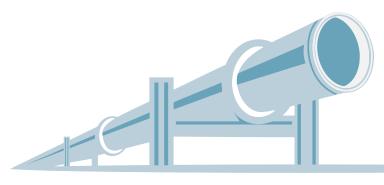
HOUSTON INDEPENDENT SCHOOL DISTRICT



Bridging the opportunity divide in advanced coursework: The AP Expansion Initiative

A 5-year strategy to ensure equitable, district-wide access to AP coursework and quality instruction.





The HISD Expansion Initiative will:

Empower	schools to make data-informed decisions
Increase	the number of students successful in AP courses
Align	a centralized curriculum with instruction
Improve	the capacity of faculty
Support	students with tutoring and enrichment activities

Expanding access to Pre-AP coursework and rigorous instruction beginning in the 8th and 9th grades will create a pipeline of students who are ready to pursue challenging college coursework and career paths such as STEM, pre-law, and healthcare. The AP Expansion Initiative is a five-year plan targeting 19 high schools with historically low AP passing rates. The Initiative bridges numerous support gaps that have resulted in low AP participation, including teacher turnover, not enough AP sections, low passing rates, and too few students to create a section.

Key pillars of this plan are data-driven course selection; a centralized curriculum aligned with instruction; curriculum implementation coaches; and ongoing professional development. Additional supports include tutoring and AVID electives. We believe these activities will, within five years, close a 38-percentage-point equity gap in 10th-grade AP enrollment and produce scholars with the critical thinking, math, and writing skills to be successful in these courses.

On our campus, we're having dialogue about master scheduling and how we can use creativity and data-informed practices to best serve our students. Seeing this data, lightbulbs started going off. This is eye-opening to me.

Rhonda Honore, Waltrip High School principal



Opportunity 19 schools

For this proposal we have identified 19 comprehensive HISD campuses whose AP passing rates and participation in AP courses is significantly less than the district's average. We have broken these campuses into three tiers.

Tier III

High schools that struggle to offer more than eight AP courses also have some of the lowest AP pass rates in the district.

Tier II

High schools that historically underutilize AP courses and struggle to help students achieve their potential in those courses.

Tier I

High schools that have the resources (students with AP Potential) to provide strong AP programs but do not consistently leverage their resources to the maximum student benefit.

Excluding the Spanish Language AP tests, the following are the passing rates on AP exams from the 15-16 to the 19-20 school years:

All campuses	39.0%
19 targeted comprehensive campuses Opportunity 19	8.8%
Tier III	1.7%
Tier II	5.2%
Tier I	13.7%

Seniors currently enrolled in AP course:

All campuses	33.6%
19 targeted comprehensive campuses Opportunity 19	28.1%
Tier III	25.7%
Tier II	23.4%
Tier I	36.3%

These comprehensive neighborhood schools have AP passing rates lower than the district's average of 39%, or have the potential to significantly increase the number of students taking AP courses. All 19 schools have low passing rates on STEM exams (ranging from 0% to 15% for the past five years). Schools are grouped into three tiers, with the 9 Tier III campuses receiving the most extensive supports.

TIER III
Yates
Wheatley
Scarborough
Madison
Washington
Worthing
Sterling
Kashmere
North Forest

TIER II
Houston MSTC
Sharpstown
Wisdom
Furr
Austin
Northside

TIER I
Waltrip
Chavez
Westbury
Milby

The AP Expansion Initiative aims to significantly close equity gaps in AP passing rates within five years while producing scholars who can take on successfully the rigors of demanding majors in STEM, pre-law, and health care.



A student from North Forest High School participates in a group exercise in Secondary Teacher of Year Kaylin McNary's class.



Support Gaps 👄

Students attending under-resourced schools experience significant gaps in support.

ENROLLMENT

 Opportunity 19 schools lose academically prepared scholars from feeder middle schools to college prep high schools.

Schools lack enough students to make a viable section for an AP Course, resulting in the course not being offered or needing an additional prep for a core content teacher.

○ ○ STAFFING

 Opportunity 19 schools experience high teacher turnover, resulting in schools staffed with AP teachers who lack experience teaching AP courses.

Delays in hiring prevent access to critical summer training opportunities because staffing decisions are not made until very close to the start of the school year.



UNLOCKING POTENTIAL

Taking just one AP exam, regardless of the score, significantly improves a student's likelihood of graduating college within four years, boosting their job prospects.

Source: Wiley Online Library, College Board Research

- When there are mid-year vacancies, there is no "bench" of staff who can assume the teaching responsibilities for the course and continue with high-level instruction.
- Many campuses do not have the capacity to "make" a standalone pre-AP or AP course; thus, forcing a principal to create small sections of AP and larger sections of regular core courses or populating a pre-AP/AP course with "filler" students.

○ ○ ○ ○ ○ OURRICULAR/PROGRAMMATIC

Curricular

- Campuses do not use a standardized pre-AP or AP curriculum, preventing the ability to benchmark teacher and student performance and making it difficult to provide targeted tutoring and teacher training.
- Providing districtwide tutoring is problematic because students across various campuses, taking the same subject, are sequenced through content and skills at different paces.



EXPLORING REAL-WORLD PROBLEMS

High-quality project-based learning—a key part of many AP courses—allows students to explore real-world problems through individual and group projects and gives students the soft skills that employers are demanding.

Source: Lucas Education Research, College Board

If the course is offered, students are not likely to earn the 3+ on the AP exam that would make them eligible to earn college credit.

AVID

- AVID is in 8 out of 9 Tier III schools and none of HISD's Tier II and Tier I schools.
 Fewer than half of the 38 middle schools that feed into the Opportunity 19 campuses offer AVID.
- Smaller high schools and middle schools often do not have the capacity to staff an AVID elective class.

Equity and Impact



"We need to change their mindset, that our students can't handle this challenge. Oftentimes students wouldn't even attempt taking five AP courses. We have to encourage our students to take the next step."

Dr. Valencia Hall, Washington High School



○ SCHEDULING

- Adding AP classes at a small campus strains existing staff by introducing course preps that require a high level of instructional attention & support.
- Limited resources are already allocated to STAAR prep remediations.
- Data is not being used to strategically place students.
- Schools lack enough sections of the right courses in the right sequence.



