Building Student Success Bridges
By Sharing Data in a
Big Way:

### Houston Pathways Initiative (Generously funded by Houston Endowment)

#### Presenters:

Juan Carlos Reina, Ph.D., Director Academic Resource Development, Houston Community College William Waters, Ph.D., English Professor, University of Houston-Downtown Gene Preuss, Ph.D., History Professor, University of Houston-Downtown

STUDENT SUCCESS SUMMIT UNIVERSITY OF HOUSTON SEPTEMBER 2011

#### Partners

- TEXAS HIGHER EDUCATION COORDINATING BOARD (THECB):
- Kristen Kramer, Director, Success Initiatives
- Julie Aklund,
- SAN JACINTO COMMUNITY COLLEGE DISTRICT (SJCD):
- Catherine O'Brien, Associate Vice-Chancellor Stuednt Learning
  - Pamela Campbell, Assistant Vice Chancellor Educational Partnerships
- HOUSTON COMMUNITY COLLEGE DISTRICT
- (HCCS):
- Juan Carlos Reina, Director,
- Academic Resource Development

# HOW DOES THE TEXAS PATHWAYS PROJECT WORKS?

- TEXAS HIGHER EDUCATION COORDINATING BOARD:
- Regions:
- 1) San Antonio: Alamo CC
- 2 and 3) 2 Regions in Houston: Houston CC and San Jacinto CC
- 4) El Paso
- 5) Rio Grande

# Goal 1: Closing the Gaps in Participation

By 2015, close the gaps in participation rates across Texas to add 500,000 more students.

- College Preparatory Curriculum
- Well-qualified Educators

## How is this implemented through P16?

- 4X4
- College and Career Readiness Standards
- End-of-Course Assessment
- Vertical Curriculum Teams
- CCRS Integrated into Educator Prep Programs
- Faculty Collaboratives (Educ. and Content Faculty)

### Goal 2: Closing the Gaps in Success

By 2015, increase by 50 percent the number of degrees, certificates and other identifiable student successes from high quality programs.

- Improved graduation rates
- Demographic parity in enrollment and graduation
- Seamless student transitions

## How is this implemented through P16?

- Alignment of EOC and Graduation Plans to College Readiness Assessment & Placement
- Alignment of Secondary and Postsecondary Expectations
- Alignment of Rigorous Instruction with Support
- Secondary and Postsecondary Collaborations in Regions with Target Populations

#### Leveraging P16 Initiatives

- Regional College Readiness Special Advisors
- Public Agenda's Student Voices Project
- CCRI Faculty Collaboratives
- College Readiness Assignments Field Test (CRAFT)
- Vertical Alignment Training
- Regional P16 Councils
- Developmental Education Demos

#### Goals

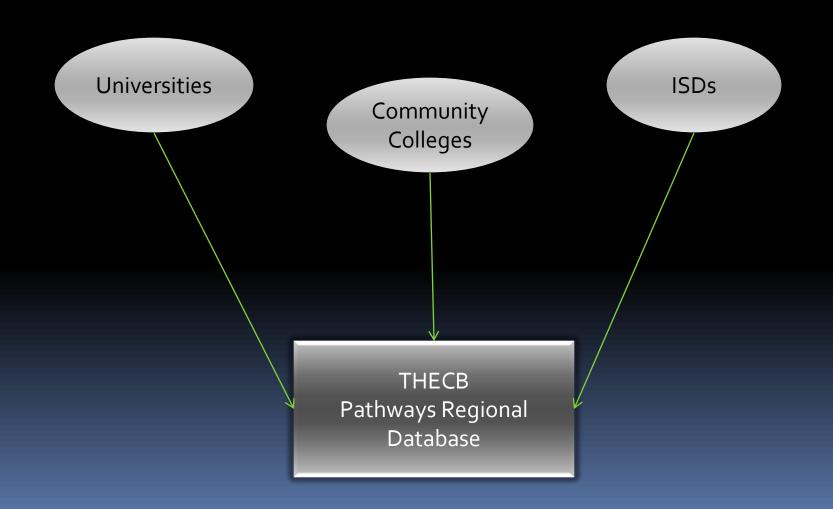
- Improve access to, analysis of, and use of data to inform decision-making at secondary and postsecondary levels
- Improve coordination between secondary and postsecondary sectors through face-to-face collaborative learning teams
- Improve successful transitions from secondary through postsecondary.

#### Pathway Project Overview

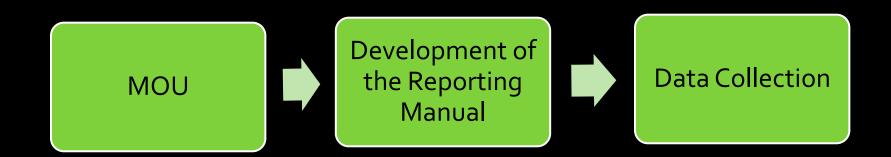
- Secondary and postsecondary education partners agree to share student level data
- Partners assign faculty members to meet on a monthly basis
- The data is used to generate reports for faculty teams
- The faculty teams use the data to fuel interventions designed to increase student success

#### Data Collection

Raw Data



#### Data Collection Process



#### Data Collected

- Enrollment
- Course (grades included)
- Graduation Data
- Five to Seven Years of Data
- Reporting Manuals

http://www.txhighereddata.org/ReportingManuals.cfm

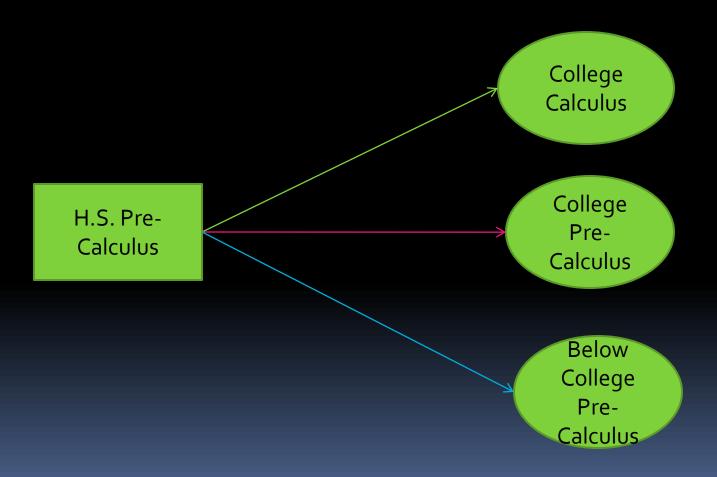
#### Faculty Reports

Find a student's highest high school course in a subject area Link the student's data to higher education data Find the first course the student took in higher education

## Faculty Reports Alignment Reports

Alignment reports are designed to illustrate possible gaps in secondary/ post-secondary alignment

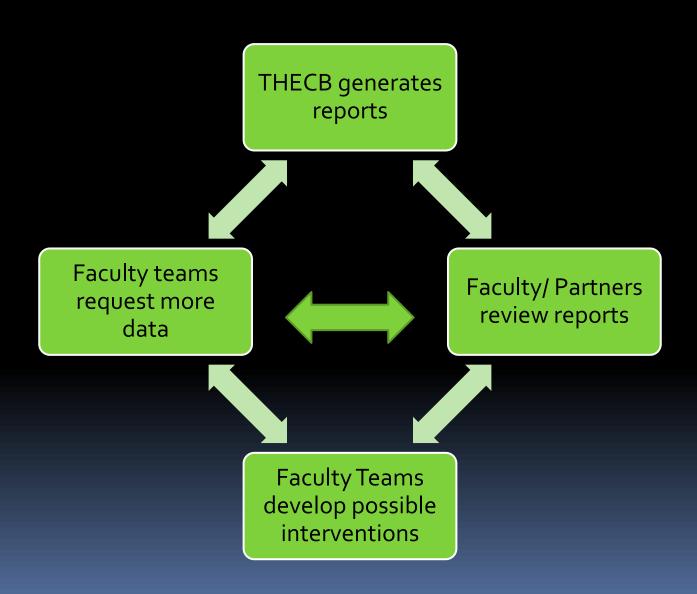
# Faculty Reports Alignment Reports



#### Faculty Reports

- Cohort Studies
- Predictive modeling
- Special Topic Reports
  - Study Skills
  - Dual Credit
  - Developmental Education
  - Researching possible interventions
- Evaluation reports
- Survey results
- Using all data at the THECB

#### Faculty Report Cycle



#### Faculty Reports

- Giving faculty reports at the institutional level is important to the Pathways process
  - Understanding how different student populations affect alignment
  - Understanding how successful institutional projects affect current alignment
- Safe place environment
  - Pathways only evaluates Pathways' interventions

#### Data Ownership

- Data ownership is important in the Pathway's process.
- The faculty teams should have the feeling the data (reports) were being generated due to their will.
- The original math alignment report had only 5 tables. The math team reviewed these reports. They requested 25 additional tables.

