EDUCATION

Children in Child Care and Early Education

INDICATORS

SUBSIDIZED CARE: The percentage of all children under the age of 14 in Harris County receiving subsidized child care through the Workforce Commission and its Gulf Coast Workforce Development Board

Year	2001	2002	2003	2004	2006	2007	2008	2009
Indicator	3.5%	3.8%	3.9%	4.3%	4.9%	4.8%	4.9%	4.9%

Source: The WorkSource – Gulf Coast Workforce Board; U.S. Census Bureau

LICENSED FACILITIES: The number of facilities that meet standards and are licensed under the Child Care Licensing Program within the Texas Department of Family and Protective Services in Harris County

Year	1990	1992	1994	1996	1998	2000	2002	2004	2006	2007	2008	2009
Indicator	1,095	1,236	1,382	1,322	1503	1566	1588	1596	1,618	1,622	1,648	1548

Source: Texas Department of Family and Protective Services, Child Care Licensing

CHILDREN IN CHILD CARE: The capacity/number of children receiving care in state licensed or registered child care facilities in Harris County

Year	1990	1992	1994	1996	1998	2000
Indicator	111,617	122,811	134,849	139,195	145,625	148,605

Year	2002	2004	2006	2007	2008	2009
Indicator	158,053	182,650	184,511	188,238	191,277	192,150

Source: Texas Department of Family and Protective Services, Child Care Licensing

NATIONAL STANDARDS: The number of child care providers in Harris County that are accredited by the National Association for the Education of Young Children

Year	1990	1992	1994	1996	1998	2000	2002
Indicator	NA	62	59	73	77	86	89

Year	2004	2005	2006	2007	2008	2009	2010
Indicator	124	149	158	107	60	50	47*

Source: The National Association for the Education of Young Children (NAEYC); Collaborative for Children
Note: Information reflects data available as of June 2010

SCHOOL AGE CHILD CARE: The number of formal programs providing care for children before school, after school, and in some cases during the holidays in Harris County

Year	1990	1992	1994	1996	1998	2000	2002	2004	2006	2008	2009
Indicator	NA	287	250	283	385	413	478	352	NA	329	356

Source: Harris County Department of Education; Collaborative for Children

Note: This indicator excludes licensed child care facilities, licensed family homes, and listed homes that provide after-school child care

- Quality child care is related to achievement later in life, but it can be prohibitively expensive to many Harris County families.
- The Texas Workforce Commission provides childcare subsidies to low-income families and childcare providers who serve them through Workforce Solutions, but funding limitations affect the quality of this care.
- Fewer childcare providers are eligible to participate in Workforce Solutions because accreditation standards have recently risen.

Early childhood experiences have been proven to shape long-term life outcomes for every child. Research indicates that a child's health development depends on positive and stimulating experiences, especially during the first six years of life.[1] Studies have shown that quality child care can benefit a child's cognitive, social-emotional, and language development, which is particularly beneficial to low-income children.[2] The positive correlation between high-quality child care and child development extends to graduation rates, college attendance, math and reading scores, and fewer teen pregnancies.

The annual average child care cost for a child under four years of age is $6,054, a price comparable to a public Texas University semester tuition.

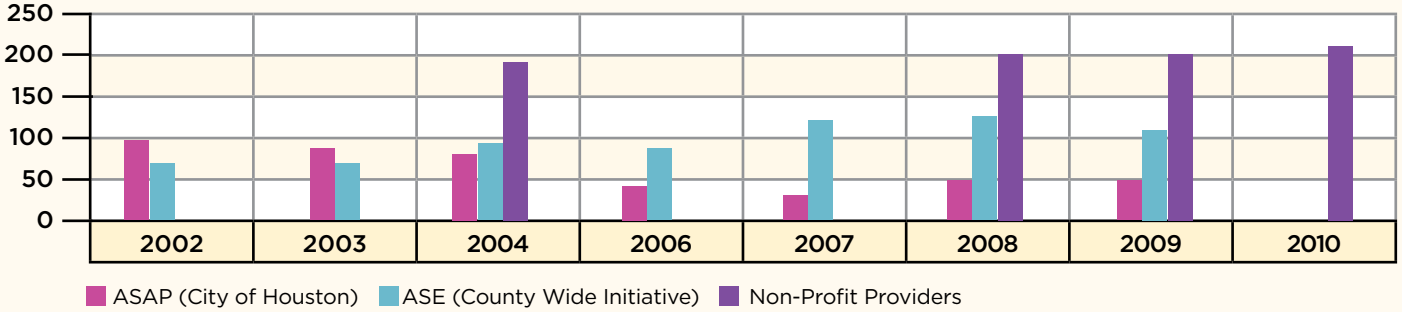
In 2009, there were 404,607 children under the age of six in Harris County[3] and approximately 45% of children in Harris County lived in or near poverty.[4] Finding affordable child care is a daunting task for parents when the average annual child care cost for a child under four years of age is $6,054, a price comparable to a public Texas university semester tuition.[5] Once a child reaches school age, the average cost for before- and after-school care is $3,040.[6]

Child care subsidies for Texas' low-income children are provided through the Texas Workforce Commission, which manages federal funds received through a Child Care and Development Block Grant. The Workforce Commission's services offer parents the opportunity to gain and maintain employment or to participate in workforce training activities.[7] Although the federal government sets maximum family eligibility standards for subsidies at 85% of the state's median income, the state's local workforce development boards can set local eligibility criteria.[8] The Gulf Coast Workforce Board, Harris County's local development board, provides direct services to the residents of a 13-county region in the Houston-Galveston Gulf Coast area through Workforce Solutions.[9]

In 2009, Workforce Solutions provided child care subsidies to 41,327 children in Harris County under the age of 14.[10] This number decreased from 2007, when 46,291 children in Harris County received subsidized child care.[11] The current family income guidelines set the gross monthly eligibility income for a family of three at $3,052 for the first month and then $3,710 for subsequent months;[12] approximately $43,852 annually, and averages at 75.8% of the state's median family income for a family of three.[13] As of early 2010, there were no Texas children eligible for subsidized child care waitlisted and not receiving assistance.[14] After having exhausted the waitlist, a large number of eligible children still were not receiving assistance. In 2010, Workforce Solutions received $33 million in American Recovery and Reinvestment Act funds for child care to provide these remaining eligible children with subsidies.[15]

Texas law requires that the Texas Department of Family and Protective Services (DFPS) regulate all child care operations to protect the health, safety, and well-being of children in care. Services include daycare facilities, registered family homes, and listed family homes.[16] DFPS regulates the number of children per caregiver, the number of hours that can be worked, and minimum hours of training and age of caregivers. To qualify for payment by Workforce Solutions under the child care subsidy program, a child care provider must be licensed or registered by the DFPS.[17] In 2009, there were 1,548 licensed or registered child care providers in Harris County, with a capacity of 170,358 children.[18]

SCHOOL AGE CHILD CARE SITES IN HARRIS COUNTY



CHILDREN AT RISK 2010-2012

Children in Child Care and Early Education (cont.)