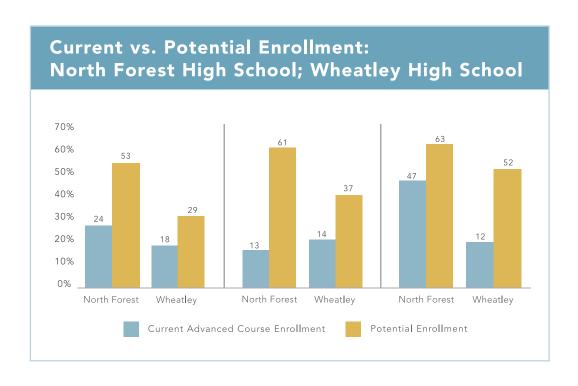
OPPORTUNITY GAP

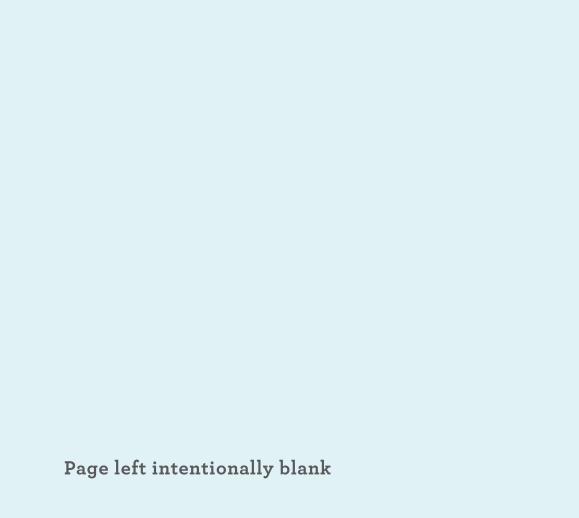
Students who are Black, Indigenous, and other non-Black people of color (BIPOC) are not enrolled in AP courses at rates comparable to their white and Asian peers, according to national data. And when they are, they experience less success.

Source: Civil Rights Data Collection

While many HISD students are fortunate to be zoned to high schools filled with academically prepared students taught by veteran teachers, those zoned to Tier III schools find the opposite is true. Their classmates may be a grade or more behind, and they often start the year without a certified teacher or with a teacher new to the profession.

The chart below illustrates the current gaps for two Tier III schools, with the blue bar depicting the current enrollment and the yellow bar indicating the number of students who should have had the opportunity to take coursework beginning in the 9th grade to prepare them for AP coursework later in high school.

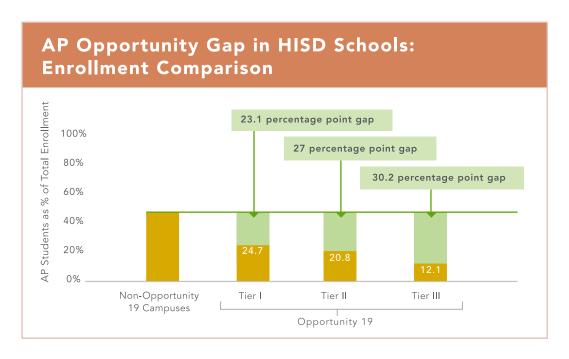






Access, Alignment & Support

The Importance of Access to AP Coursework, Exams



- AP students, including those with average scores of 1 or 2, are more likely to enroll in a four-year college compared to academically similar students who did not take AP in high school. AP students who average scores of 1 or 2 on their AP Exams are 16 and 19 percentage points, respectively, more likely to enroll in a four-year college than academically similar peers who did not take AP.
- Students who earn AP scores of 2 are well prepared to succeed in introductory college coursework. Compared to academically similar college peers who did not take the AP course, AP students who earn scores of 2 perform as well or better when they take those introductory college courses.

Many students who first score a 1 or 2 on an AP exam will take further AP courses and score higher. Depending on when students take their first AP exam, 61%-84% of students who earn a 2 on their first AP exam will take another AP exam in subsequent years. Students who earn a 1 on their first AP exam are also very likely (49%–70%) to take more AP courses and exams in high school. Many students who first earn an AP exam score of 1 or 2 will then earn a higher score on the subsequent AP exams they take. This trend is particularly true for 9th- and 10th- grade students who earn a score of 2 on their first AP exam.

Source: New Analyses of AP Scores of 1 & 2, AP College Board

We are implementing a series of systems-level changes to achieve greater access, alignment, and support for success in AP coursework, including:

- Data-driven Course Selection
- Acceleration & Pathways
- Mandated Use of AP Potential
- Centralized, Aligned Curriculum
- Curriculum Implementation Coaches
- AVID Expansion
- Creative Staffing Models
- Ongoing Professional Development
- Student-centered Support



ACCESS



Data-driven Course Selection

The Pipeline enables campuses to use data to drive their course selection process. Each campus receives a list of students who, based on a variety of data points such as STAAR, PSAT and AP Potential, have the academic capacity to perform well in Pre-AP and AP coursework. Campuses receiving this data commit to offering the courses and ensuring students' schedules reflect their potential.

Young Women's College Preparatory Academy, which consistently ranks near the top of regional rankings by Children at Risk, requires all students to take Pre-AP and AP courses, prioritizing STEM.





ACCELERATION

AP math and science courses are some of the most challenging courses and, as a result, have some of the lowest rates of students earning college credit with a 3+ on the exam. Students often need support outside of the traditional course sequences.

ACCELERATION & PATHWAYS: ADVANCED MATH

Summer school original credit offerings in geometry and precalculus can accelerate students' journey toward graduation requirements. Additionally, we are working with schools to create multiple, advanced STEM pathways. For example, a senior tracking into an engineering program in college would take Calculus AB; however, a senior tracking into a major in finance would take AP Statistics. While both would take the same Pre-AP math courses as freshmen and sophomores, starting their junior year they would branch to math courses specific to their intended college major.