#### Faculty Teams

- Faculty Teams are the core of the Pathways project
- Faculty Teams identify possible local road blocks to successful transition from secondary to postsecondary
- Faculty teams are often encouraged to focus on local vertical alignment issues
- San Antonio and Houston Faculty Teams
  - Mathematics
  - English
  - U.S. History (Social Sciences)
  - Biology/ Chemistry (Sciences)

#### Faculty Teams

- Faculty teams are supported by a regional coordinator, the THECB, and always by local leadership, stakeholders, and overall statewide project.
- Faculty teams meet once a month.
- Initially, faculty team meetings center around team organization and faculty reports.
- Then, faculty teams are charged with development of interventions/systemic policy change for all education levels to better align secondary and post-secondary.

#### Team Organization

Data Support THECB Research Staff

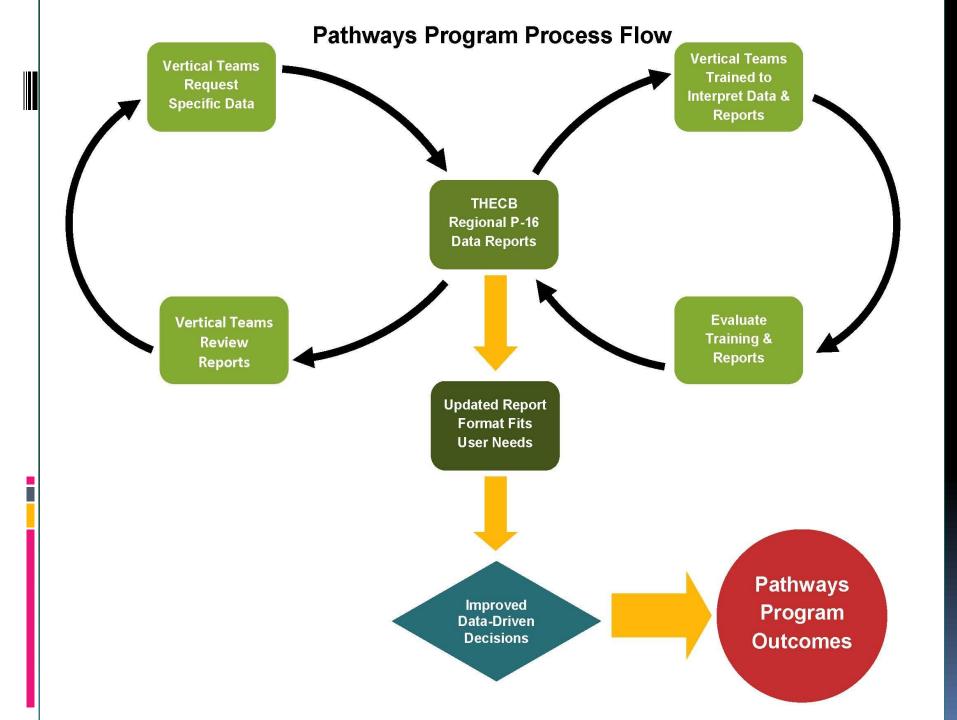
**Regional Coordinator** 

Secondary Co-Chair

Postsecondary Co-chair

Secondary and Postsecondary Content Team Members 12-15

Each Region has at least four content area teams.



# WHAT IS THE HOUSTON PATHWAYS INITIATIVE (HPI)?

#### Two Regions:

- San Jacinto
   Community College
- 2. University of Houston-Clear Lake
- 3. Pasadena ISD
- 4. Deer Park ISD
- 5. Galena Park ISD

- Houston Community College
- 2. University of Houston-Central
- 3. University of Houston- Downtown
- 4. Spring Branch ISD
- 5. Houston ISD

### WHAT IMPACT HAS THE TEXAS PATHWAYS HAD IN HOUSTON?

- HOUSTON COMMUNITY COLLEGE DISTRICT
- (HCCS):
- Juan Carlos Reina, Director,
- Academic Resource Development

# Texas Pathways Project-Houston For all Faculty Vertical Alignment Teams (FVAT):

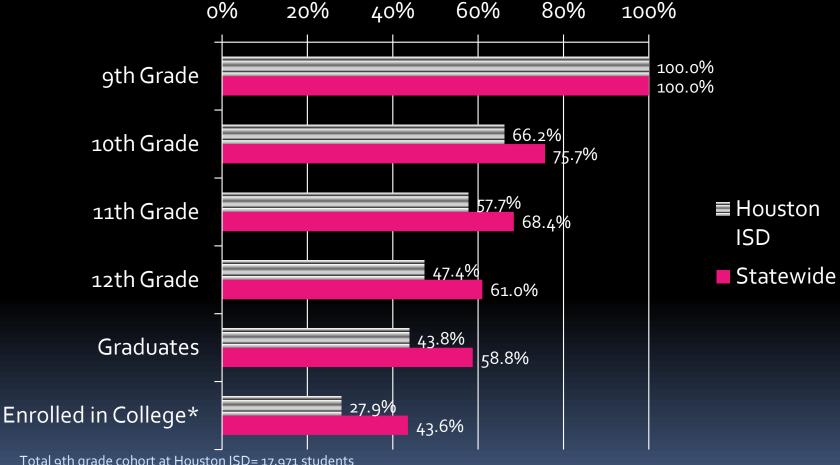
- Data Reports Obtained For All ISDs, HISD, SBISD with HCC, UH, UH-D:
- 1. Full alignment reports
- 2. TAKS Alignment reports
- 3. Full Developmental Ed reports
- 4. Full Alignment Reports on Ethnicity, Gender, Pell grants, Social economic status, etc...

