with blended learning today and what's happening with online learning, we see schools being very different. I see schools 10 to 15 years from now where kids come half the day.

They are home learning the other time or they’re at school half the day, they’re working the other half. Employers may have online training for those kids. I know when I worked for Guilford County, North Carolina, we started a true early college high school there. It was a high school that was located on a college campus.

So as we’ve gone around the country and literally looked at facilities, talked to architects, and looked at designs around the world, we want something that’s going to make a big difference and look different. It’s going to feel different. It’s going to function differently. So we’re excited about that.

NS: How will the schools look differently from our grandfathers’ schools?

TG: If you look at what we have now, classrooms are too small. Lamar High School was built in 1923 when class sizes were 20 students per teacher. Those classrooms now have 30 to 35 kids in them. It’s like a sardine can. Honestly, I’m not exaggerating. You can’t walk down the aisle ways or between the desks. It’s sad. You see one biology lab, one physics lab, and one chemistry lab for 3,400 kids. That’s unacceptable. We need to have classrooms and laboratories for our kids to be successful. They don’t have that right now.

You may see a lot of glass, very thick glass. If you go in the [Highland Village] Apple store, and you just stop right before you go in, look at how thick that glass is outside the panel walls – it must be three inches thick.

You may see a lot of inside cubicles for study and small group projects again with walls made out of glass where you can monitor kids and watch them do their work. Or you may see classrooms in which the space is flexible. You may see folding wall partitions.

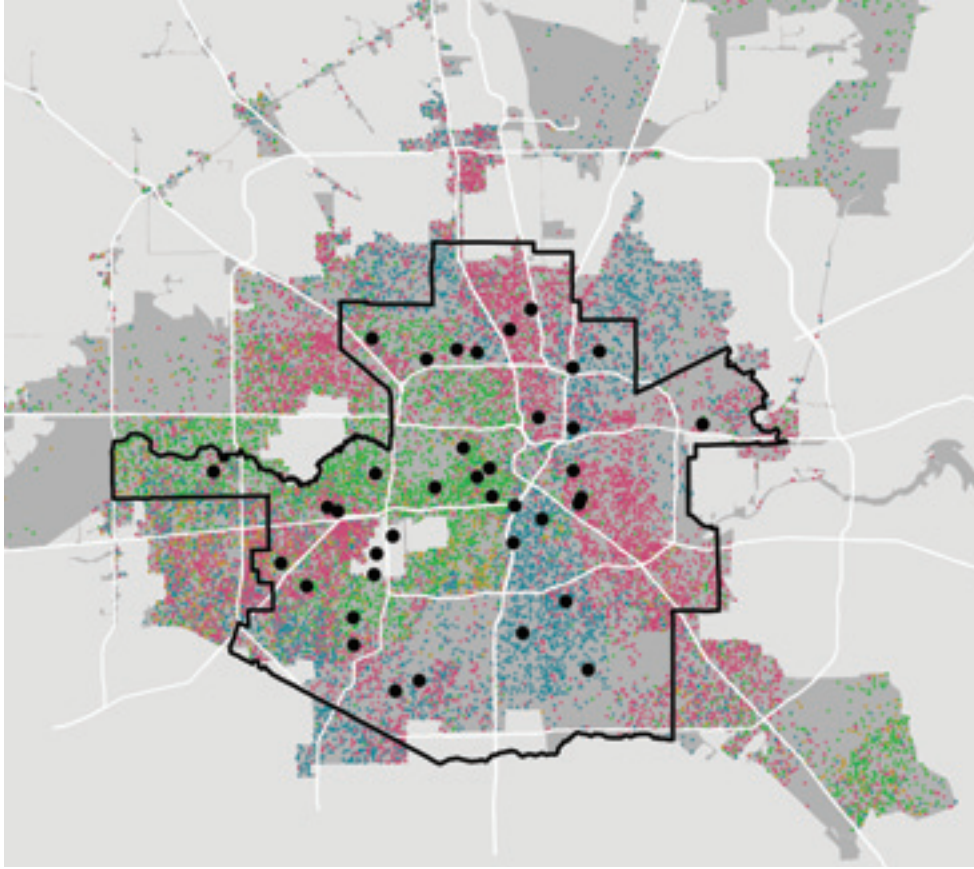
We went into a school several months ago where they had balls instead of chairs. Kids were sitting on these high-density rubber balls.