Table 7, ACCELERATED & PATHWAY: **AP MATH**

PATHWAY	Traditional	AP Calculus	College Credit Math	Computer Science	
9th Grade	Algebra I	Pre-AP Algebra I	Pre-AP Algebra I	Pre-AP Algebra I	
9-10 Summer	_	Pre-AP Geometry (OC)	_	Pre-AP Geometry (OC)	
10th Grade	Geometry	Pre-AP Algebra II	Pre-APGeometry & AP Comp. Sci. Principles Double Blocked	Pre-AP Algebra II	
11th Grade	Algebra II	AP Precalculus	Pre-AP Algebra II	AP Comp. Sci. Principles 1st LOTE Credit Option to pair with Precalculus	
12th Grade	Grad. Req. = 3 Cred. If taking 4th math credit: Precalculus College Prep Math Other Math Elective	AP Calculus AB with August bootcamp option	AP Statistics AP Computer Science AP Precalculus	AP Computer Science Double Blocked 4th Math Credit & 2nd LOTE Credit	
Unique advantages to each pathway:		Provides an accelerated track with supplemental instruction to ensure students are prepared to enroll in AP Calculus.	Maximizes use of the AP Comp. Sci. Principles course while giving students choices for a college-level math class in 12th grade than is less rigorous that AP Calc and does not require summer school to complete.	Focused preparation for AP Computer Science. Meets graduation requirement for 2 LOTE credits. Could be utilized in conjunction with AP native language exam-only option in 9th grade. Provides access to AP courses that do not require as much reading and writing, and does not require completing an advanced math course.	
		In 2020, AP Comp. Sci. Principles had 71% pass rate (students scoring a 3 or higher on the exam) Can be paired with PIT in 9th grade to integrate with a CTE course sequence.			

Table 8, ACCELERATED & PATHWAY: ENGLISH

PATHWAY	Traditional	AP English	AP Capstone	Writing Intensive
9th Grade	English I	Pre-AP English I	Pre-AP English I	Pre-AP English I
10th Grade	English II	Pr-eAP English II	Pre-AP English II	Pre-AP English II
11th Grade	English III	AP Language	AP Seminar with regular or HISD Advanced Eng III	AP Language & AP Seminar Double Blocked
12th Grade	English IV	AP Literature	AP Research with regular or HISD Advanced Eng IV	AP Literature & AP Research Double Blocked
Unique advantages to each pathway:		Most common pathway for offering AP courses in English	Advanced course option that emphasize analytical writing and thinking with more practical applica- tion to the course content	A very writing-intensive course sequence that might be best suited for a strong student interested in a traditional liberal arts education after high school

Table 9, ACCELERATED & PATHWAY: SCIENCE

PATHWAY	Traditional	AP Bio & AP Chem	AP Chem	UT OnRamps Physics
9th Grade	Biology	Pre-AP Biology	Pre-AP Biology	Pre-AP English I
10th Grade	Chemistry	AP Biology	Pre-AP Chemistry	Pre-AP English II
11th Grade	Physics	Pre-AP Chemistry	AP Chemistry	AP Language & AP Seminar Double Blocked
12th Grade	Grad. Req. = 3 Credits	AP Chemistry	College Level Options for 4th Science AP Environmental Science UT OnRamps Physics with AP Physics Exam-Only Option	Choice of AP Science Courses AP Biology AP Chemistry AP Environmental Science
Unique advantages to each pathway:		Pathway for students interested in medical school, or careers in the medical field (nursing, physical therapy, public health, etc.)	Pathway emphasizes advanced physical science courses while providing the opportunity for two science courses that can earn college credit	Provides advanced science pathway that can earn a student college credit through course completion instead of exam performance



Use AP Potential Report to Expand Offerings

Campuses should be required to use the AP Potential report and Opportunities to Expand report to expand AP offerings.
All HISD students take the school-day PSAT exam annually, starting in 8th grade. The College Board provides a predictive (student level) list of AP courses in which students would be successful. A summary table (right) illustrates the missed AP potential from that report.

The first column adds up all the subjects where there would be enough students (15 or more) and either there is no course offered at that campus or there could be more sections offered. The second column is the total number of students who could be in an AP section.

Tiers I and II have greater pool of students for AP sections

School	# of subjects where a course selection could be added	# of students not in AP course where they could score 3 or better (duplicated)
Furr	6	111
Austin	18	540
Northside	10	396
Wisdom	14	350
Houston MSTC	9	236
Sharpstown	1	15
Waltrip	24	1769
Chavez	21	1536
Westbury	21	1317
Milby	15	841

There are AP courses that nationally have very high success rates—(AP Seminar (78%) and Research (73%), AP Computer Science Principles (71%)—that could be more widely offered across HISD.

Depending on campus, access to AP coursework varies widely

NUMBER OF AP COURSES OFFERED

Tier III	
Average	7.7
Madison	12
Sterling	12
Kashmere	9
North Forest	9
Washington	8
Yates	6
Wheatley	5
Worthing	5
Scarborough	3

Tier I and II								
Average	13.3							
Waltrip	20							
Westbury	17							
Houston MSTC	15							
Milby	15							
Furr	12							
Austin	11							
Wisdom	11							
Northside	10							
Sharpstown	9							

11	
Average	20.1
Bellaire	30
Carnegie Vanguard	27
Westside	22
DeBakey	21
Eastwood	19
Energy Institute	17
YWCPA	17
Mickey Leland CP	15
Kinder HSPVA	13
Sharpstown Int.	10
Law and Justice HS	9

Non-Opportunity

^{*}IB, charter campuses, and early colleges not included

69 ALIGNMENT

Centralized, Aligned Curriculum

Students who earn an A or B in an AP course should score a 3 or higher on the corresponding AP exam – but that isn't happening in our Opportunity 19 schools. To address this, the Pipeline has implemented a high-quality, centralized curriculum. To monitor student growth, aligned student assessments and course benchmarks are required for all Pre-AP & AP courses. For teachers, ongoing professional development prepares them to use this curriculum effectively. At every step, ongoing curriculum and instructional support is being provided to these teachers.

Equitable Access to Grade Appropriate Assignments

The Pipeline includes investment in the Pre-AP Curriculum from College Board for each campus. Teachers can then use this common curriculum, benchmarks, assessments, and mock exams to monitor student performance. By increasing the rigor of the 9th and 10th grade courses in a structured way, more students are being prepared for the rigor of the AP courses that are offered in the 11th and 12th grade.