#### Pathways

9<sup>th</sup> Grade to College Report AY 2003-2004 9<sup>th</sup> Grade Cohort Expected H.S. Graduation FY 2007

#### HOUSTON ISD REPORT

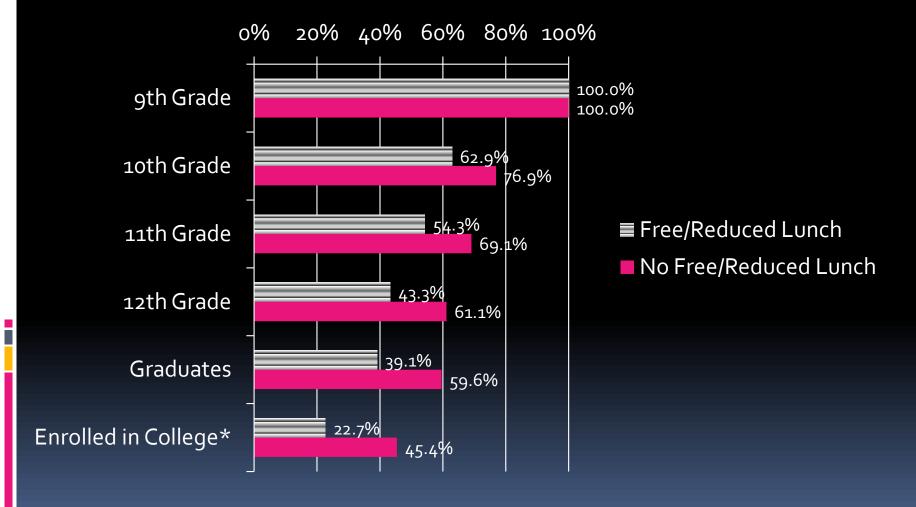
### Student Flow from 9<sup>th</sup> Grade to College



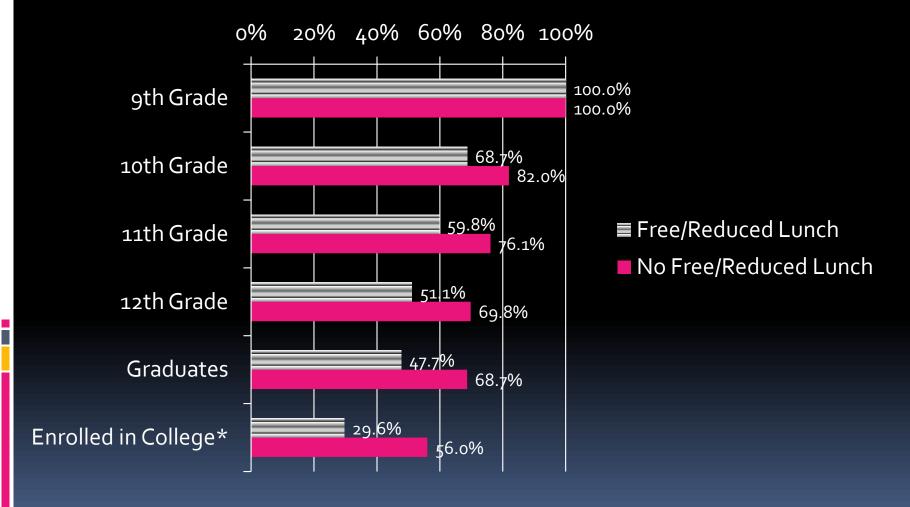
Total 9th grade cohort at Houston ISD= 17,971 students Total 9<sup>th</sup> grade cohort statewide = 375,183 students

<sup>\*</sup> Enrolled in Texas public or private higher education institutions.

### Student Flow from 9<sup>th</sup> Grade to College Free/Reduced Lunch at Houston ISD

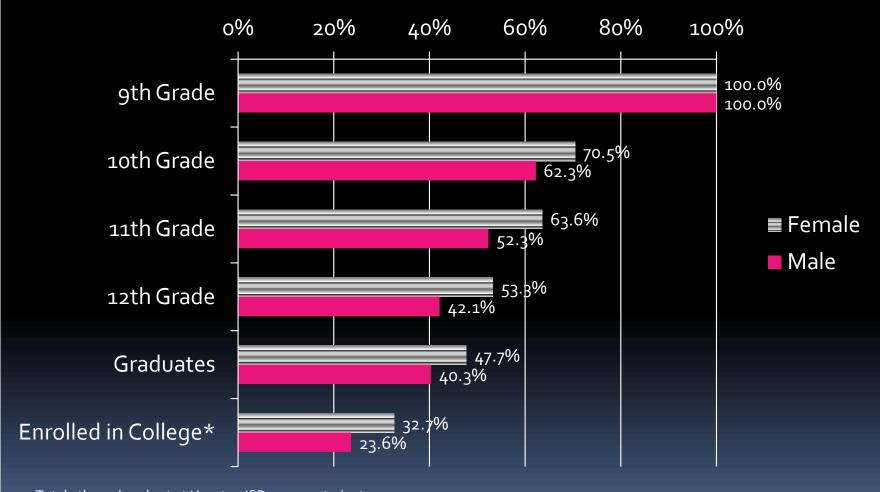


### Student Flow from 9<sup>th</sup> Grade to College Free/Reduced Lunch Statewide



<sup>\*</sup> Enrolled in Texas public or private higher education institutions.

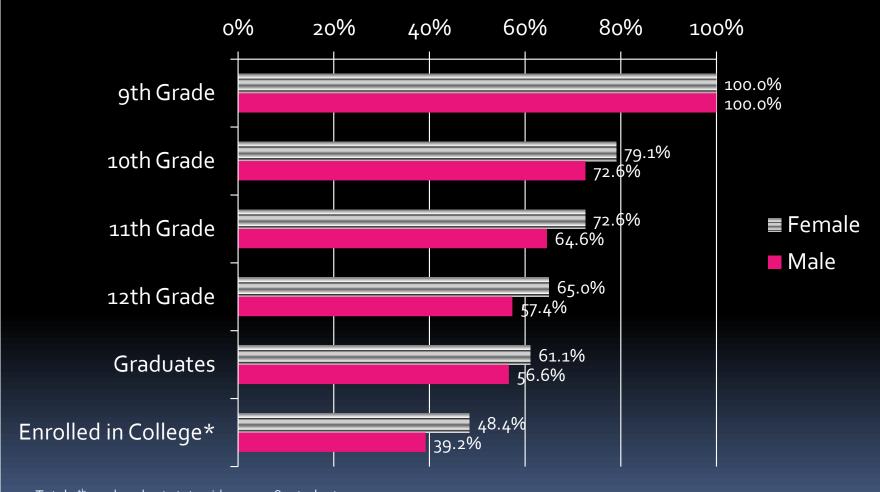
#### Student Flow from 9<sup>th</sup> Grade to College by Gender at Houston ISD



Total 9th grade cohort at Houston ISD= 17,971 students

<sup>\*</sup> Enrolled in Texas public or private higher education institutions.

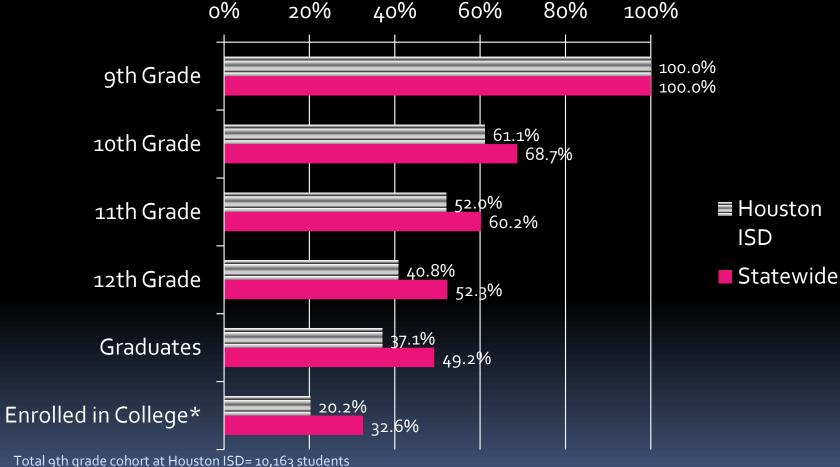
### Student Flow from 9<sup>th</sup> Grade to College by Gender Statewide