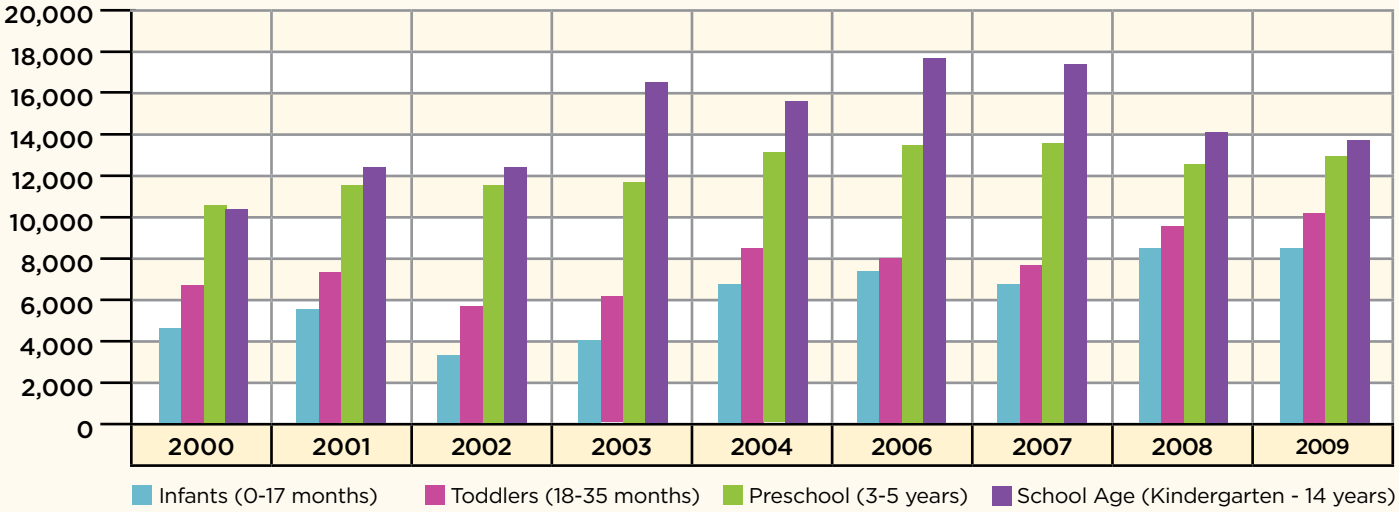
In 2009, 1,167,862 of Texas' K-12 children, roughly 26%, were responsible for caring for themselves after school.

The National Association for the Education of Young Children (NAEYC) sets standards for accreditation with the goal of improving the well-being of all young children.[19] The NAEYC developed the Accreditation of Programs for Young Children to raise the standards for accreditation and also to monitor standards.[20] The NAEYC uses 10 standards to evaluate child care institutions. As of July 2010, there were 6,983 accredited programs serving 610,761 children in the United States.[21] Texas houses 264 accredited child care providers, 3.8% of all accredited facilities.[22] As of June 2010, there were 47 accredited providers in Harris County, compared to 50 in 2009, 60 in 2008, and 107 in 2007.[23] Increased NAEYC child care standards have caused some providers to default on maintaining their accreditation. However, these higher standards are meant to provide a safe and healthy physical environment and maintain polices that ensure high-quality experiences for children, families, and staff.[24]

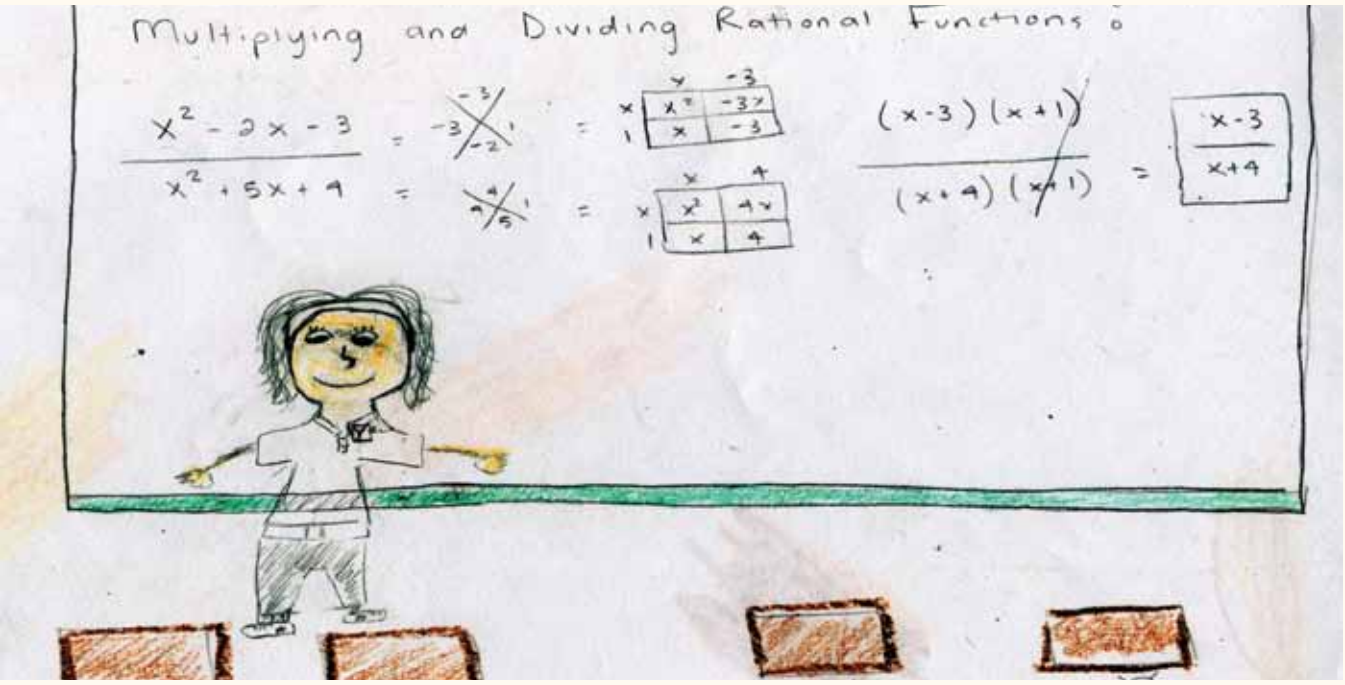
In 2009, 1,167,862 of Texas' K-12 children, roughly 26%, were responsible for caring for themselves after school.[25] Studies show that lack of adult supervision and resulting self-care for children and adolescents leads to increased likelihood of accidents, injuries, lower social competence, lower GPAs, lower achievement test scores, and greater likelihood of participation in delinquent or high-risk activities.[26] School-aged children show significant benefits from before- and after-school programs, as they provide services that assist with schoolwork, test preparation, life skills, physical activity, social experiences, attitudes, and relationships.[27] Harris County offers such programs through individual school districts and non-profits, but programs are also available through churches, community centers, apartment complexes, and learning centers. In 2009, there were 356 formal programs providing before- and after-school care for school-age children.