The Pre-AP Designation emphasizes the most critical elements to encourage student growth and the development of the skills that help them achieve their full potential, including:

- Consistency
- Building Teacher Capacity
- Focus
- Best in Class Assignments









SUPPORT

Centrally Funded Curriculum Implementation Coaches (CICs)

Postsecondary Programming has hired a team of exceptional AP teachers to serve as Curriculum Implementation Coaches (CICs). Currently, CICs cover the subject areas of Advanced math, physics, and English. The goal is to expand coaching competencies to include AP Precalculus, AP Biology, and AP Capstone. The Postsecondary department currently has one CIC per core subject area. By expanding the number of CICs to two per subject area, we will provide more focused support for identified AP courses.

Postsecondary Programming Leading "Architects of Change" PLCs to Guide AP Expansion





KEY LEARNINGS FOR ATTENDEES:

AP POTENTIAL

At this event, leaders explored the potential and power of AP Seminar and AP Research, two courses which together form the basis of the AP Capstone Diploma Program and are not widely offered throughout HISD. Leaders realized how many of their students showed potential for these two courses. These courses distinguish students when applying to the most competitive and prestigious universities.



AP CLASSROOM

AP Classroom gives a detailed view of students' assignments and performance, with progress-monitoring data. Teachers, coaches and administrators can see individual questions missed and the trends indicated by those missed questions. This data reveals weaknesses and links teachers and students with targeted resources.

AVID

We propose mandating AVID across all 19 campuses as well as middle school feeder patterns. AVID, when implemented with fidelity, infuses critical thinking, discussion and writing skills across disciplines. AVID strategies such as Cornell Note Taking give students the tools to succeed in demanding Pre-AP courses. However, even though it's funded 100% for three years with ESSER funds, campuses can opt out of AVID. As part of the AP Initiative we recommend mandating AVID at all AP Pipeline high schools and middle schools.

Currently 8 out of 9 Tier III campuses have one or more centrally funded AVID elective teachers. We propose staffing a centrally funded AVID teacher at all Tier III and II campuses and their feeder middle schools. The College Readiness department, which oversees AVID, will hire, train, and evaluate the AVID elective teachers. When a strong teacher is in place, the AVID elective class becomes an essential component in supporting students who are experiencing more rigorous pre-AP courses for the first time.

AVID expanding to Opportunity high schools TIER III SCHOOL 2022 2023

TIER III SCHOOL	2022	2023
Wheatley	✓	✓
North Forest	✓	✓
Yates	✓	✓
Scarborough	✓	~
Washington		
Madison	✓	✓
Worthing		✓
Sterling		✓
Kashmere	✓	✓



Kashmere High School AVID student, recipient of the Dell Scholars UT Austin Scholarship

AVID expands to 6 campuses

In 2022, Postsecondary Programming added AVID elective teachers to six campuses:

- Kashmere
- North Forest
- Wheatley

- Yates
- Madison
- Scarborough





Creative Staffing Models

Where staffing shortages exist, there is an opportunity for a creative staffing model with a visiting instructor, or the infusion of a full-time teacher who is participating in the Aspiring AP Teacher Academy. A creative staffing model will address teacher shortages by assigning a centrally funded dean of instruction and teacher to serve multiple campuses. In addition to hiring and assigning AP Expansion Faculty to teach the supplemental courses, Postsecondary Programming will provide curriculum training and program onboarding.



Worthing High School is among campuses receiving support through the AP Expansion Initiative.

AP Seminar and AP Research are two of the most engaging courses we offer at Waltrip. They come up with amazing topics and it's driven by the students. Kids conduct intense research, sometimes using QR codes for surveys and then presenting their results.

— Rosalind Barley, Waltrip High School



The Teacher Pipeline and Instructional Support model recruits teachers to supplement existing teaching staff on high-need campuses. This ensures high-quality instruction for existing students while also developing teachers to take on this responsibility in years 2 & 3. The teacher-in-training also builds relationships with students and families, investing in the students who will become his or her AP students in the coming years.

Employ traveling teacher model to increase capacity

Some AP courses may have only a few students eligible and interested until we grow capacity on the campus by implementing additional pre-AP courses. In the interim, a course like AP Calculus AB could be offered by a "Traveling Teacher" at 3-5 campuses who have a handful of students who deserve access to the course. This would function similiar to an adjunct faculty member from HCC coming to campus to teach a Dual Credit course.



ADVANCED PLACEMENT EXPANSION INITIATIVE

Teacher turnover is a significant challenge because AP courses require additional training and content specializations.

Recruitment activities in partnership with schools seek centrally funded AP Expansion teachers to serve multiple campuses. These supplement campus-based teachers in core subjects allow for a wider variety of AP courses to be offered at a school with staffing shortages.



School-based staff from Opportunity 19 campuses access their students' AP Potential reports.

Implement a shared-teacher model for stand-alone AP courses

Some campuses will not have enough students to warrant hiring an entire teacher to teach a single course (AP Psychology, AP Computer Science Principles, AP Seminar / Research, as examples). However, a campus could share a teacher with another campus to have enough sections. This teacher would, for example, teach AP Psychology at one school on an "A" day, and another campus on a "B" day (or mornings vs. afternoons), thus allowing both campuses to expand their AP course offerings.

Offer performance-based and retention stipends

Dual credit teachers receive a stipend, which has greatly assisted HISD in recruiting and retaining qualified teachers. A stipend paid out fall and spring for pre-AP and AP teachers would have a similar impact. Stipends would be contingent on teachers attending professional development opportunities provided by Postsecondary Programming. Additional stipends could be earned for being the lead AP teacher on a campus.



AP Teacher Professional Development Academy

As part of the AP Initiative, Postsecondary Programming is providing comprehensive and year-long professional development.

KEY COMPONENT	Intensive Training Pre-AP and AP teachers participate in intensive summer institutes through NMSI (National Math and Science Institute) and the College Board.
KEY COMPONENT	Required Participation The expectation from campus leadership must be that pre-AP and AP teachers are required to participate in the entirety of the Academy's offerings.
KEY COMPONENT	Funding for Stipends & Substitutes This will free up faculty to participate in these trainings and compensate them for time outside their duty schedule.

