The Apollo 20 elementary program is a bold turnaround strategy launched during the 2011–2012 school year, one year after the secondary program was launched. It is designed to ensure that every student will have the rigorous instructional program required for college and career success. This partnership with EdLabs at Harvard University incorporates best practices from successful public and charter schools across the nation.

WHAT BEST PRACTICES ARE BEING USED IN THESE SCHOOLS?
The research conducted by Dr. Roland Fryer of EdLabs identified five tenets that have consistently been shown to improve student performance and close the racial achievement gap. These tenets have been implemented in 11 elementary schools.

1. Human Capital
   - Effective principal and teachers in every school
   - Professional development in the areas of reading and math for principals and teachers
   - Performance bonuses and merit pay
   - New appraisal system for principals and teachers

2. More Instructional Time
   - Minimizing noninstructional time to carve out more time for instruction
   - Increasing the amount of time for reading and math instruction for all students by 30 minutes each day. This adds up to an extra 90 hours of math and reading instruction per year
   - Focusing on small group instruction in reading and math to provide more individualized attention to each student

3. Use of Data to Drive Instruction
   - Biweekly monitoring of student progress
   - Use of running records
   - Use of formative assessments
   - Standards-based curriculum and assessments

4. High-dosage Tutoring
   - In-school math tutoring for all fourth-graders, to help both struggling students and those who are ready to move ahead. Special math tutors who are college graduates will work with students in school every day, with a tutor-to-student ratio of one to three.
   - In-school reading intervention for grades K–2 facilitated by a reading interventionist
   - Saturday tutorials two a month for students who are struggling in core academic areas

5. Culture of High Expectations for All
   - 100 percent of students performing on or above grade level in all core subjects
   - 100 percent of students reading on or above grade level by the end of third grade
   - 98 percent attendance rate for all students and staff
   - School-parent contract

HOW WERE THE APOLLO 20 ELEMENTARY SCHOOLS SELECTED?
The Apollo 20 schools were selected based on their performance in the reading and math portions of the 2009–2010 Texas Assessment of Knowledge and Skills. The schools with the lowest average scores on those exams were given the highest priority for being included in the program. Two schools were automatically selected for the program because they had been rated “Academically Unacceptable.” An additional nine schools were selected from the remaining lowest-ranked 18 elementary schools.

PARTICIPATING ELEMENTARY SCHOOLS
- Blackshear
- Scarborough
- Kelso
- Highland Heights
- Dávila
- Tinsley
- Robinson
- Isaacs
- Frost
- Walnut Bend
- Young

RESULTS
Just one year after implementation at the elementary level, participating campuses are already rising to the challenge of higher expectations – an integral part of the program. Students at Walnut Bend ES advanced to the Odyssey of the Mind World Finals for the first time ever in 2012 – and brought home third- and fourth-place prizes after defeating international competitors. Meanwhile, students in the fledgling robotics club at Robinson ES outscored teams from across the city to win the EARLY Robotics championship held in May 2012.
The Apollo 20 project was launched during the 2010–2011 school year to accelerate HISD’s efforts to improve student performance in every school and close the achievement gap districtwide. This partnership with EdLabs at Harvard University incorporates best practices from successful public and charter schools across the nation.

WHAT BEST PRACTICES ARE BEING USED IN THESE SCHOOLS?
The research conducted by Dr. Roland Fryer of EdLabs identified five tenets that have consistently been shown to improve student performance and close the racial achievement gap. These five tenets have been implemented in four high schools and five middle schools.

FIVE TENETS FOR TRANSFORMING SCHOOLS
1. Human capital
   - Effective principal and teachers in every school
   - Professional development in the areas of reading and math for principals and teachers
   - Performance bonuses and merit pay
   - New appraisal system for principals and teachers

2. More instructional time
   - Minimizing noninstructional time to carve out more time for instruction
   - School day lengthened by one hour four days a week and school year lengthened by five days in 2010–2011 and 10 days in 2011–2012. Apollo 20 students were also offered optional Saturday classes.
   - Focusing on small group instruction in reading and math to provide more individualized attention to each student

3. Use of data to drive instruction
   - Biweekly monitoring of student progress
   - Use of running records
   - Use of formative assessments
   - Standards-based curriculum and assessments

4. High–dosage tutoring
   - In–school math tutoring for all sixth- and ninth–graders, to help both struggling students and those who are ready to move ahead
   - For students in grades 7, 8, 10, 11, and 12 performing below grade level, a double dose of math OR reading based on the subject in which they are most behind

5. Culture of high expectations for all
   - 100% of students performing on or above grade level
   - 100% graduation rate
   - 100% of students accepted to a four–year college or university
   - 100% of students taking at least one college–level course
   - 95% attendance rate for students and staff
   - School–parent contract

PARTICIPATING SECONDARY SCHOOLS
Four high schools:
- Jones
- Kashmere
- Lee
- Sharpstown

Five middle schools:
- Attucks
- Dowling
- Fondren
- Key
- Ryan

RESULTS
Just one year after implementation, students at nine historically underperforming secondary schools had made extraordinary gains in math. Apollo 20 campuses also produced “strikingly similar” academic gains to those seen in nationally renowned charter schools, according to Dr. Roland Fryer’s October 2011 report to the National Bureau of Economic Research.