Designing schools with surround sound is very important. For kids who learn to speak English as a second language, the enunciation of the words is very important. With surround sound, the teacher wears a lapel/ear mic so that no matter where they go, kids can hear clearly.

We want schools with the capability of Skype-ing. For example, if we have a phenomenally good chemistry teacher at Lamar, we want to have the capability of Skype-ing that lesson to students all over the district. If we have a classroom large enough to hold 70 or 75 kids, we don’t have to have three teachers with them. We can have two teacher assistants while the teacher is teaching.

We also want classrooms and furniture that really encourage project-based learning. Lecturing is not the way kids learn. We know that. You look at our traditional schools and they are designed for a teacher to stay in front of the room to talk to kids all day. For example, kids can leave the classroom and

OPPOSITE: Superintendent Terry Grier makes a big impression. Photo courtesy HISD.



ABOVE: The map indicates the location of 2012 HISD Bond funded schools. The black border represents HISD boundaries.

> **LEGEND:**

- 2012 HISD Bond funded schools
- African American
- Asian
- Caucasian
- Hispanic

go in small groups to do work and everyone knows where they're going. They know that this is a project area. You have a large open area and you have seating that would make you feel like you were in Starbucks. You would have study rooms or study carrels off of each of those, maybe with the glass front.

Kids learn by doing. They learn by cooperatively sharing ideas and questioning each other's work.

NS: So you've talked a bit about the elements that are within the space. Can you talk a little bit about how you think design and aesthetics can stimulate and inspire learning? How do you see architecture contributing to that?

TG: We also need to pay a lot of attention to green schools. Since I've come to the district, all of the new schools we build are LEED certified. We're now pushing hard for platinum certification with 80 percent of the material and the schools constructed with recycled material. That's something we're going to continue to push for.

I'd like to see schools almost look like art museums. It doesn't cost more to have an innovative, creative architect to design space and create a place where kids and teachers both want to

come. Somewhere they look forward to coming. They feel safe. They feel warm. They feel comfortable and it's a place where they can both relax and focus.

NS: When you say innovative, what are you thinking about?

TG: I'm thinking of flexible space where kids can meet in large groups or small groups, movable walls, partitions that are sliding. A lot of open space, high ceilings.

Again, spaces where kids can use the technology that we have today and the technology that we're going to have tomorrow that we don't even realize or understand that we will have.

NS: One thing we appreciate about HISD is that you aren't looking for cookie-cutter schools. You're looking for a variety of designs and you're looking for people to respond to the stakeholders and all the communities.

TG: We have developed an architectural advisory selection committee. Most school districts don't do that. We've never done that here in Houston before. We have the faculty of the architecture schools at Rice, University of Houston, and Prairie View A&M. They helped us go through and analyze proposals of 86 architects for 40 jobs.

NS: In previous bonds there's always been a great concern for equity and parity. When you are looking at these different innovative experiences, how do you plan to manage for that?

TG: We told architects this is not rocket science. We have scheduled 160 square feet per child and we have scheduled \$200 per square foot. Now some schools, because of their size, may have to have something extra and we've been very transparent.

For example, at Lamar we put \$10 million more in that budget, and we did the same thing at Bellaire, because they need parking decks.

We will build, for example, the High School for Performing and Visual Arts downtown. It will cost more to build up, to put in an underground parking deck, and to have spaces for music lessons, sound-proof rooms, and small group practice venues.

For the other schools, no matter where they are in the city, it's basically the same amount of money per child per square foot per child.