AP STEM Summer Camps for Opportunity 19 students



TAPIA Camps

Week-long residential STEM camps at Rice, emphasizing communication and equity.

CALC Squared

Three-week summer program for students at Rice to start their journey to conquering AP calculus.

RUSMP

Rice University School of Mathematics Project: Two-week math camps at Rice.

AP Leadership Academy

Week-long camp with 4H at Lake Brownwood to build leadership capacity.

Houston PREP

Mathematics-based pre-college enrichment program at UH Downtown.

NMSI

The National Math and Science Initiative provides learning activities, practice, and review modules on topics chosen by students.

Additional Strategies

Taking the AP Spanish Language Exam

Bilingual students should be encouraged to take the AP Spanish Language exam, which enables them to earn college credit without taking unnecessary semesters of a foreign language. This opens their schedule up to an elective while saving money on tuition when they enroll in college.

In-classroom Tutoring through the UH ACES Program

The UH Advancing Community Engagement and Service (ACES) tutoring program allows university students to work with high school schools while embedded in their classroom. This enables teachers to focus on targeted and differentiated skill development while filling a critical need for math and science tutoring.









UH-ACES tutors (in red) support multiple high schools, including Madison (top), Sterling (left), Yates (center), and Kashmere (right).



The HISD AP Expansion Initiative

Current State †

Investments

Activities

Enrollment Gap

- Students leave their zoned school to attend a high school with more AP offerings
- Too few prepared students to create AP sections
- 38-percentage-point gap in 10th grade AP enrollment between Opportunity schools and non-Opportunity schools

Resource Gap

- High teacher turnover
- Inconsistent use of data,
 AVID, centralized curriculums
 and professional development

Professional Development

- Rice, NMSI
- CollegeBoard

Curriculum

- College Board
- Pre-AP Curriculum

Data

- AP Potential report
- Opportunities to Expand report

HISD

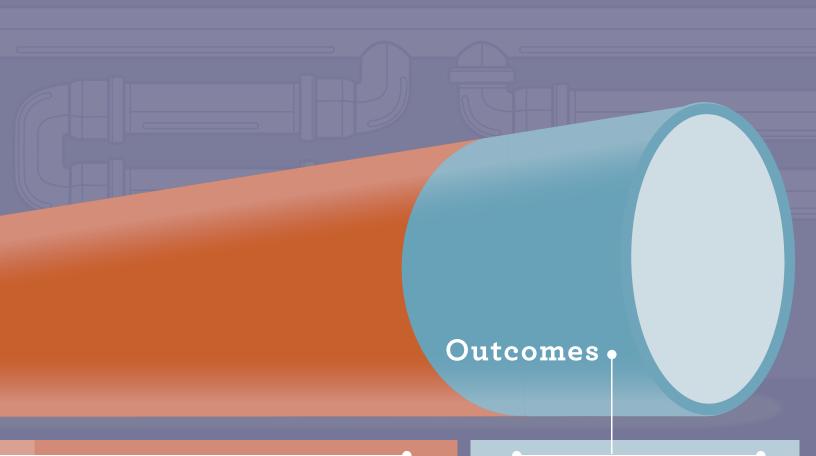
- Executive director
- 2 directors
- 5 AP academic deans
- 30+ AP initiative teacher corps
- 10+ AVID elective teachers
- Stipends, trainers, substitute teachers, AP readers

Data-Driven Decision-Making

- Strategic course offerings
- Course selections based on data on incoming 9th grade class

Centralized, Aligned Curriculum

- Implement Pre-AP curriculum from College Board at each campus
- Aligned student assessments & course benchmarks required for all courses
- Ongoing PD for teachers in Pre-AP & AP courses



Capacity Building

- Centrally funded dean of instruction
 & teachers serve multiple campuses
- Curriculum training & onboarding
- Required attendance in AP Teacher Professional Development Academy
- Teachers receive fall and spring stipends for attending PD or serving as a lead AP teacher

Student Support

- Tutoring and academic counseling
- Mandating AVID at all AP Pipeline campuses
- On-demand supplemental instruction
- Summer school original credit offerings
- Strategic science sequencing through Pre-AP courses in biology and chemistry followed immediately by the AP course
- Feedback for students in writing-heavy courses provided by AP Readers

- ✓ Ninth and 10th grade courses at all HISD high schools offer increased rigor in a structured way.
- All 19 Opportunity schools have an AVID elective delivered by a quality teacher.
- Students at all 19 Opportunity schools develop critical thinking, math and writing skills across disciplines.
- Scholars at 19 Opportunity high schools can take on successfully the rigors of demanding majors in STEM, pre-law, and health care.
- More students pass exam as more students take AP classes related to STEM.
- Equity gaps in AP passing rates close within five years.



APPENDIX 1: Goals

2023-2024							
Tier III Increase AP exam passing rate from 2.1% to 3.5%							
Tier II increase AP exam passing rate from	7.2% to 10%						
Tier I increase AP exam passing rate from	13.7% to 18%						
Tier III increase STEM passing rate from	1% to 3%						
Tier II increase STEM passing rate from	6.6% to 9%						
Tier I increase STEM passing rate from	11.4% to 15%						
Each Tier III will have 'x' STEM courses	1						
Each Tier II will have 'x' STEM courses	2						
Each Tier I will have 'x' STEM courses	3						
Tier III will increase the % students taking AP	23.6% to 25%						
Tier II will increase the % students taking AP	24.6% to 27%						
Tier I will increase the % students taking AP	36.3% to 40%						

2024-2025	
Tier III Increase AP exam passing rate from	2.1% to 7%
Tier II increase AP exam passing rate from	7.2% to 14%
Tier III increase AP exam passing rate from	13.7% to 20%
Tier III increase STEM passing rate from	1% to 6%
Tier II increase STEM passing rate from	6.6% to 12%
Tier I increase STEM passing rate from	11.4% to 19%
Each Tier III will have 'x' STEM courses	2
Each Tier II will have 'x' STEM courses	3
Each Tier I will have 'x' STEM courses	4
Tier III will increase the % of students with AP potential	16.6% to 20%
Tier II will increase the % students with AP potential	22.0% to 26%
Tier I will increase the % students with AP potential	35.3% to 39%
Tier III will increase the % students taking AP	23.6% to 26.5%
Tier II will increase the % students taking AP	24.6% to 29%
Tier I will increase the % students taking AP	36.3% to 42%