The 21st Century Community Learning Centers (CCLC) is a national program that provides funds to public schools to plan, implement, or expand projects that benefit the educational health or social service needs of the community.[28] Through the Harris County Department of Education, the CCLC endorsed the Cooperative for After-School Enrichment Program (CASE) which provided after-school enrichment services to over 16,000 students at 110 sites in 2009.[29] The City of Houston also funds after-school programs through the Mayor's After-School Achievement Program (ASAP). In 2009, ASAP provided services to 3,105 students at 44 different sites.[30] The number of children served by the ASAP program has decreased significantly over the past years due to guidelines set to encourage regular attendance, from over 4,000 children in 2007; 8,000 children in 2004; and over 11,000 in 2002.

NUMBER OF CHILDREN RECEIVING SUBSIDIZED CHILD CARE IN HARRIS COUNTY



CHILDREN AT RISK 2010-2012



Child care providers should receive higher payments that are at market rate and be provided with reimbursements in a more efficient and effective manner.

Policy Implication

Texas child care providers who participate in the child care subsidy program often receive payment based upon rates that are 30-40% below the market rate.[31] The result of this is often higher child-to-staff ratios, under-trained staff, and lack of equipment, resources, and materials. Families in Texas utilizing the child care subsidy program usually pay a 9-11% co-payment; however, child care providers report that insufficient reimbursement rates have caused them to discontinue serving low-income children.[32] Despite the significant amount of stimulus funds allocated to Texas, little progress was made in response to the urgent need to change the system of reimbursements for child care providers to find a more efficient and effective method for providing reimbursements.

There is a desperate need for quality, affordable before- and after-school programs. In 2009, only 15% of school-age children were enrolled in after-school care, while 26% of Texas' children care for themselves after school, and yet 51% of all Texas children not involved in after-school programs would likely take part if programs were available in their community. Research indicates that beyond the lack of need, the predominant barriers to after-school program enrollment include cost, preference for alternative activities, and concerns about program quality.[33] Because school-age child care programs fill the gaps in communities by offering resources and experiences that families and schools are sometimes unable to provide, the continued need for quality care before- and after-school remains an important issue that requires attention.

An essential component of quality early child care is the knowledge and skills of a child's caregiver. Legislation proposing increased development of early childhood professionals was proposed during the 81st Legislative Session, and while it did not pass, its proposal offers promising ideas for early child care standards.[34] Currently, early childhood professionals are required only 8 hours of pre-service training, and 15 hours of in-service training for teachers and staff.[35] With so many children in need of early child care, higher standards requiring more extensive training for the child care provider must be considered.

Pre-K and Head Start Enrollment

INDICATORS

PRE-K: The number of children enrolled in the pre-kindergarten public school program designed for the improvement of the social, intellectual, language, aesthetic, and physical development of children in Harris County

Year	1990	1992	1994	1998	2000	2001	2002
Indicator	14,551	17,897	20,475	22,958	24,563	25,254	28,743

Year	2003	2004	2006	2007	2008	2009
Indicator	30,731	32,683	35,381	34,965	36,022	38,179

Source: Harris County Head Start/Early Head Start Collaborative Community Assessment

HEAD START: The number of children enrolled in the federal Head Start Program in Harris County

Year	1990	1992	1994	1996	1999	2000	2002
Indicator	3,424	3,806	4,149	5,512	5,178	5,670	7,215

Year	2003	2004	2005	2006	2007	2008
Indicator	7,568	7,760	8,589	7,679	7,328	7,386

Source: Harris County Head Start/Early Head Start Collaborative Community Assessment

- **Pre-kindergarten programs have been shown to increase success later in life.**
- **The Harris County Head Start program and the Public School Pre-kindergarten initiative provide pre-k education and care to needy children.**
- **Texas would benefit from universal pre-k programs, which have proven successful in other states.**

A strong learning background is essential for the preparation of a child entering kindergarten and can impact his/her education experience throughout life. School district-led pre-school and the national Head Start program play vital roles in providing toddlers with the skills necessary to succeed in kindergarten.

In 1984 Texas established the Public School Pre-kindergarten initiative to provide a half-day pre-kindergarten program for children who are unable to speak or comprehend the English language, are economically disadvantaged, or are homeless.[36] The State defines "economically disadvantaged" as being eligible to participate in the National Free or Reduced-Price Lunch Program (family income at or below 185% of the Federal Poverty Level). In 2006 and 2007 the program was expanded to include children of active military personnel or the children of someone killed or injured during active duty, and all children who have ever been in the foster care system.[37] School districts with 15 or more eligible children are mandated to offer the program.[38]

Following a decline between 2006 and 2007, enrollment in school district-led pre-kindergarten programs in Harris County has continued its previous trend of increasing each school year. Since the year 2000, when the programs served 24,563 children, enrollment has increased by over 50%, to 38,179 children in 2009.[39] Enrollment increased by more than 2,000 children between the years of 2008 and 2009 alone. Half-day pre-k, however, can often be impracticable for working parents. School districts that choose to offer a full-day pre-k program either pay half the difference or must compete for state grants.

Research confirms the value of early education for young children. Pre-kindergarten programs that support effective teaching practices have been shown to lead to important growth in children's intellectual and social development, which is crucial to their future academic success. A Georgetown University study that assessed Oklahoma's universal pre-k program by focusing on Tulsa, the state's largest school district, showed strong positive effects of the pre-k program on children's language and cognitive test scores.[40] The study found positive and statistically significant impacts on students in both half- and full-day pre-k programs. The evaluation showed that Latino children benefited most from the program and African American children also showed sharp gains, especially when they attended the full-day programs.[41]

HEAD START ENROLLMENT IN HARRIS COUNTY

	1999-2000	2000-2001	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009
Area I:	927	927	1,483	1,544	1,973	1,328	1,432	1,350	1,311
Area II:	1,303	1,485	1,915	1,946	2,364	2,059	1,713	1,713	1,713
Area III:	1,300	1,545	1,853	2,214	1,365	2,696	2,203	2,098	2,098
Area IV:	1,648	1,713	1,864	1,864	2,058	2,506	2,431	2,167	2,064
Total:	5,178	5,670	7,215	7,568	7,760	8,589	7,779	7,328	7,186

Source: Harris County Department of Education; Avance; Neighborhood Centers, Inc.; Gulf Coast Community Services Association

Since the year 2000, when the programs served 24,563 children, Harris County district-led pre-k program enrollment has increased by over 50%, to 38,179 children in 2009.