Total 9<sup>th</sup> grade cohort statewide = 375,183 students

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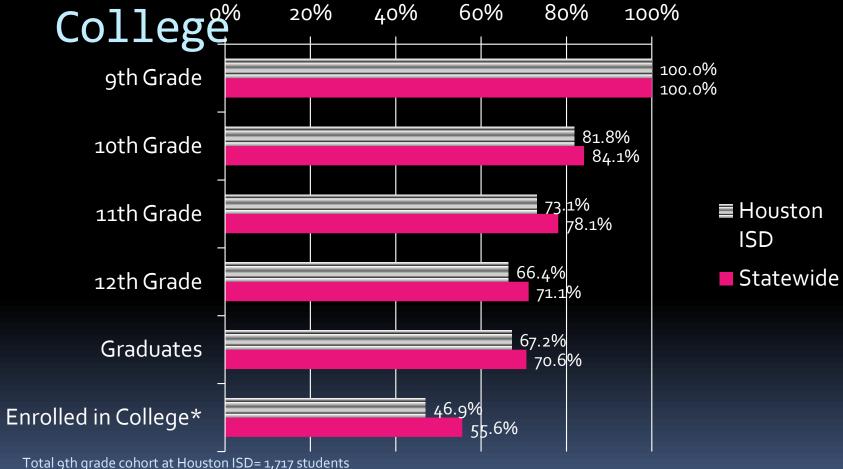
### Student Flow for Hispanics from 9<sup>th</sup> Grade to College



Total 9th grade cohort at Houston ISD= 10,163 students Total 9<sup>th</sup> grade cohort statewide = 159,971

<sup>\*</sup> Enrolled in Texas public or private higher education institutions.

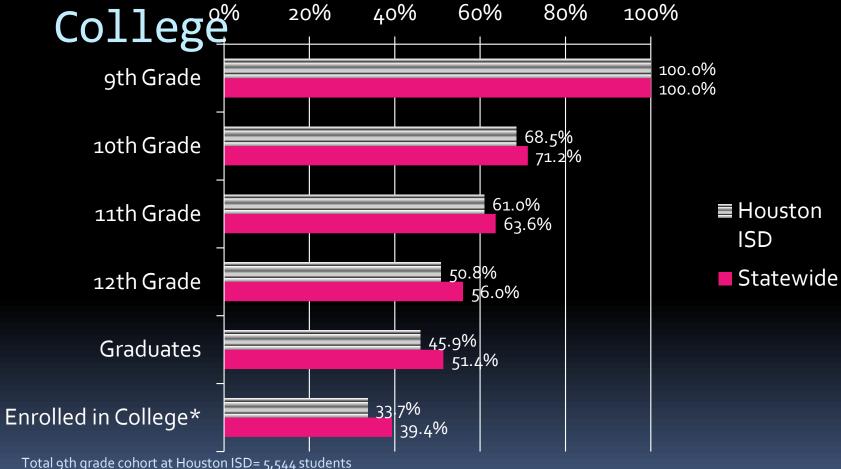
#### Student Flow for European-Americans from 9<sup>th</sup> Grade to



Total 9th grade cohort at Houston ISD= 1,717 students Total 9<sup>th</sup> grade cohort statewide = 147,483

<sup>\*</sup> Enrolled in Texas public or private higher education institutions.

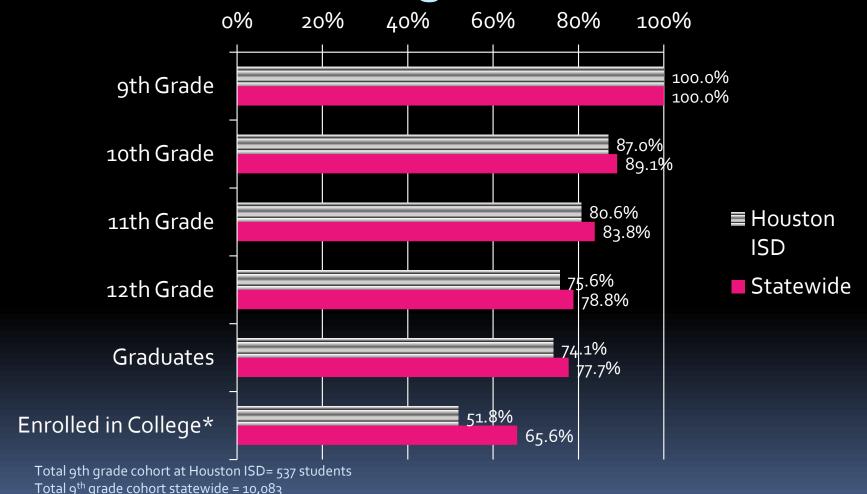
#### Student Flow for African-Americans from 9<sup>th</sup> Grade to



Total 9th grade cohort at Houston ISD= 5,544 students Total 9<sup>th</sup> grade cohort statewide = 56,477

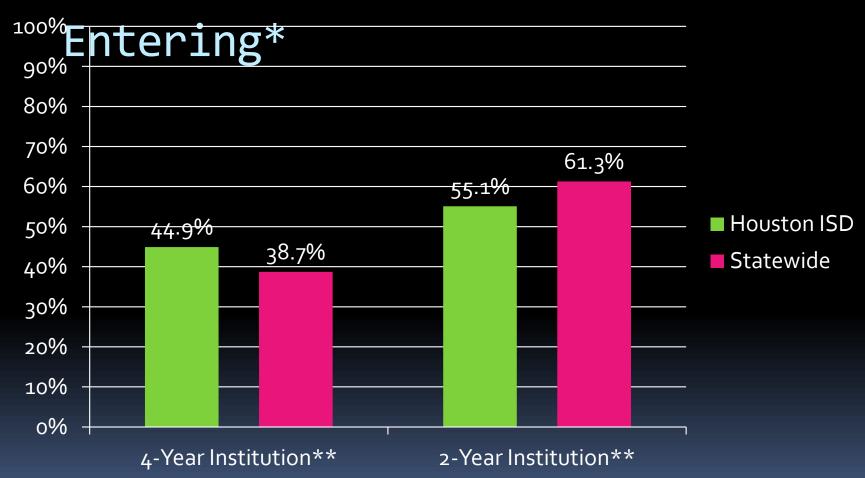
<sup>\*</sup> Enrolled in Texas public or private higher education institutions.

## Student Flow for Asians from 9<sup>th</sup> Grade to College

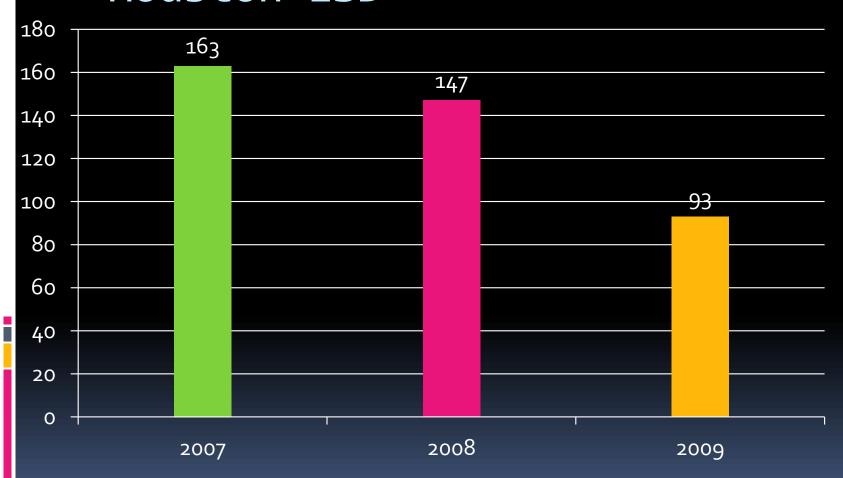


\* Enrolled in Texas public or private higher education institutions.