NS: Right, so the program will evolve with community involvement?

TG: Yes. So your building's space is going to look different based on what-ever that community wants, such as different kinds of vocational technical programs.

NS: You mentioned blended learning. Can you expand a little bit on what blended learning is and potentially what are the other types of curriculum models that you see HISD using?

TG: Blended learning is usually when you blend online instruction with face-to-face instruction. Perhaps three days a week you're doing online work, two days a week I'm there and I'm teaching the class.

There are schools in other states called Rocketship Schools designed like a large basketball gymnasium. So on that court they have study carrels. Every kid sits in their own study carrel and has a laptop computer there. Off the side of the court, they have these study rooms and they have teachers in those study rooms. So, say, from 8 o'clock until 9:30 we're all working on social studies. And also working at our own pace on an online curriculum. There are kids from grades 9 through 12 all in there.

He may be working on U.S. government. She may be working on U.S. history. She may be working on world geography. The teacher can monitor what they're doing online, and the software now is becoming sophisticated enough so that when you get stopped, it sends a teacher an alert. So the teacher can see quickly that there are 8 students spread out in these different study carrels struggling with a particular concept. It can be math, science, whatever. So she can send you a quick email that pops up on your computer—"Please meet me in study carrel 1C." All of a sudden those kids show up. She says she is seeing that these students are having problems with square roots and so she explains that to them. She does a tutorial on square roots. You go back and you're seated.

NS: How are you going to ensure the quality of the schools being produced and make sure that lessons are being learned, that from school 1 to school 20 we're not making the same mistakes?

TG: We hired some of the best staff in the country. We've gone outside the district and have found people that have national reputations around facility design, around construction oversight. Each school will have a local oversight committee that will be made up of the principal, teachers from the high school, members of the parent-teacher association, and a student-body president.

So they will meet with the architects. They will actually have hard hats so that they can do walk-throughs. They will see the design specifications and they'll understand that the concrete is supposed to be 6 ½ inches thick, and

they'll walk out there with rulers and stick it down in there to see how deep it is. They'll see that the walls are supposed to have two or three coats of paint. They can be there to watch. We hope there will be a deep community ownership as a result of being, first, very transparent and, second, being very inclusive.

NS: So speaking of a high school like Lamar, which obviously has a lot of historic value, what is your commitment or your understanding of preserving historic buildings in Houston?

TG: If you went in and wanted to tear Lamar down, you couldn't. You would have an uprising that you could never ever quell. People would hang you by your thumbs. So you understand the historical importance of buildings like that.

Having said that, you can keep that façade, but then you tear everything else out and gut it out from top to bottom and rebuild it like you're rebuilding a downtown office building and steel infrastructure and the whole shebang.

Yet we have other buildings that don't seem to have that kind of a historical significance or importance in a community so we're going into communities and we're saying, we're giving you a choice.

NS: In some ways, with all the construction that you're doing and the many campuses that you have, there's an urban footprint that you're making on the city as a whole.

TG: Every bit of research you read around building new high schools talks about the immediate financial impact it has on community within the 3 ½- to 5-mile radius of that school—how property values go up, how it becomes the source of pride for the community, how little mom-and-pops pop up around it, how homeowners all of a sudden start taking care of their yards and their homes to a higher degree. It has a huge impact on the city.

When we finish with this project, we're going to be the only urban school district, the only large city in America, where all of its high schools have either been completely built new or completely renovated since 2000. It's going to be huge. It's going to change our city. There is no question.

The board wanted to set the bond at about \$800 million. Most people don't realize that we waited until the very last day that you could legally put the bond on the ballot in Texas. I only had three votes out of nine to put it on the ballot at 8 o'clock that morning.

We ended up with an 8-1 vote. I think it's a Houston kind of thing to do. Houston has always been a city that could think big, dream big. I knew that if we could just get this thing in front of voters that they would do the right thing about the children of Houston and they did. I'm still very excited about that. **C**

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