In the Tulsa pre-k program, teachers must hold bachelor's degrees and child care certificates, and they must receive compensation at the same level as elementary and secondary school teachers. During the 81st Legislative Session the Texas Legislature passed a landmark bill to increase pre-k quality standards; this legislation would have enabled districts to mandate bachelor's degrees for pre-k teachers, while placing necessary limits on teacher-to-child ratios and class size. The bill was, however, vetoed by Governor Perry. A $25 million pre-k budget increase remained intact.[42]

PRE-K ENROLLMENT IN HARRIS COUNTY BY DISTRICT

District	2003	2004	2006	2007	2008	2009
Aldine	2,684	2,863	2,997	3,083	3,048	3,526
Alief	1,852	1,924	2,306	2,135	2,136	2,139
Channelview	311	320	367	390	459	463
Crosby	114	127	105	144	120	117
Cypress-Fairbanks	1,494	1,732	2,270	2,565	2,892	3,089
Deer Park	203	213	230	252	235	261
North Forest	979	986	992	890	901	926
Galena Park	916	1,010	970	989	954	968
Goose Creek	768	792	813	753	726	738
Houston	14,034	14,823	15,814	15,023	15,354	16,352
Humble	622	632	667	745	900	947
Katy	544	709	892	974	1,118	1,158
Klein	666	732	961	1,016	1,028	1,044
La Porte	202	211	227	175	228	219
Pasadena	1,902	1,968	2,085	2,098	2,176	2,219
Spring	895	966	1,260	1,283	1,312	1,470
Spring Branch	2,233	2,298	1,957	1,925	1,902	1,935
Tomball	129	166	174	181	182	203
Sheldon	140	172	222	283	273	321
Huffman	43	39	72	61	78	84
Total	30,731	32,683	35,381	34,965	36,022	38,179

Source: Texas Education Agency

Pre-K and Head Start Enrollment (cont.)

Head Start enrollment dropped sharply in 2006 (from 8,589 to 7,779 children) and has continued to steadily decline throughout the last two years to 7,186 children in the 2008-2009 school year.

The Head Start program first emerged in 1965 as part of a solution to end systemic poverty in the United States.[43] Directed mainly towards children ages three to five, the program provides comprehensive education, health, nutrition, and parental involvement services to low-income families.[44] As an addition to the Head Start Program, Early Head Start (EHS) was created to promote healthy prenatal outcomes, to enhance the development of very young children, and to promote healthy family functioning.[45] In 2007 the federal government reauthorized the Head Start program with new requirements, including more stringent teacher credentials and extension of the program to children living within 130% of the Federal Poverty Level.[46]

Harris County Head Start has divided its services into four geographic areas, each directed by different agencies: Area I – Harris County Department of Education; Area II – Avance; Area III – Neighborhood Centers, Inc.; and Area IV – Gulf Coast Community Services Association. In 2008 Harris County Head Start operated 81 locations within schools, community centers, and independent sites.[47] Children who attend Head Start participate in a variety of educational activities. They also receive free medical and dental care, have healthy meals and snacks, and enjoy playing indoors and outdoors in a healthy setting. Services are offered to meet the special needs of children with disabilities.

Head Start enrollment dropped sharply in 2006 (from 8,589 to 7,779 children) and has continued to steadily decline throughout the last two years to 7,186 children in the 2008-2009 school year.[48] While the number of children benefiting from Head Start has remained unsteady, a recent increase in funding may facilitate growth. In February, 2009, President Obama signed the American Recovery and Reinvestment Act (ARRA), which included a funding increase of $2.1 billion for Head Start, $1.1 billion of which was designated for Early Head Start expansion.[49] In addition, as part of the FY 2009 appropriations process, Congress provided a $234.8 million funding increase for Head Start. More recently, in December 2009, President Obama signed the Consolidated Appropriations Act, 2010, which included an approximate increase in funding of $122 million over the FY 2009 appropriation level for Head Start.[50]

Implementation of universal pre-kindergarten programming should be made a priority in Texas.

Policy Implication

Both Head Start and district pre-k programs are important in giving low-income children learning opportunities that they would not otherwise have access to. The availability of these programs also positively impacts parents' ability to work and to provide for their families while their children are enrolled at school during the day. The implementation of a universal pre-kindergarten program should be made a priority in Texas. Universal pre-kindergarten, already implemented in such states as Georgia, Florida, and Oklahoma, provides equality of access to all families, and would significantly impact those families who are ineligible under the current guidelines and struggling with private-sector child care costs. Emphasis should be placed on high-quality teaching rather than child supervision.

Continuing federal support of Head Start is also essential in supporting families with children living in and near poverty. The pay levels for both pre-kindergarten and Head Start teachers should be increased to better match pay levels of other teachers.

Economically Disadvantaged Students

INDICATOR: The percentage of students enrolled in Harris County public schools who are economically disadvantaged

Year	1990-91	1994-95	1998-99	2000-01	2001-02	2002-03	2003-04
Indicator	33.8	42.5	49.8	52.5	54.0	55.6	56.9

Source: Texas Education Agency

- **Economically disadvantaged students experience chronic and severe economic challenges which hinder their academic success.**
- **Latino children (65.3% of all low-income children) make up a majority of the economically disadvantaged students in Harris County, followed by African American children (24.9% of all low-income children).**
- **Several federal initiatives target economically disadvantaged schools and districts by providing funding for instructional and program improvements, counseling, and parental involvement.**

Before October of every school year, Texas school districts identify those students who fall into the category of economically disadvantaged. A status of economically disadvantaged is given if the student is eligible for free or reduced-priced meals under the National School Lunch and Child Nutrition Program or if he/she meets one of the following criteria: having a family income at or below the federal poverty line, being eligible for Temporary Assistance for Needy Families (TANF) or other public assistance, receiving a Pell Grant or comparable state grant of need-based financial assistance, being eligible for programs assisted under Title II of the Job Training Partnership Act (JTPA), or for benefits under the Food Stamp Act of 1977.[51]

In 2009-2010, there were 512,473 economically disadvantaged students in Harris County public schools, comprising 63.2% of the student population.[52] These figures rose in comparison to 2007-2008, when there were 461,344 economically disadvantaged students in Harris County, which was 59.6% of all students. In North Forest ISD, 100% of the students fell under the definition of economically disadvantaged. Other districts with a high percentage of economically disadvantaged students were Aldine ISD with 85% and Houston ISD with 81%. Most school districts in Harris County have a rate of economically disadvantaged students above 50%. Tomball ISD remains the district with the lowest rate of economically disadvantaged students, 23.1%, although this rate has increased 3.5% since 2007.[53]

The demographics of economically disadvantaged students in Harris County have changed considerably over the past