### The Type of Postsecondary Institutions Students are

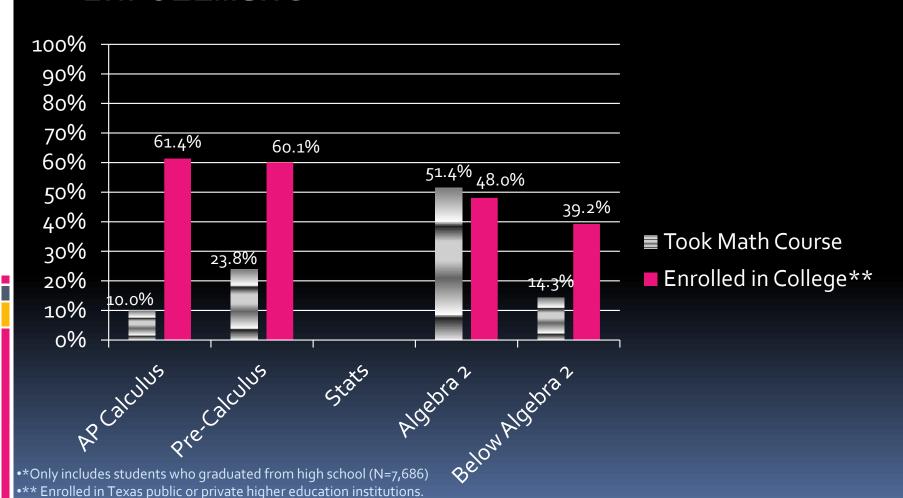


## GED Students from Houston ISD\*

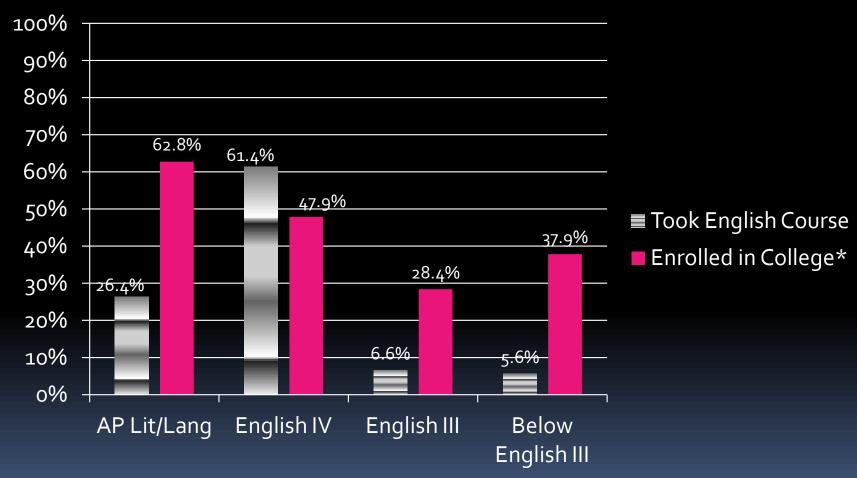


<sup>\*</sup> Total number of students who received GED.

#### Highest Math Course Taken in High School at Houston ISD by College Enrollment\*



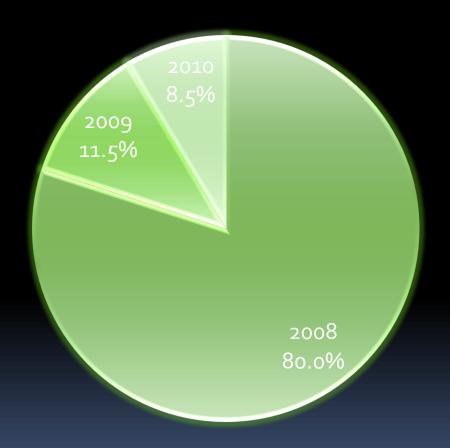
## Highest English Course Taken in High School by College Enrollment\*



<sup>•\*</sup>Only includes students who graduated from high school (N=7,686)

<sup>•\*\*</sup> Enrolled in Texas public or private higher education institutions.

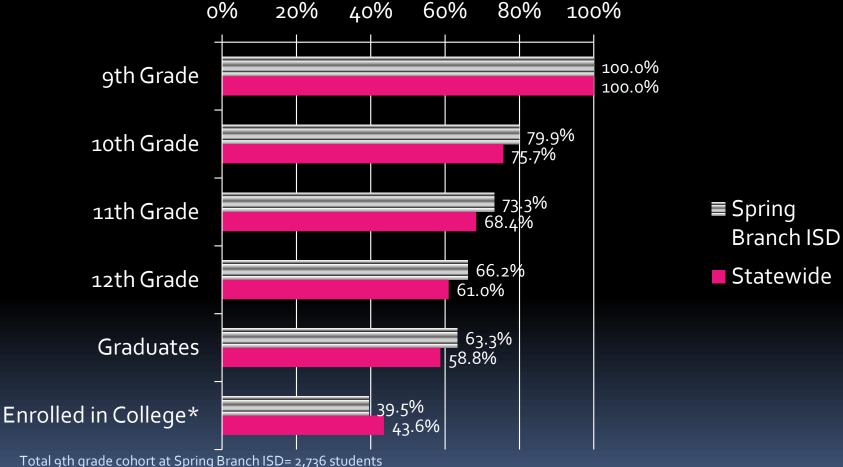
## Year Entering College Houston ISD \*



Pathways 9<sup>th</sup> Grade to College Report AY2003-2004 9<sup>th</sup> Grade Cohort Expected H.S. Graduation FY 2007

#### SPRING BRANCH ISD REPORT

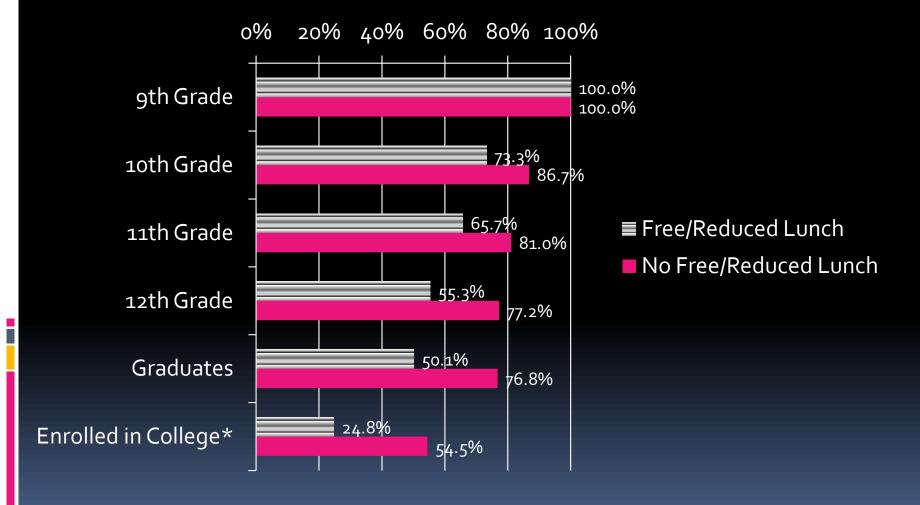
## Student Flow from 9<sup>th</sup> Grade to College



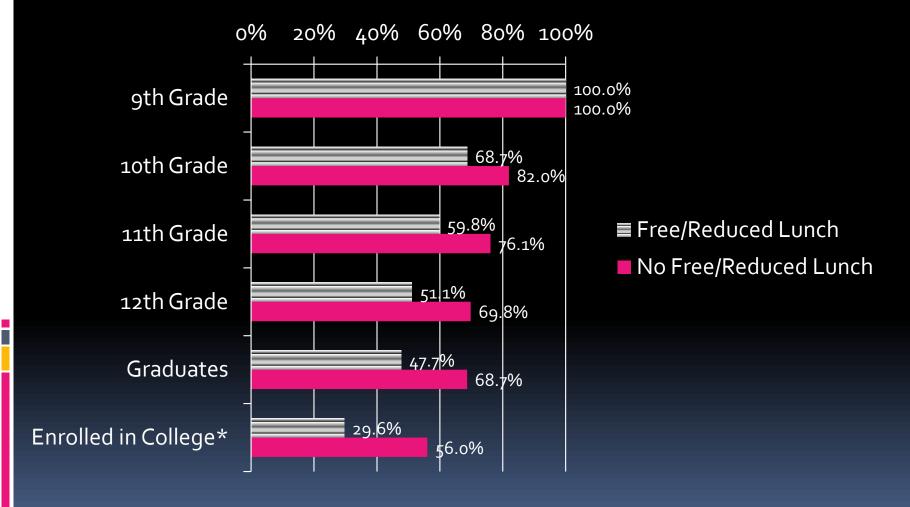
Total 9th grade cohort at Spring Branch ISD= 2,736 students Total 9th grade cohort statewide = 375,183 students

<sup>\*</sup> Enrolled in Texas public or private higher education institutions.

