Houston— Where Personalized Learning Comes of Age

When Houston's initiative, PowerUp, was announced two years ago, Beatriz Arnillas became one of the key players in organizing the digital transition. "The first thing we thought about was our pedagogical model—what did one-on-one really mean? How could we utilize technology to enhance and transform teaching and learning? If teachers and students are going to have devices, what does this mean in the classroom? And when they go home? Do their homes have WiFi? If not, how much storage will they need overnight for homework? We're a large urban district, so a lot of our students come from low-income homes where wifi might not be available."

Acting as a senior technical consultant to all the schools in the system, Beatrice sits on a number of committees and strategic decision-making groups. When the transition was launched, she was able to work with other leaders on critical decisions about devices, content and infrastructure. "When you purchase a textbook, you're making a purchase for 10 years," said Beatrice. "In a district this size, we're talking about a sizeable budget. How would that kind of planning apply to digital curriculum?" With millions of dollars in curriculum materials to be considered Houston focused first on their strategy.

For the past year, every curriculum adoption at the high school level in HISD has been completely digital. "That's digital, not digitized," Beatriz clarifies. And when it is absolutely indispensable to get paper and ink, even at pre-kindergarten through eighth grade, Beatriz's groups are taking a very close look. "You still have to ask," said Beatriz, "What will they be doing at this level in ten years?" She added, "These are hard decisions."

Houston realized early on that such decisions cannot be made aloof in the central office, remote from the classrooms and teachers that will be impacted. "You have to make sure that every department and stakeholder is involved. These decisions cannot be made in isolation by the curriculum department. When you begin this process, you have to find the solutions together."

"One thing that happens when you swing open the door to digital is that you realize how many more options there are. You are no longer in total control of the learning in your classroom—your students are gaining more and more control of their learning process." Another thing Beatriz did personally, realizing the students were in many cases more familiar with working on digital devices than the teachers, was to talk with them directly. "What can I do to help you learn better?"

"It's not a matter of if we transition to a digital curriculum, it's a matter of how fast."

In Houston, they no longer talk about teaching— they now say teaching and learning.

One major concern they encountered had to do with the individuality of their teachers. "Strong

teachers will have no problem curating content. They will go online; they will search from multiple sources we have provided, and from free sources." New teachers, or those with less experience tend to need more guidance, which means, as part of strategy

Beatriz and her team in Houston have shown key pieces that would be part of any strategy to smooth ridges and give successful pathways to reaching the end goal. In Beatriz' words, "It's not a matter of if we transition to a digital curriculum, it's a matter of how fast."
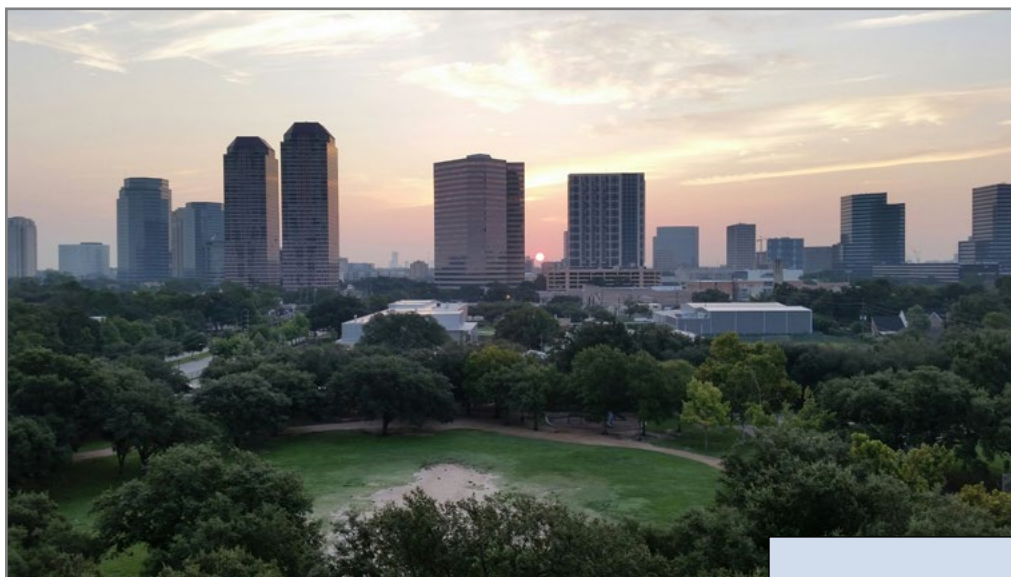
planning that the curriculum department would have to create more specific planning guides to help teachers leverage their available content.