2025-2026	
Tier III Increase AP exam passing rate from	2.1% to 9%
Tier II increase AP exam passing rate from	7.2% to 16%
Tier III increase AP exam passing rate from	13.7% to 24%
Tier III increase STEM passing rate from	1% to 9%
Tier II increase STEM passing rate by %	6.6% to 15%
Tier I increase STEM passing rate by %	11.4% to 21%
Each Tier III will have 'x' STEM courses	3
Each Tier II will have 'x' STEM courses	4
Each Tier I will have 'x' STEM courses	4
Tier III will increase the % of students with AP potential	16.6% to 22%
Tier II will increase the % of students with AP potential	22.0% to 28%
Tier I will increase the % of students with AP potential	35.3% to 42%
Tier III will increase the % students taking AP	23.6% to 29%
Tier II will increase the % students taking AP	24.6% to 33%
Tier I will increase the %" students taking AP	36.3% to 46%

2026-2027	
Tier III Increase AP exam passing rate from	2.1% to 11%
Tier II increase AP exam passing rate from	7.2% to 18%
Tier III increase AP exam passing rate from	13.7% to 27%
Tier III increase STEM passing rate from	1% to 12%
Tier II increase STEM passing rate by %	6.6% to 18%
Tier I increase STEM passing rate by %	11.4% to 25%
Each Tier III will have 'x' STEM courses	4
Each Tier II will have 'x' STEM courses	4
Each Tier I will have 'x' STEM courses	4
Tier III will increase the % of students with AP potential	16.6% to 24%
Tier II will increase by 'x" % students taking AP based on AP potential	22.0% to 30%
Tier I will increase by 'x" % students taking AP based on AP potential	35.3% to 44%
Tier III will increase the % students taking AP	23.6% to 32%
Tier II will increase the % students taking AP	24.6% to 36%
Tier I will increase the %students taking AP	36.3% to 50%



APPENDIX 2: Budget

2022-2023		
PD Support		\$936,000
Pre-AP Curriculum		\$364,000
Tutoring		\$66,000
Supplies		\$224,444
Technology		\$89,451
Student Activities		\$1,264,020
Study Materials		\$281,670
Operating Cost		\$58,047
Staff		\$2,527,095
 Senior Managers 	4	
• Deans	4	
• CIC	6	
 AVID Teachers 	7	
 AP Teachers 	0	
		\$5,810,726

2023-2024		
PD Support		\$982,000
Pre-AP Curriculum		\$364,000
Tutoring		\$66,000
Supplies		\$224,444
Technology		\$89,451
Student Activities		\$1,264,020
Operating Cost		\$58,047
Staff	4 4 6 9 12	\$3,506,350
		\$ 6,554,311

2024-2025	
PD Support	\$500,000
Pre-AP Curriculum	\$300,000
Tutoring	\$66,000
Supplies	\$100,000
Technology	\$40,000
Student Activities	\$500,000
Operating Cost	\$25,000
Staff	\$3,763,812
• Senior Managers 5	
• Deans 4	
• CIC 6	
AVID Teachers 9	
AP Teachers 12	
Academic Program Manager 1	
	\$5,294,812

APPENDIX 3: AP Potential

	Biology	Chemistry	Env Science	Phys 1	Phys 2	Phys C.M	Phys C. EM	Calc AB	Calc BC	Comp Sci A	CSP	Stat Section	Eng Lang
TIER III BT Washington											19		
TIER III Yates													
TIER III Madison											36		18
TIER III Kashmere													
TIER III North Forest													
TIER III Wheatley													
TIER III Sterling													28
TIER III Scarborough													
TIER III Worthing													
TIER II Furr													17
TIER II Wisdom	21												28
TIER II Northside													33
TIER II Houston MSTC	17												25
TIER II Sharpstown													
TIER II Austin											66		43
TIER I Chavez		26				35		26	26		170		99
TIER I Milby													79
TIER I Waltrip	87											44	121
TIER I Westbury	61	23	38			30		24	24	30	159		99

A course gap (blue) represents an opportunity to add an AP course for which 15 or more students demonstrated AP Potential and the school

Currently goes not offer.

A section gap (green) represents an opportunity to add sections of an AP course currently offered at a school, where there are 15 or more students who have AP Potential for that course.

Course Gap Section Gap

	Eng Lit	U.S. Hist	Eur Hist	World Hist	U.S. Gov	Comp Gov	Micro Ec	Macro Ec	Psychology	Human Geo	Art Hist	Mus Theory
TIER III BT Washington				16								
TIER III Yates												
TIER III Madison				23					20	20	18	
TIER III Kashmere												
TIER III North Forest												
TIER III Wheatley												
TIER III Sterling												
TIER III Scarborough												
TIER III Worthing												
TIER II Furr												
TIER II Wisdom		21		37								
TIER II Northside												
TIER II Houston MSTC		17	21	30					29	29	25	
TIER II Sharpstown												
TIER II Austin	19			57								
TIER I Chavez	41			149				26		138		
TIER I Milby	20											
TIER I Waltrip	52	87							143	143	121	
TIER I Westbury	39			132				23	114	114		