#### Student Flow from 9<sup>th</sup> Grade to College Free/Reduced Lunch at Spring Branch ISD

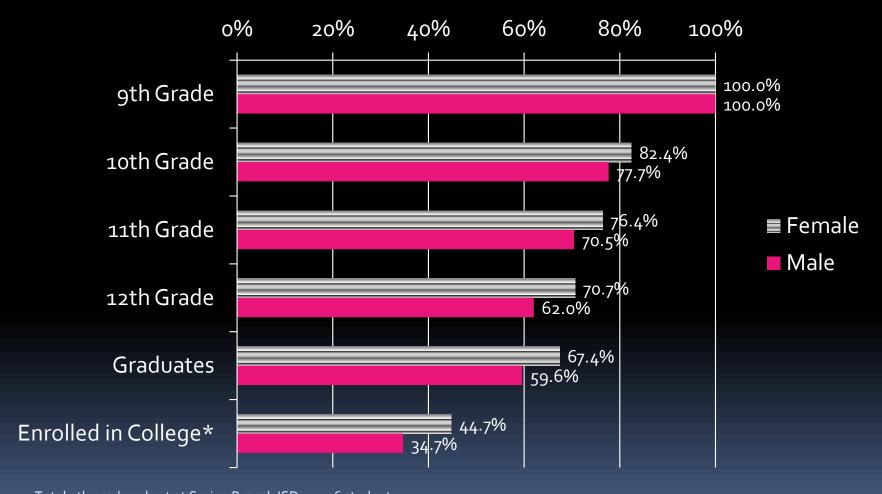


### Student Flow from 9<sup>th</sup> Grade to College Free/Reduced Lunch Statewide



<sup>\*</sup> Enrolled in Texas public or private higher education institutions.

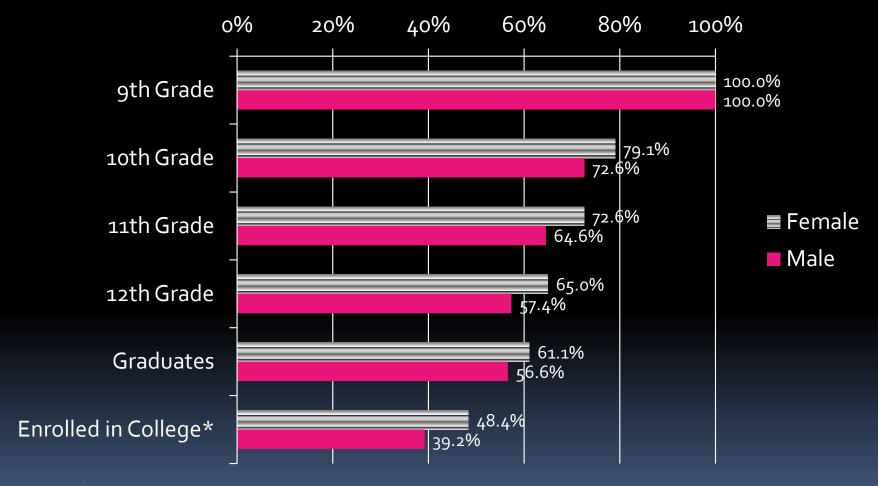
#### Student Flow from 9<sup>th</sup> Grade to College by Gender at Spring Branch ISD



Total 9th grade cohort at Spring Branch ISD= 2,736 students

<sup>\*</sup> Enrolled in Texas public or private higher education institutions.

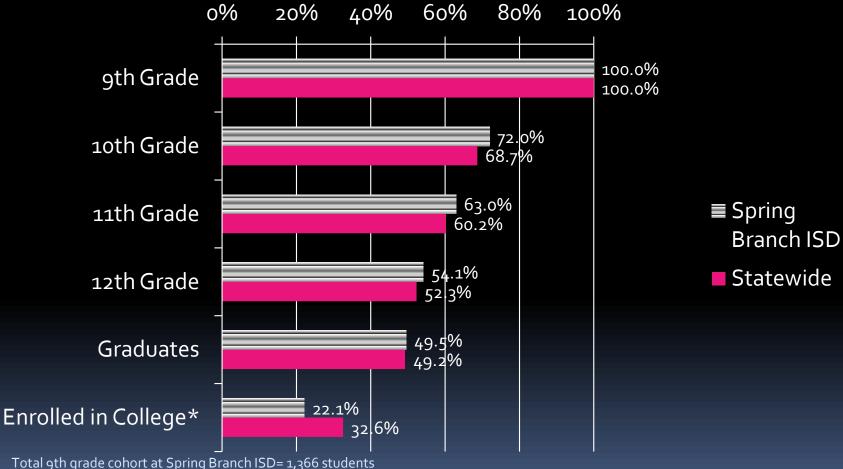
### Student Flow from 9<sup>th</sup> Grade to College by Gender Statewide



Total 9<sup>th</sup> grade cohort statewide = 375, 183 students

<sup>\*</sup> Enrolled in Texas public or private higher education institutions.

## Student Flow for Hispanics from 9<sup>th</sup> Grade to College

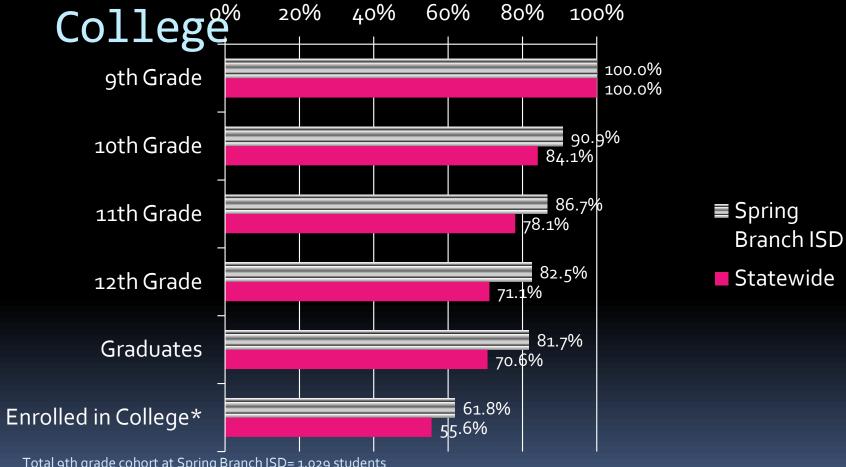


Total 9<sup>th</sup> grade cohort statewide = 159,971

\* Enrolled in Toxas public or private higher education institu

<sup>\*</sup> Enrolled in Texas public or private higher education institutions.