Another aspect Houston explored is how to bring teachers into a more amenable frame of mind as regards transitioning to an all-digital curriculum. An example of this is student workbooks. "A workbook is consumable. You have to buy one for every student, and every year. You consume it then throw it away." Moving to digital, a teacher has to think about how to assign the lesson, and how to receive the response—paper and pencil, or electronic media? The initial reaction is usually discomfort when moving away from the familiar framework.

To tackle this potential barrier to implementation Beatriz' groups identified the early adopters—those teachers who are willing to jump right in or who are already using technology on their own—and enlist them to help other teachers through the change, a sort of peer-to-peer transition support. "There isn't an answer that fits everybody. That's one of the things we as districts need to think and remember. Our teachers come from different backgrounds and they have different levels of strengths—and we have to support all of them.

While there are so many details to the transition,

One-on-One Computing Initiative

The one-on-one computing initiative, (also called one-to-one or 1:1) has been sporadically implemented in the American educational system since the 1990s. However, with the broad availability of more and more inexpensive digital devices, this implementation is expanding rapidly. A good example is in Houston, Texas.

The Houston Independent School District launched its own initiative last year, called PowerUp, with the goal of distributing 65,000 digital devices—enough for every high school student and teacher in the district— across 282 schools, and to do this by the start of the 2015–16 school year. This set the demand for a fast-paced, focused transition strategy.

Digital Resources
Now Integrated Into the HISD LMS

Houston Independent School District is piloting a new IMS Global standard called "One Roster" –which is making their rostering more simple and manageable. The apps, games learning software they've integrated, thus far, as part of the architecture of their digital curriculum strategy, is listed below:

Bedford Freeman
AP Macro Econ
AP US History
AP World History
Discovery Education
    Earth and Space Science
    United Streaming
Istation (State-approved)
US History Since 1877
Knovation
McGraw Hill
    6-8 Science: Texas Glencoe
iScience
    Physics
    Integrated Physics and Chemistry
    K-5 Spanish Reading: Tesoros
Pearson
    Algebra I
    AP Psychology
    Stats Modeling the World, 4th Ed
    Biology
    K-5 English Reading: Reading Street
Social Studies School Service
Wiley
AP Human Geography
ABC CLIO
CompuScholar
Computer Science I, II Teen Coder
Game Programming Teen Coder
Houghton Mifflin-Harcourt
    2-5 English and Spanish Language Arts
    Environmental Systems
    K-5 English and Spanish Science:
        Fusion Science
    Chemistry
HMH/Holt McDougal - 6-8 Math:
    Texas Go Math
HMH Riverside (Iowa/Logramos/CogAT)
Write Source/ Fuente de Escritura

Khan Academy
Globaloria
Learning A-Z
Language! Live
National Geographic Reach K-5 ESL
Zaner-Bloser:
    1-3 Handwriting
    1-5 Spelling

These digital resources have been integrated or ingested into the HUB and can be found by HISD teachers and administrators through searches by "key word" or by "TEKS (Texas Standards)" in The HUB (ItsLearning LMS) library.

Digital Teaching and Learning Platform
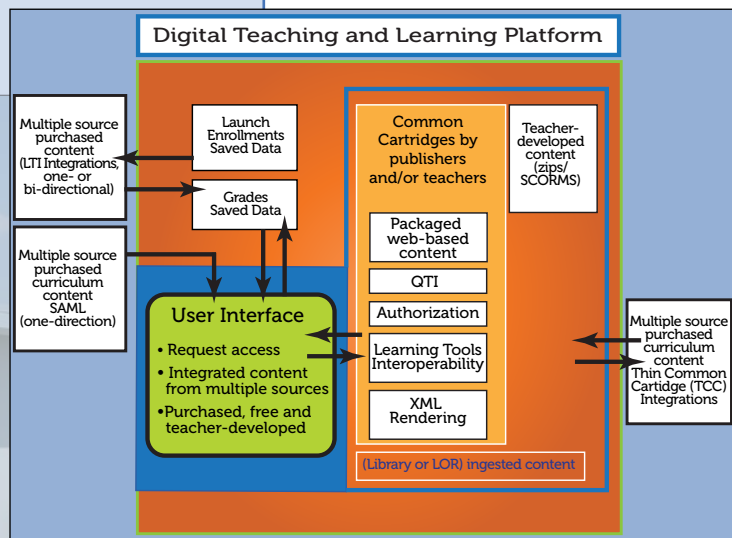
Beatriz Arnillas is the Central Office Senior Manager of Instructional Technology in the Houston Independent School District. HISD has implemented a very aggressive conversion to digital curriculum. Here Ms. Arnillas explains some of the strategic decisions they made and how they overcame the challenges encountered.
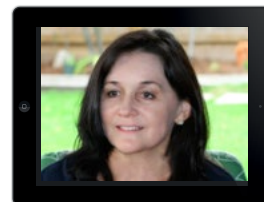
For the complete interview with Beatriz Arnillas, visit learningcounsel.com