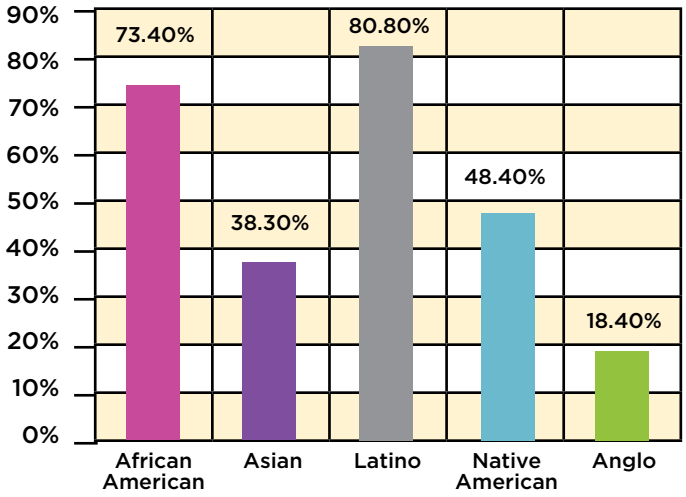
In 2009-2010, there were 512,473 economically disadvantaged students in Harris County, which comprises 63.2% of the student population.

Economically Disadvantaged Students (cont.)

two decades. Latino children make up a majority of the 2009-2010 economically disadvantaged students at 65.3%, followed by African American children (24.9% of all low-income students), Anglo children (6.4% of all low-income students), Asian American children (3.2% of all low-income students), and Native American children (0.2% of all low-income students). The most visible difference in racial/ethnic composition of economically disadvantaged students from 1989-1990 to present is a significant increase in the percentage of low-income students who are Latino (from 50.2% in 1989-1990 to 65.3% in 2009-2010) alongside a moderate decrease of low-income students identified as African American (from 35.5% to 24.9%) and Anglo (from 11.0% to 6.4%).[54]

Economically disadvantaged students face particularly difficult challenges in succeeding academically.[55] Research shows that socioeconomic factors such as family income, neighborhood poverty, parental education levels, and parental occupation are even more significant in explaining differences in educational achievement than traditional factors such as race, ethnicity, and immigration status.[56] Experience of chronic and severe economic hardship limits children's potential and hinders a nation's ability to sustain itself in the future. American students, on average, already rank behind students in other industrialized nations, particularly in their understanding of math and science.

HARRIS COUNTY STUDENTS BY ECONOMIC DISADVANTAGE AND RACE/ETHNICITY 2009-2010 SCHOOL YEAR



Several federal initiatives, such as the Elementary and Secondary Education Act, are designed to alleviate the burden on economically disadvantaged families to provide their children with a quality education.[57] Under this Act, federal funds can be used for instructional and program improvements, counseling, and parental involvement. In return, Title I schools and districts must meet accountability requirements for raising student performance.[58]

Training programs should be provided to teachers so that they may better understand the issues low-income children face, and outreach should be made to economically disadvantaged students in order to change their perceptions of education.

Policy Implication

It is imperative to invest time and effort in educating students who are economically disadvantaged. More than half of the students in Harris County are economically disadvantaged, and schools need more programs to reach these children. Training programs that help teachers understand the issues low-income children face are important in providing quality education. Reaching out to economically disadvantaged students and changing their perception of education will increase the quality of life for the students and the community as a whole.

Expenditure Per Student

INDICATOR: The average expenditure per student in Harris County based on the total current operating expenses of the school districts divided by the number of students for that year

Year	1990	1992	1994	1996	1998	1999	2000
Indicator	3,850	4,304	4,552	5,347	5,702	6,498	6,724

Year	2002	2003	2004	2005	2006	2007	2008
Indicator	7,045	7,283	6,936	6,151	6,249	6,679	7,157

Source: Academic Excellence Indicator System, Texas Education Agency
Note: Charter schools are excluded from this calculation

- **Texas is currently one of the lowest in the country in regards to amount spent per student, and has continued to drop in the national rankings.**
- **It remains to be seen whether data will show an increase in expenditure per student as a result of the repeal of the "65 Percent Rule."**

A school district's total operating expenses include such items as salaries for school personnel, fixed charges, student transportation, school books and materials, and energy costs. Each district quantifies a value of total expenditures from the general funds allocated per pupil, the average of which is reported with the indicator. The general fund excludes special revenue funds, debt service funds, and capital project funds.[59]

During the 2007-2008 school year, the national average for current expenditure per student was $9,963.[60] Texas ranked 45th out of the 50 states and the District of Columbia, with an average of $7,978 spent per student.[61] Just three years ago, Texas ranked 41st nationally in the amount spent per student. Unfortunately, Texas continues to drop in the national rankings and is currently one of the lowest in the country.

A district's general fund is typically used for operations of on-going organizations and activities.[62] School districts in Harris County expended an average of $6,679 per student from their general funds in 2007. In 2008, the average rose to $7,157 per student. During this school year, Sheldon ISD reported expending $8,090 per student, the highest of all districts in Harris County.[63] North Forest ISD and Deer Park ISD reported the second and third highest expenditures per student with $7,808 and $7,583, respectively.[64] Cypress-Fairbanks ISD, expending $6,332 per pupil, and Klein ISD, expending $6,607 per pupil, reported the lowest expenditures per student in 2008.

From 2005 to 2009, a possible reason for Texas' overall low expenditure per student was the "65 Percent Rule."

Expenditure Per Student (cont.)

Governor Perry issued this rule under an executive order in 2005, and it mandated that 65% of school district funds be expended for "instruction."[65] "Instruction" was based on the definition issued by the National Center for Education Statistics and included costs such as salaries and benefits for teachers, instructional aides, general instructional supplies, athletics, field trips, music, and art.[66] The remaining 35% of school district spending was considered to be for "support services," even though it included costs such as expenses for librarians, teacher training, nurses, counselors, food services, transportation, operations, and maintenance.[67] During Texas' 81st Legislative Session, Governor Perry came to recognize that it would be best to abandon the rule if Texas found a better way to measure school efficiency.[68] Therefore, the Legislature passed a measure that did away with the 65% rule.[69] The specific language stated:

The [financial accountability] system may not include an indicator under Subsection (b) or any other performance measure that: (1) requires a school district to spend at least 65 percent or any other specified percentage of district operating funds for instructional purposes; or (2) lowers the financial management performance rating of a school district for failure to spend at least 65 percent or any other specified percentage of district operating funds for instructional purposes.[70]

This act took effect in 2009. It remains to be seen whether data will show an increase in expenditure per student as a result of its repeal.

Both instructional services and support services such as buses to school, counselors, and breakfast and lunch programs should be made priorities in Texas classrooms.