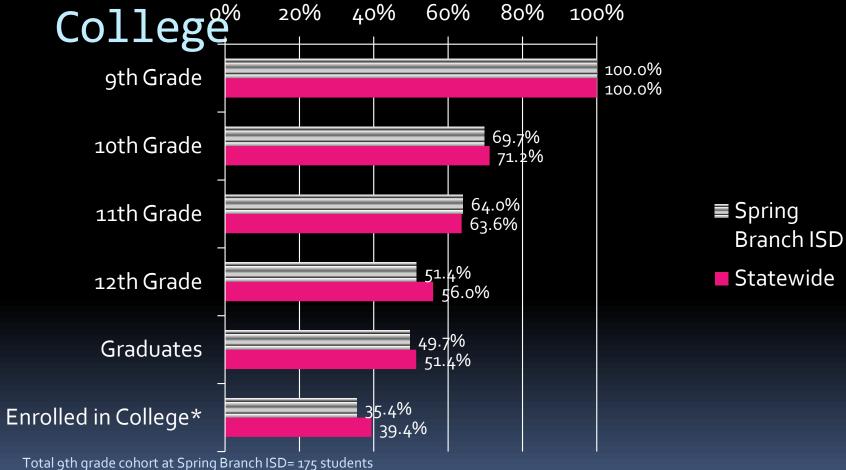
### Student Flow for European-Americans from 9<sup>th</sup> Grade to



Total 9th grade cohort at Spring Branch ISD= 1,029 students Total 9<sup>th</sup> grade cohort statewide = 147,483

<sup>\*</sup> Enrolled in Texas public or private higher education institutions.

### Student Flow for African-Americans from 9<sup>th</sup> Grade to



Total 9th grade cohort at Spring Branch ISD= 175 students
Total 9<sup>th</sup> grade cohort statewide = 56,477
\* Enrolled in Texas public or private higher education institutions.

## Student Flow for Asians from 9<sup>th</sup> Grade to College

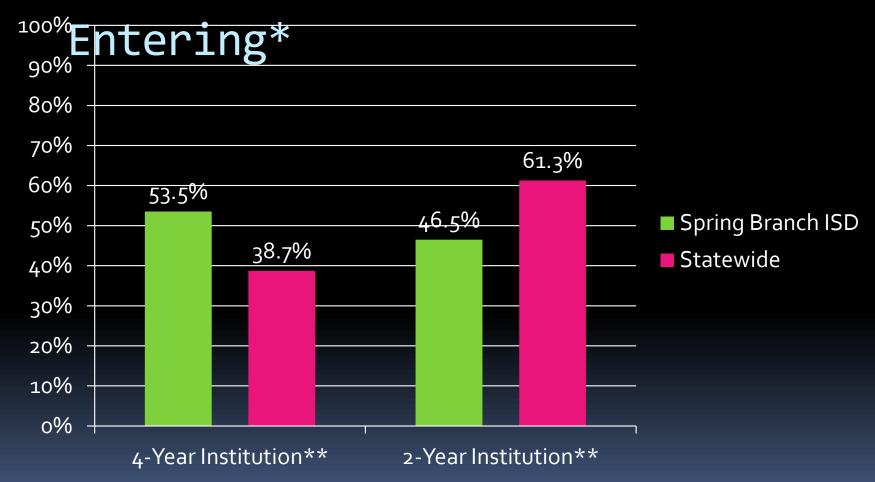


Total 9<sup>th</sup> grade cohort statewide = 10,083

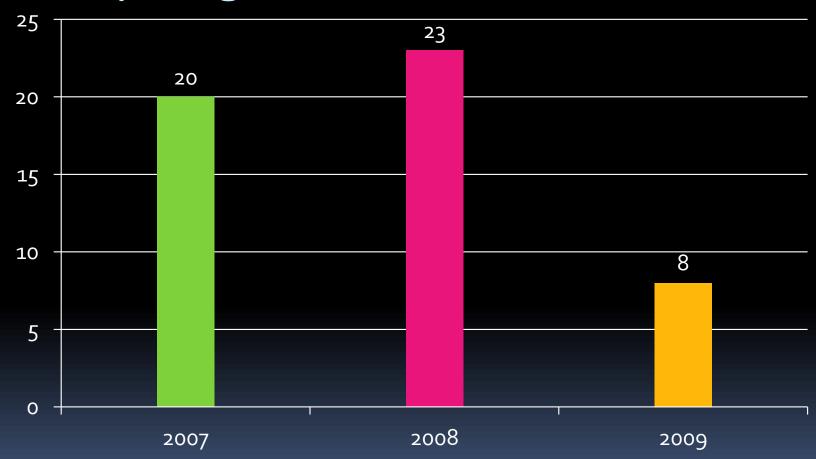
\* Enrolled in Texas public or private higher education insti

<sup>\*</sup> Enrolled in Texas public or private higher education institutions.

### The Type of Postsecondary Institutions Students are

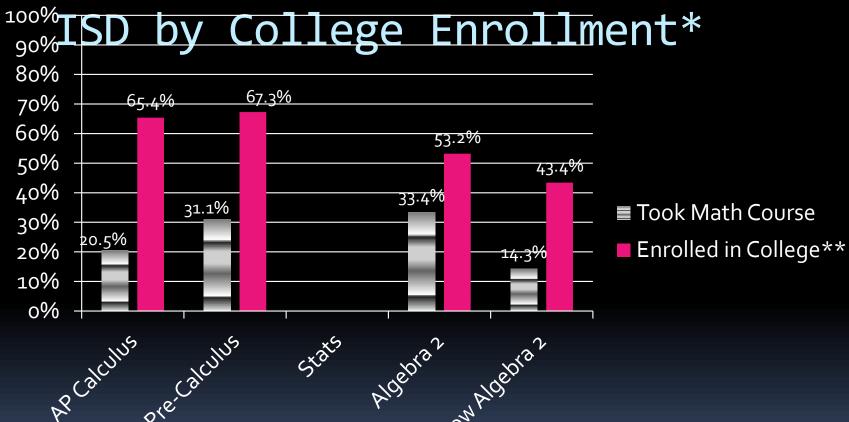


## GED Students from Spring Branch ISD\*



<sup>\*</sup> Total number of students who received GED.

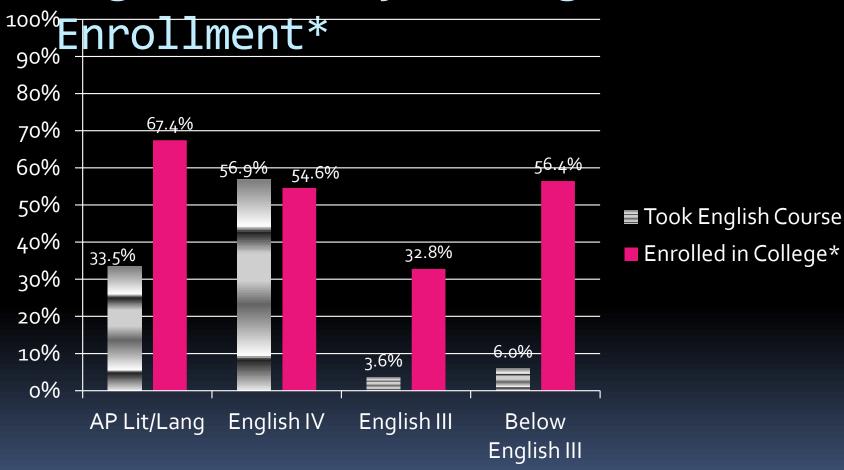
# Highest Math Course Taken in High School at Spring Branch



<sup>•\*</sup>Only includes students who graduated from high school (N=1732)

<sup>•\*\*</sup> Enrolled in Texas public or private higher education institutions.