APPENDIX 4: AP Course Offerings, Pass Rates, and AP Potential

School Name		Deficits	Number of co AP Courses	re	AP Potential at 60 for top 6 course	
Vheatley	92% score 1	18 STEM exams given	AP ENG LANG A	18	New Course	
viicaticy	on AP exam	since 2016 0% score 3+	AP ENG LIT A	11	AP Biology	2
			AP HUMAN GEO A	21	AP Calculus AB	2
			AP MACRO ECO	24	AP Chemistry	2
			AP US GOVT	16	AP Comp Sci Prin	,
			AP US HISTORY A	18	AP Statistics	,
			AP WORLD HIST A	18	AP Seminar	
			Grand Total	126		
North	88% score 1	63 STEM exams given	AP BIOLOGY A	21	New Course	
Forest	on AP exam	since 2016 0% score 3+	AP CAL AB A	9	AP Biology	
			AP ENG LANG A	21	AP Calculus AB	:
			AP ENG LIT A	53	AP Chemistry	
			AP MACRO ECO	48	AP Comp Sci Prin	
		The state of the s	AP US GOVT	50	AP Statistics	
			AP US HISTORY A	35	AP Seminar	
			AP WORLD HIST A	24	Growth Potential	
			Grand Total	261	AP Biology	
					AP Calculus AB	
Yates	87% score 1	114 STEM exams given	AP ComSciPrin A	27	AP Biology	
lates	on AP exam	since 2016 0% score 3+	AP ENG LANG A	19	AP Calculus AB	
			AP ENG LIT A	17	AP Chemistry	
			AP MACRO ECO	15	AP Comp Sci Prin	
			AP US GOVT	15	AP Statistics	
			AP US HISTORY A	18	AP Seminar	
			AP WORLD HIST A	24	20	
			Grand Total	135		
			Note, school offers IB Lang & Lit IB Mathematics Applic IB Biology IB History			
Northing	89% score 1	120 STEM exams given	AP ENG LANG A	29	AP Biology	
	on AP exam	since 2016 0% score 3+	AP ENG LIT A	11	AP Comp Sci Prin	
			AP ENVIRN SCI A	5	AP Seminar	
			AP US HISTORY A	24	AP Statistics	
			AP WORLD HIST A	16		
			Grand Total	85		
			Note, school offers: IB Mathematics Applic		Growth potential: AP Env Science	2

TIER 3						
School Name		Deficits	Number of co AP Courses	re	AP Potential at 6 for top 6 course	
Sterling	91% score 1	58 STEM exams given	AP CAL AB A	10	New courses:	
o torring	on AP exam	since 2016 0% score 3+	AP ComSciPrin A	88	AP Biology	75
			AP CS A LOTE A	9	AP Chemistry	74
			AP CS A MATH A	9	AP Seminar	75
			AP ENG LANG A	32	AP Statistics	69
			AP ENG LIT A	30	Growth potential:	
			AP ENVIRN SCI A	34	AP Calculus AB	74
			AP MACRO ECO	23	AP Env Science	71
			AP US GOVT	20		
			AP US HISTORY A	37		
			AP WORLD HIST A	34		
			Grand Total	326		
Scarborough	74% score 1	226 STEM exams given	AP CAL AB A	8	New courses:	
Scarborough	on AP exam	since 2016 4% score 3+	AP CHEMISTRY A	16	AP Biology	49
			AP ENG LANG A	13	AP Comp Sci Prin	47
			AP ENG LIT A	21	AP Seminar	49
			AP PHYSICS 1A	19	AP Statistics	47
			AP WORLD HIST A	31	Growth potential:	
			Grand Total	108	AP Calculus AB	49
					AP Env Science	47
Washington	87% score 1	216 STEM exams given	AP BIOLOGY A	29	New courses:	
wasiiiigtoii	on AP exam	since 2016 8% score 3+	AP CAL AB A	9	AP Comp Sci Prin	33
			AP CAL BC A	3	AP Env Science	34
			AP CHEMISTRY A	28	AP Seminar	35
			AP ENG LANG A	21	AP Statistics	34
			AP ENG LIT A	27	Growth potential:	
			AP MACRO ECO	29	AP Calculus AB	34
			AP PHYSICS 1A	14	AP Physics 1	35
			AP US GOVT	22		
			AP US HISTORY A	25		
			AP WORLD HIST A	30		
			Grand Total	237		
Madison	85% score 1	288 STEM exams given	AP ENG LANG A	31	New courses:	
iviadison	on AP exam	since 2016 8% score 3+	AP ENG LIT A	42	AP Biology	112
			AP ENVIRN SCI A	40	AP Calculus AB	112
			AP MACRO ECO	42	AP Comp Sci Prin	120
			AP STATISTICS A	16	AP Seminar	122
			AP US GOVT	41	Growth potential:	
			AP US HISTORY A	49	AP Env Science	119
			AP WORLD HIST A	60	AP Statistics	118
			Grand Total	321	71. 314131163	110
			Grand Total	321		



TIER 3						
School Name	Deficits		Number of co AP Courses	re	AP Potential at 60% for top 6 courses	
Kashmere	93% score 1	67 STEM exams given	AP CAL AB A	7	New courses:	
Rasilliere		since 2016 0% score 3+	AP ENG LANG A	9	AP Biology	25
			AP ENG LIT A	10	AP Comp Sci Prin	21
			AP ENVIRN SCI A	14	AP Seminar	25
			AP MACRO ECO	8	AP Statistics	23
			AP PHYSICS 1A	9	Growth potential:	
			AP US GOVT	7	AP Calculus AB	25
			AP US HISTORY A	12	AP Physics 1	25
			AP WORLD HIST A	17		
			Grand total	93		

TIER 2						
School Name		Deficits	Number of co AP Courses	re	AP Potential at 60% for top 6 courses	
Houston	72% score 1	694 STEM exams given	AP BIOLOGY A	34	New courses:	
MSTC	on AP exam	since 2016 2% score 3+	AP CAL AB A	17	AP Comp Sci Prin	16
			AP CHEMISTRY A	24	AP Seminar	173
			AP ENG LANG A	83	AP Statistics	165
			AP ENG LIT A	34	Growth potential:	
			AP ENVIRN SCI A	14	AP Biology	172
			AP HUMAN GEO A	9	AP Calculus AB	173
			AP MACRO ECO	86	AP Env Science	164
			AP PHYSICS 1A	45		
			AP US GOVT	79		
			AP US HISTORY A	81		
			AP WORLD HIST A	112		
			Grand Total	618		
Northside	75% score 1	1007 STEM exams given	AP BIOLOGY A	30	New courses:	
Northing	on AP exam	since 2016 9% score 3+	AP CAL AB A	32	AP Chemistry	112
			AP CAL BC A	3	AP Env Science	102
			AP ComSciPrin A	8	AP Physics 1	112
			AP ENG LANG A	74	AP Statistics	106
			AP ENG LIT A	47	Growth potential:	
			AP HUMAN GEO A	18	AP Biology	113
			AP PHYSICS 1A	34	AP Comp Sci Prin	111
			AP US HISTORY A	69		
			AP WORLD HIST A	75		
			Grand Total	390		