The Apollo 20 culture of high expectations has also led one Fondren MS student to national recognition. Ludreche Bouanga was named a Scholastic All-Star Award winner in April 2012.
Apollo 20: First-year results show dramatic math gains

TAKS Math passing rates for Apollo 20 students receiving double-dose math instruction

- Math skills acquired by the average Apollo 20 student represent an estimated 3½ months of additional schooling.
- Sixth-grade students gained the equivalent of six additional months of schooling.
- Gains achieved by ninth-grade students ranged between nearly five months to more than nine months of additional learning.
Apollo 20: Math tutoring pays off for sixth-, ninth-graders

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sixth-graders passing math</td>
<td>63</td>
<td>85</td>
<td>+22</td>
</tr>
<tr>
<td>Sixth-graders commended in math</td>
<td>12</td>
<td>30</td>
<td>+18</td>
</tr>
<tr>
<td>Ninth-graders passing math</td>
<td>56</td>
<td>72</td>
<td>+16</td>
</tr>
<tr>
<td>Ninth-graders commended in math</td>
<td>12</td>
<td>20</td>
<td>+8</td>
</tr>
</tbody>
</table>
HISD has had record-breaking successes during the past several years. In particular, graduation rates are at an all-time high for every subgroup and overall at 87.9 percent, and drop-out rates are at an all-time low for every subgroup and overall at 12.6 percent. This success is the result of a shift in focus from drop-out recovery to drop-out prevention. A comprehensive approach has been taken that entails the relentless use of data and tracking systems to identify and monitor students who are at-risk of dropping out or who have been recovered back into the district. Some of the major strategies implemented by HISD include:

Establishing Dropout Recovery, Intervention and Prevention (DRIP) Committees. Every middle and high school has a DRIP Committee made up of assistant principals, teachers, college access coordinators, clerks, police officers and counselors that meet weekly to monitor each student’s attendance and academic performance, particularly those who are at-risk of dropping out of school and trained on procedures, resources and practices around early identification and intervention. Once at-risk students are identified, personal graduation plans are created, implemented and monitored.

Implementing Apollo 20 turnaround initiative. Apollo 20 is HISD’s effort to turn around 20 of the district’s lowest performing schools, including four persistently unacceptable high schools. The four high schools serve predominately African American students at a significantly higher rate than the district average. Apollo 20 utilizes strategies from effective charter schools, including:

- **Effective teachers and principals** – each Apollo 20 high school received new principals and entirely new leadership teams. In addition, more than 40 percent of the teaching staff has been reconstituted.
- **Longer school year and school day** – students in Apollo 20 schools begin two weeks earlier than their peers and receive an hour more of instruction each day, Monday through Thursday, every week.
- **High dosage tutoring** – all grade 9 students and students who are significantly behind in grades 10 through 12 receive 1:2 tutoring in math for an entire period during the school day.
- **Double dose classes** – all students in grades 10 through 12 who are far behind in reading and/or math take two courses concurrently in that subject. Double-dose classes are blended learning classes, using online software and face-to-face instruction by a certified teacher.
- **Culture of high expectations and no excuses** – there is a relentless focus on accelerating student academic progress and ensuring that “no excuses” are made by staff in meeting the needs of students or by students in achieving results.

Opening Grad Labs. Grad Labs are in every high school and provide struggling students with supplemental learning opportunities through online coursework and tutoring on state mandated assessments and college entrance exams. A graduation coach leads the Grad Lab and is responsible for identifying at-risk students as early as ninth grade and developing intervention plans to keep them on track to four-year graduation.

Creating Twilight High Schools. Twilight High Schools use a blended learning approach that leverages the online courses through the Advanced Virtual Academy and optimizes face-to-face instruction provided by certificated teachers. Twilight High Schools are open until 8 p.m. every day to allow students the flexibility to work or care for their families during the day.

Creating “Go Centers” in every high school. The purpose of Go Centers is to provide ongoing support for all students as they prepare for graduation and transition into college. Go Centers are led by college access coordinators who are knowledgeable about college admissions processes, skilled at completing financial aid applications, scholarship and college entrance applications, and removing barriers to high school graduation and college entrance.

These strategies, as well as the broad engagement and partnerships we have established across the community, have led to our dramatic increase in the number of African American and Hispanic students attend school, remain on track with their school-age peers, graduate on-time and are prepared for the workforce or success at the college of their choice.