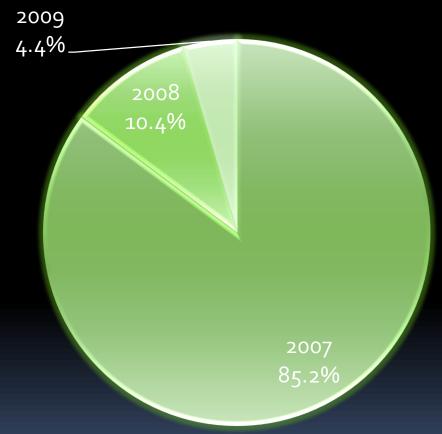
## Highest English Course Taken in High School by College



<sup>•\*</sup>Only includes students who graduated from high school (N=1732)

<sup>•\*\*</sup> Enrolled in Texas public or private higher education institutions.

### Year Entering College Spring Branch ISD \*



#### First Mathematics College Course (HCC)

		Secondary						
HCC Math Category	Housto	on ISD	Spring Bi	anch ISD	Total			
	Total	%	Total	%	Total	%		
<b>Developmental Math</b>	1,464	54.9	166	34.3	1,630	51.73		
Intermediate Algebra	482	18.1	101	20.9	583	18.50		
Algebra	582	21.8	151	31.2	733	23.26		
Pre- Calculus	25	0.9		2.3	36			
Calculus	93	3.5	40	8.3	133	4.22		
Other	21	0.8	15	3.1	36			
Total	2,667	100.0		100.0		100		

### Success Rates First Mathematics College Course (HCC)

Secondary Institution													
	Houston ISD  Course Success Rates							5	Spring B	ranch IS	D		
HCC Math Category							Course Success Rates						
Pass			Fai	led	V	V	Pa	Pass		Failed		W	
	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%	N
	979	66.9	327	22.3	158	10.8	115	69.3	43	25.9	8	4.8	1,630
	329	68.3	92	19.1	61	12.7	60	59.4	30	29.7	11	10.9	583
Algebra	433	74.4	91	15.6	58	10.0	123	81.5	16	10.6	12	7.9	733
Pre- Calculus	16	64.0	*	*	5	20.0	11	100.0	*	*	*	*	36
Calculus	73	78.5		6.5	14	15.1	33		*	*	*	*	133
Other	19	90.5		*	*	*	13		*	*	*	*	36

### First Mathematics College Course (UH-Central)

		Secondary					
UH-Central Math Category	Houst	on ISD	Spring R	anch ISD	Total		
	Total	%	Total	%	Total	%	
UH-Central Math Course							
Intermediate Algebra							
Intel mediate Aigebra	228	14.6	26	8.8	254	13.69	
Algebra							
G	841	54.0	168	56.6	1,009	54.39	
Pre-Calculus							
	142	9.1	43	14.5	185	9.97	
Stats							
	34	2.2	11	3.7	45	2.43	
Calculus							
	308	19.8	47	15.8	355	19.14	
Other							
	5	0.3	*	*	7	0.38	
Total							
	1,558	100.0	297	100.0	1,855	100	

### Success Rates First Mathematics College Course (UH-Central)

	Secondary Institution												
			Housto	on ISD				S	Spring B	ranch IS	D		
<b>UH-Central Math Category</b>	Math Category College Success Rates							C	ollege Su	ccess Ra	tes		
	Pass		Failed		W		Pass		Failed		W		Total
	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%	N
Math Course													
Intermediate Algebra	144	63.2	70	30.7	14	6.1	16	61.5	8	30.8	*	*	254
Algebra	580	69.0	226	26.9	35	4.2	132	78.6	22	13.1	14	8.3	1,009
Pre-Calculus	86	60.6	46	32.4	10	7.0	31	72.1	11	25.6	*	*	185
Stats	32	94.1	*	*	*	*	10	90.9	*	*	*	*	45
Calculus	220	71.4	56	18.2	32	10.4	33	70.2	9	19.1	5	10.6	355
Other	*	*	*	*	*	*	*	*	*	*	*	*	7

<sup>\*</sup> denote cell sizes less than 5

### First Mathematics College Course (UH-Downtown)

		Secondary					
UH-Downtown Math Category	Houste	on ISD	Spring B	ranch ISD	Total		
	Total	%	Total	%	Total	%	
UH-Downtown Math Course							
Developmental Math	459	44.7	34	27.6	493	42.91	
Intermediate Algebra	253	24.7	30	24.4		24.63	
Algebra	304	29.6	59	48.0	363		
Pre-Calculus	*	*	*	*	*		
Calculus	6	0.6	*	*	6	0.52	
Total	1,026	100.0	123	100.0			

### Success Rates First Mathematics College Course (UH-Downtown)

	Secondary Institution													
			Housto	on ISD			Spring Branch ISD							
UH-Downtown Math Category		College Success Rates						College Success Rates						
	Pass Failed		led	W		Pass		Failed		W		Total		
	Total	%	Total	%	Total	%	Total	%	Total	%	Total	%	N	
Math Course														
Developmental Math	190	41.4	105	22.9	164	35.7	25	73.5	*	*	7	20.6	493	
Intermediate Algebra	152	60.1	32	12.6	69	27.3	18	60.0	5	16.7	7	23.3	283	
Algebra	223	73.4	81	26.6	*	*	41	69.5	18	30.5	*	*	363	
Pre-Calculus	*	*	*	*	*	*	*	*	*	*	*	*	*	
Calculus	5	83.3	*	*	*	*	*	*	*	*	*	*	6	

<sup>\*</sup> denote cell sizes less than 5

# FACULTY VERTICAL ALIGNMENT TEAM: Mathematics

#### **Activities:**

- Research Correlation between TEKS, CCRS with College Entrance Exams: COMPASS & ACCUPLACER.
- 2. Study horizontal alignment of college level math courses at HCC and UH
- 3. Team took COMPASS as a group:
  - Surprises: Structure of test, adaptive test, language issues...

## Houston Pathways: FVAT: MATH

#### Intervention:

- 1. Create Workbook to Prep for Placement Testing
- 2. Partner with 8 high schools (HISD 5, SBISD 3)
- 3. 4 HS form control group, 4 HS engage in intervention
- 4. 749 seniors take Pretest early in Spring 2011
- 5. 4 teachers work with seniors
- 6. 250 students take COMPASS test
- 7. Data is being collected and analyzed.

### HPI FVAT MATH: Outcomes

- Study of placement cut-off scores for three levels of developmental math courses at HCC, two at UH-D, 1 at UH.
- Reinforcing continuous remediation at HCC
- Coupled with Dev. Ed. Initiative (Gates) create different formats for dev. Math courses: 4week bridge courses, 8-week regular courses
- Through THECB Comprehensive Student Success Program, increase student support in College Algebra courses.

# Texas Pathways Houston FVAT HISTORY

- Data Reports Obtained For All ISDs, HISD, SBISD with HCC, UH, UH-D:
- 1. Full alignment reports
- 2. TAKS Alignment reports
- 3. Full Developmental Ed reports
- 4. Full Alignment Reports on Ethnicity, Gender, Pell grants, Social economic status, etc...

# Texas Pathways Houston FVAT HISTORY

#### Activities:

- Analysis of alignment of CCRS and horizontal alignment of History I&II for HCC, UH, UH-D
- 2. Emphasis on critical thinking skills, reading and writing

# Texas Pathways Houston FVAT ENGLISH

- Intervention:
- 1. FVAT created survey for teachers and professors in English throughout Houston area.
- Emphasis on expectations, methodologies, pedagogies, resources in the English classroom.
- 3. 190 faculty responded in Spring 2011
- 4. Analysis of data underway.

# Texas Pathways Houston FVAT BIOLOGY

- Intervention:
- FVAT with most extensive data requests and reports
- 2. Finding: Hispanic students do not enroll in majors Biology, perform poorly.
- 3. Subgroup creates research agenda to study in greater detail
- 4. Subgroup creates survey and focus groups to research attitudes and expectations from secondary and post-secondary students

#### Questions?

- Juan.reina@hccs.edu
- Watersw@uhd.edu
- Preussg@uhd.edu
- Thank you!