Policy Implication

The idea behind Governor Perry's "65 Percent Rule," was to increase funds for classroom use; however, critics argued that the rigid breakdown of funding impaired public schools' abilities to serve the needs of their students. While direct instructional services are the obvious priorities for public schools and the students they serve, money spent on these services is not always related to student achievement. For many schools, especially those in low-income areas, support services, such as buses to school, counselors, and breakfast and lunch programs, often provide students with missing resources that give them the potential to attain academic success from the instruction provided in the classroom.[71] By ensuring that the money is spent where needed, Texas will be investing in the future of its children and strengthening its national position in the public school system.

Average Class Size and Student-to-Teacher Ratio

INDICATORS

STUDENT-TO-TEACHER RATIO: The average student-to-teacher ratio in the Greater Houston Area (Region 4)

Year	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Indicator	16.2	16.2	15.9	15.8	16	15.9	16	15.6	15.4	15.3

Source: Academic Excellence Indicator System, Texas Education Agency

FIRST GRADE: The average class size for first grade students in the Greater Houston Area (Region 4)

Year	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Indicator	19.3	19.4	19.3	18.5	19.5	19.5	20.1	19.5	19.9	19.8

Source: Academic Excellence Indicator System, Texas Education Agency

SECONDARY ENGLISH: The average class size for secondary English/Language Arts in the Greater Houston Area (Region 4)

Year	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Indicator	23.2	22.9	22.7	23	22.9	22.6	23	22	22.5	22.1

Source: Academic Excellence Indicator System, Texas Education Agency

SECONDARY MATH: The average class size for secondary mathematics in the Greater Houston Area (Region 4)

Year	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Indicator	23.7	23.2	22.7	23.2	22.7	22.7	22.8	22.1	22.3	21.9

Source: Academic Excellence Indicator System, Texas Education Agency

- **Between 2000 and 2009, the average class size of Greater Houston Area classrooms has remained fairly steady.**
- **Class size, or the number of students in a classroom, is a more accurate tool of measurement rather than the standard student-to-teacher ratios.**
- **Studies indicate that students in smaller classes are more successful, made better grades, and took more advanced courses in high school.**

Student-to-teacher ratio is most commonly calculated by dividing the number of students enrolled by the number of all educators, including administrators, counselors, and other employees.[72] Therefore, student-to-teacher ratios measure only the number of students relative to the number of instructional staff in the school. Counselors, administrators, and other staff are considered part of the instructional staff in the school, even though many of these positions do not involve actual curriculum instruction. Student-to-teacher ratios also do not consider unique circumstances, such as special education classes, which are generally smaller than traditional instructional classes and often have more than one teacher. Lower student-to-teacher ratios reveal higher availability of teacher services to students.[73]

Since 2000, the student-to-teacher ratios in Harris County schools as well as nationwide have undergone a slow but steady decline. The average student-to-teacher ratio for districts in the Greater Houston Area in 2009 was 15.3,[74] slightly below the national student-to-teacher ratio in 2009 of 15.4 students to one teacher.[75] However, this is above

Average Class Size and Student-to-Teacher Ratio (cont.)

Texas law requires that class sizes from kindergarten through fourth grade should not exceed 22 students; however, the National Education Association recommends 15 students per classroom.

the average student-to-teacher ratio for Texas which stands at 14.4.[76] Crosby ISD, North Forest ISD, and Houston ISD had the highest student-to-teacher ratios in 2009. Together these three districts averaged a student-to-teacher ratio of 17. Galena Park ISD and Spring Branch ISD had the lowest ratios, with approximately 14 students for every full-time teacher.[77]

Class size, or the number of students in a classroom, is a more accurate tool of measurement.[78] It is calculated by taking the number of students served in a certain grade on a school campus and dividing that number by the number of full-time teachers for those students.[79]

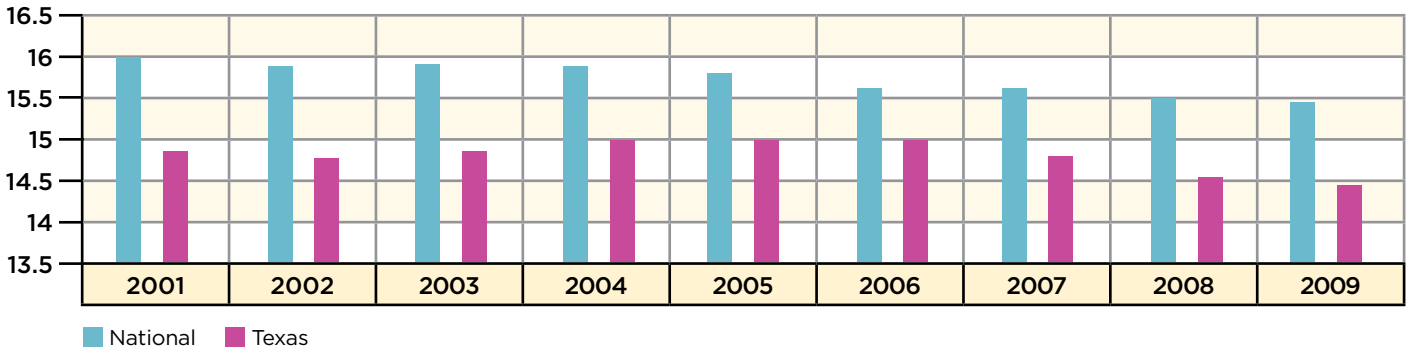
When calculating an average class size the Texas Education Agency includes:

- Classes identified as serving regular, compensatory/remedial, gifted and talented, career and technical, and honor students;
- Subjects including English language arts, mathematics, science, social studies, foreign language, computer science, business education, vocational, and self-contained;
- Teachers labeled as "special duty teacher," "teacher," and "substitute teacher"; and
- Only classes coded as "regular class."
- Finally, if a teacher teaches more than one class at the same time, the records are combined into a single class.[80]

Because class size measures the approximate number of students actually in the classroom, this measure will generally be higher than student-to-teacher ratios. Between 2000 and 2009, the average class size of Greater Houston Area classrooms has remained fairly steady.[81] The biggest shifts have occurred in mixed elementary grades—usually a subject that is taught by a teacher with students from varied grade levels—and sixth grade, both showing a significant decline. However, kindergarten, first, second and third grade classes have shown a slight increase in average size. In 2000, first grade classes averaged 19.3 and in 2009 these classes averaged 19.8.[82]

Studies have found that students in smaller classes generally were more successful, made better grades, and took more advanced courses in high school.[83] According to a four-year longitudinal class-size study, known as the Student Teacher Achievement Ratio (STAR), students in smaller classes demonstrated better high school graduation rates and were more inclined to pursue higher education.[84] The STAR experiment also revealed that "attendance in small classes appears to have cut the African American - Anglo gap in the probability of taking a college entrance exam by more than half."[85] Texas law requires that class sizes from kindergarten through fourth grade should not exceed 22:1.[86]

NATIONAL AND STATE STUDENT-TO-TEACHER RATIO



Harris County should strive to achieve an average class size that matchers the National Education Association's recommendation of 15 students per classroom for kindergarten and first grade.