School			Number of co	re	AP Potential at 6	0%
Name		Deficits	AP Courses		for top 6 course	
Wisdom	77% score 1	421 STEM exams given	AP BIOLOGY A	2	New courses:	
	on AP exam	since 2016 5% score 3+	AP CAL AB A	11	AP Comp Sci Prin	55
			AP CHEMISTRY A	3	AP Seminar	57
			AP ENG LANG A	28	AP Statistics	56
			AP ENG LIT A	28	Growth potential:	
			AP ENVIRN SCI A	24	AP Biology	57
			AP HUMAN GEO A	27	AP Calculus AB	57
			AP MACRO ECO	28	AP Env Science	55
			AP PHYSICS 1A	8		
			AP PSYCHOLOGY	19		
			AP US GOVT	27		
			AP US HISTORY A	53		
			AP WORLD HIST A	46		
			Grand Total	304		
Furr	80% score 1	193 STEM exams given	AP CAL AB A	24	New courses:	
	on AP exam	since 2016 6% score 3+	AP ENG LANG A	61	AP Biology	76
			AP ENG LIT A	51	AP Comp Sci Prin	73
			AP ENVIRN SCI A	62	AP Seminar	76
			AP HUMAN GEO A	131	AP Statistics	74
			AP PHYSICS 1A	54	Growth potential:	
			AP PSYCHOLOGY	53	AP Calculus AB	75
			AP US GOVT	39	AP Physics 1	76
			AP US HISTORY A	64		
			AP WORLD HIST A	91		
			Grand Total	630		
Austin	76% score 1	654 STEM exams given	AP CHEMISTRY A	25	New courses:	
71031111	on AP exam	since 2016 3% score 3+	AP ComSciPrin A	25	AP Biology	97
			AP ENG LANG A	38	AP Calculus AB	95
			AP ENG LIT A	22	AP Seminar	9
			AP ENVIRN SCI A	7	Growth potential:	
			AP PHYS C:E & M	2	AP Chemistry	97
			AP PHYS C:MECH	2	AP Comp Sci Prin	95
			AP STATISTICS A	11	AP Statistics	93
			AP US HISTORY A	26		
			AP WORLD HIST A	35		
			Grand Total	193		
Sharpstown	56% score 1	174 STEM exams given	AP CAL AB A	15	New courses:	
	on AP exam	since 2016 15% score 3+	AP CAL BC A	2	AP Biology	64
			AP ENG LIT A	49	AP Comp Sci Prin	61
			AP ENVIRN SCI A	21	AP Seminar	64
			AP MACRO ECO	38	AP Statistics	61
			AP US GOVT	38	Growth potential:	
			AP US GOVT AP WORLD HIST A	38 77	Growth potential: AP Calculus AB	63



TIER 1						
School Name		Deficits	Number of cor AP Courses	'e	AP Potential at 6 for top 6 course	
Waltrip	53% score 1	904 STEM exams given	AP BIOLOGY A	77	New courses:	
77377.19	on AP exam	since 2016 22% score 3+	AP CAL AB A	19	AP Comp Sci Prin	188
			AP CHEMISTRY A	10		
			AP ENG LANG A	158		
			AP ENG LIT A	62	Growth potential:	
			AP ENVIRN SCI A	19	AP Biology	194
			AP HUMAN GEO A	32	AP Calculus AB	192
			AP MACRO ECO	129	AP Env Science	176
			AP PHYSICS 1A	48	AP Seminar	194
			AP PSYCHOLOGY	24	AP Statistics	181
			AP STATISTICS A	15		
			AP US GOVT	129		
			AP US HISTORY A	157		
			AP WORLD HIST A	131		
			Grand Total	1010		
Chavez	55% score 1	761 STEM exams given since 2016 11% score 3+	AP CAL AB A	123	New courses:	
	on AP exam		AP ComSciPrin A	28	AP Seminar	250
			AP HUMAN GEO A	24	AP Statistics	227
			AP MACRO ECO	60		
			AP US GOVT	52	Growth potential:	
			AP WORLD HIST A	131	AP Calculus AB	244
			Grand Total	418	AP Comp Sci Prin	247
			Note, the school offers: IB Lang & Lit		AP HUMAN GEO	250
					AP US GOVT	214
			IB Mathematics Analy			
			IB Mathematics Applications IB Biology			
			IB Environmental Sys	tems		
			IB Physics			
			IB History			
Westbury	65% score 1	896 STEM exams given	AP BIOLOGY A	42	New courses:	
	on AP exam	since 2016 4% score 3+	AP CAL AB A	50	AP Chemistry	193
			AP ComSciPrin A	44	AP Statistics	178
			AP ENG LANG A	110	Growth potential:	
			AP ENG LIT A	59	AP Biology	194
			AP ENVIRN SCI A	54	AP Calculus AB	192
		AP MICRO ECO	64	AP Comp Sci Prin	184	
			AP PHYSICS 1A	132	AP Seminar	194
			AP PSYCHOLOGY	53		
			AP US GOVT	78		
			AP US HISTORY A	97		
			AP WORLD HIST A	106		
			Grand Total	889		

APPENDIX

TIER 1						
School Name	Deficits		Number of co AP Courses	re	AP Potential at 60% for top 6 courses	
Milby	67% score 1	486 STEM exams given	AP BIOLOGY A	37	New courses:	
2	on AP exam	since 2016 2% score 3+	AP CAL AB A	38	AP Chemistry	222
		AP ComSciPrin A	71	AP Physics 1	223	
		AP ENG LANG A	55	AP Seminar	223	
			AP ENG LIT A	65	AP Statistics	211
			AP ENVIRN SCI A	50	Growth potential:	
			AP HUMAN GEO A	37	AP Biology	223
			AP MACRO ECO	103	AP Comp Sci Prin	215
			AP US GOVT	28		
			AP US HISTORY A	48		
			AP WORLD HIST A	62		
			Grand Total	594		



Notes:	
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