Policy Implication

Student-to-teacher ratio and class size have been measured in relation to student achievement to ascertain how these can affect the quality of education. For younger children specifically, smaller classes allow teachers to dedicate more individualized attention to students, which produces an increase in student achievement, particularly for disadvantaged students. A widening disproportionate racial and economic achievement gap and alarming high school dropout rates indicate that Harris County would benefit from a reduced average class size that matches the National Education Association's recommendation of 15 students per classroom for kindergarten and first grade.[87]

Charter Schools

INDICATOR: The number of charter operators in Harris County

Year	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02	2002-03
Indicator	6	7	17	36	39	43	45

Year	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Indicator	44	45	45	46	46	48

Source: Academic Excellence Indicator System, Texas Education Agency
Note: Each charter school/system with a unique district number is counted as one charter operator.

- When compared to public schools, charter schools are subject to fewer state laws.
- When compared to the state average, charter schools tend to serve more minority students and students designated as economically disadvantaged.

Charter Schools (cont.)

A charter school is a type of public school providing education through a contract, or charter, granted by the State Board of Education, or the board of trustees of an independent school district. These schools are subject to fewer state laws than other public schools, with the goal of being fiscally and academically accountable without undue regulation of pedagogical methods. Charter schools, like independent school districts, are monitored by the state and accredited under the state's testing and accountability system.[88]

The Texas Education Code defines the purpose of charter schools: (1) to improve student learning; (2) to increase the choice of learning opportunities within the public school system; (3) to create professional opportunities that will attract new teachers to the public school system; (4) to establish a new form of accountability for public schools; and (5) to encourage different learning methods.[89]

Four classes of charters are authorized by the Texas Education Code: (1) home-rule school district charters; (2) campus or campus program charters; (3) open-enrollment charters; and (4) college or university charters.[90] Currently, there are no home-rule school district charters operating in Texas. Historically most charter schools have operated under open-enrollment charters granted by the State Board of Education. Similar to independent school districts, open-enrollment charter schools receive state funds based on the average daily attendance of students. They may also receive funds from private funding sources. Unlike independent school districts, however, open-enrollment charter schools do not receive funds from local tax revenue and do not have access to state facility allotments.[91]

Only two states, Arizona and California, have more charter schools than Texas. Texas has 427 of the nation's 4,364 active charter schools.

A growing number of new charter schools are campus charter schools.[92] During the 2008-2009 academic year, 48 charter operators served 27,767 students in Harris County.[93] Charter schools have increased their presence in Harris County since 2007, when 46 charter operators were serving 22,605 students.[94] Compared to traditional public schools, charter schools tend to serve more minority students and students designated as economically disadvantaged. In Harris County, 75.8% of the student body in open-enrollment charters is economically disadvantaged, compared to 61.8% of students enrolled in traditional public school districts. In addition, 48.4% of charter school students in Harris County are considered to be at risk of dropping out. Harris County open-enrollment charters also serve proportionately more African American students and fewer Anglo students than traditional public schools, as 36% of charter students in 2008-2009 were African American, 50.1% were Latino, and 9.5% were Anglo. This compares to the 2008-2009 student demographics of Harris County's traditional public schools where 21.3% of students are African American, 50.3% are Latino, and 23% are Anglo.[95]

STUDENT DEMOGRAPHICS IN CHARTER AND NON-CHARTER SCHOOL DISTRICTS IN HARRIS COUNTY (2008-09)

	Charter	Non-Charter
Asian/Pacific Islander	4.2%	5.2%
African American	36.0%	21.3%
Latino	50.1%	50.3%
Native American	0.2%	0.2%
Anglo	9.5%	23.0%
Economically Disadvantaged	75.8%	61.8%
At-Risk	48.4%	54.1%
Total Students	100.0%	100.0%

Source: Academic Excellence Indicator System, Texas Education Agency

Many teachers who work in charter schools have fewer years of experience, and earn less on average, when compared to teachers in traditional public schools across the state.[96] Of charter schools founded after 2005, the average years of teaching experience was 4.5 years prior to their current position, and about half of these years were spent in traditional public schools.[97] According to a survey conducted by the Texas Center for Educational Research for the Texas Education Agency, parents and students revealed deciding factors to enroll in a charter included teacher quality, specialized courses, smaller class sizes, and reduced student conflict.[98] The majority of students in Texas (78% of respondents) also reported receiving less than an hour of homework per day, and a small percentage of students stated their grades had dropped since enrolling. Finally, while many charters require that parents sign agreements expressing they will be actively engaged in their child's education, overall levels of parental involvement did not increase.[99]

In the 2008-2009 academic year, there were 48 charter operators in Harris County:[100]

Academy of Accelerated Learning Inc.
Accelerated Intermediate Academy
Alief Montessori Community School
Alphonso Crutch's Life Support Center
Amigos por Vida (Friends for Life)
Bay Area Charter Inc.
Beatrice Mayes Institute Charter School
Benji's Special Educational Academy
Calvin Nelms Charter Schools
Children First Academy of Houston
Comquest Academy
Draw Academy
Excel Academy
George I. Sanchez Charter
Girls & Boys Prep Academy
Gulf Shores Academy*
Harmony School Of Excellence
Harmony School Of Innovation
Harmony School Of Science - Houston
Harmony Science Academy
Houston Alternative Preparatory Charter
Houston Can Academy Charter School
Houston Gateway Academy Inc.
Houston Heights High School
Houston Heights Learning Academy
Jamie's House Charter School
Jesse Jackson Academy
Juan B. Galaviz Charter School
KIPP Inc. Charter
KIPP Southeast Houston
La Amistad Love & Learning Academy
Medical Center Charter School
Meyerpark Elementary
North Houston High School for Business
Northwest Preparatory
Raul Yzaguirre School For Success
Rhodes School
Richard Milburn Academy
Ripley House Charter School
Ser-Niños Charter School
Southwest School
Stepping Stones Charter
Two Dimensions Preparatory Academy
University of Houston Charter School
Varnett Public School
West Houston Charter School
Yes Preparatory Public Schools
Zoe Learning Academy

*Note: Gulf Shores Academy was denied a charter renewal shortly after the 2008-2009 academic year.[101]

It is imperative that Texas continue to work to ensure that high-quality schools proliferate and that low-performing charters do not.

Policy Implication

Interest in expanding high quality charters has grown amongst policy makers in Texas. As a result, there has been increased focus on identifying and providing support to new charter programs that have the potential to meet the unique needs of students and improve educational outcomes. The U.S. Department of Education has provided funding for new charter schools since 1994, and the current administration continues to seek ways to provide support for charter school expansion across the country, including competitive grants for states to establish or enhance facilities for charter schools[102] and requiring states wanting to compete for Race to the Top funds to adopt policies that support the expansion of high-performing charter schools.[103] However, as charter schools vary dramatically in the quality of education they provide, it is imperative that Texas work to ensure that high-quality schools proliferate and that low-performing charters do not.

Career and Technology Education Programs

INDICATOR: The percentage of students enrolled in career and technical education in Harris County public schools

Year	1990-91	1994-95	1998-99	2000-01	2002-03	2004-05
Indicator	10.1%	14.8%	14.2%	16.8%	17.3%	18.4%

Year	2005-06	2006-07	2007-08	2008-09	2009-10
Indicator	18.2%	18.1%	18.0%	18.8%	18.4%

Source: Texas Education Agency

- The U.S. Bureau of Labor Statistic's 2008-2018 occupational projections state that of the 30 most rapidly growing occupations, 16 require on the job training, a postsecondary vocational award, or an Associate degree.
- There are an increasing number of students from higher academic achievement who are completing occupational concentrations.

Changes in the labor market and economy, such as advancements in technology, global competition, and increasingly service-oriented industries, have altered the face of the workforce and the occupational skills needed to succeed in America.[104] Since the 1970s, Career and Technical Education (CTE) has gained significant attention as a way to broaden the academic focus and career preparation of students in Texas.

Fewer Houston ISD students (17.1%) are enrolled in Career and Technical Education programs compared to 21.4% statewide.

Most high schools in Texas have adopted CTE to provide a foundation of skills with the aim of enabling students to attain high-skill, high-wage jobs after graduation and/or to continue their education. With employers reporting that approximately 45% of high school graduates with no additional education are unprepared for the expectations that they face in entry-level jobs,[105] more career and technical courses, as well as "innovative courses," are being considered as viable alternatives for preparing students with more specified knowledge and skills than traditional high school courses. According to 2008-2018 occupational projections conducted by the U.S. Bureau of Labor Statistics, of the 30 most rapidly growing occupations 16 require on-the-job training, a postsecondary vocational award, or an associate degree.[106] Of these 16 occupations, including home health aides, physical therapist assistants, and environmental engineering technicians, 6 were considered high or very high paying professions, while the rest were low or very low paying professions.[107]

The majority of high schools nationwide offer career and technical education, and the vast majority of graduating students, over 90% of the class of 2005, have taken at least one CTE course.[108] Although historically high school students who participate in CTE are more likely to come from lower educational backgrounds, often taking a lower-level 9th grade mathematics course, an increasing number of students of higher academic achievement have been completing occupational concentrations since the 1990s.[109] The most common CTE credits remain computer technology and business services.[110] Examining the class of 1992 and their status eight years later, a high school graduates' occupational course-taking correlated with a lack of postsecondary aspirations: the more occupational credits that graduates earned in high school the less likely they were to pursue any postsecondary education; attend a vocational, technical, or business school; or complete a postsecondary certificate or associate degree.[111] However, examining the class of 2000 and their status five years later, it appears that this correlation has shifted: students who earn more occupational credits in high school are more likely to attain a subbaccalaureate credential (most likely an associate's degree).[112] Although it remains unclear whether CTE is correlated to higher earnings later in life, because CTE

classes relate directly to career goals, such programs engage students otherwise disinterested in strictly academic coursework.[113]

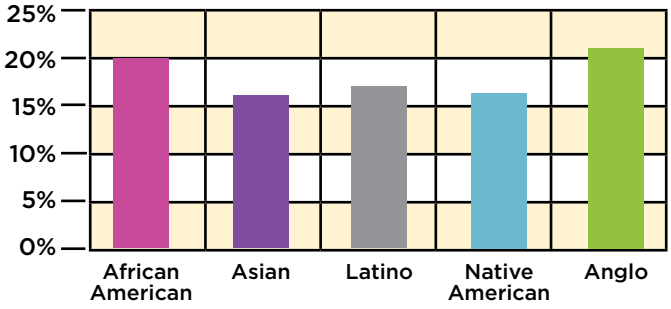
While specific course offerings vary among schools, the Texas Education Agency recognizes CTE programs in agriculture, business, health, marketing, home economics, and technological education, with courses ranging from entrepreneurship to applied entomology. Many Texas schools offer licensing and certificate opportunities to CTE students, but there is no state requirement to offer such programs.[114] However, in 2007, the 80th Texas Legislature passed HB 3485 which required the State Board of Education to revise previous standards for knowledge and skills for CTE programs.[115] Tech-Prep is a national program funded by the Carl D. Perkins Vocational and Technical Education Act, which allows students to begin a college technical major while still in high school. In 2008, 860 Texas public school districts with high schools had Tech-Prep program agreements with one or more Texas colleges, up from 821 in 2007.[116] Tech-Prep high school students in grades 9-12 have had lower annual dropout rates for thirteen years ('94-'95 to '06-'07) than those students who did not participate in Tech Prep programs.[117]

Harris County public schools spent more than $130 million on career and technical education, or approximately 1.6% of total expenditure from all funds, in 2007-08.

Harris County public schools spent more than $130 million on career and technical education, or approximately 1.6% of total expenditure from all funds, in 2007-2008.[118] During the 2009-2010 school year, 148,976 students in Harris County public schools were enrolled in CTE programs, or 18.4% of the total student population. This figure has nearly doubled in the past two decades, from 10.5% of students in the 1989-1990 school year. Today in Harris County, Anglo and African American students are most likely to be enrolled in CTE programs, participating at rates of 20.1 and 20.0%, respectively. They are followed, in descending order, by Latino (17.2%), Asian (16.6%), and Native American (15.6%) students.[119]

According to a 2008 survey conducted by the Texas Education Agency, 85% of respondents, comprised mainly of CTE teachers and administrators, reported that the need for flexibility to offer advanced/college level CTE courses in lieu of existing requirements for graduation

HARRIS COUNTY CAREER & TECHNICAL EDUCATION (CTE) ENROLLMENT BY RACE/ETHNICITY, 2009-2010 SCHOOL YEAR



was a considerable obstacle to implementing quality CTE programs.[120] Seventy-five percent of respondents agreed or strongly agreed that the misperception of CTE programs as "old vocational" programs that do not prepare students for college was also a considerable barrier.[121] In addition, the majority of respondents also expressed significant difficulty in creating effective partnerships with businesses and industries for hands-on experience—citing factors such as liability, transportation costs, and inadequate supervision.[122] Finally, 78% of respondents expressed that not all Texas colleges accepting the statewide articulated course credit for career and technical education was a significant barrier to offering quality CTE programming.[123]

Alternative Education Programs

INDICATOR: The percentage of students in Region 4 (Houston) with disciplinary placements

Year	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Indicator	1.70%	2.20%	2.80%	3.10%	2.70%	2.50%	2.20%	2.30%	2.20%	1.80%

Source: Academic Excellence Indicator System, Texas Education Agency

- **Alternative Education Campuses (AECs) available in Texas provide a non-traditional academic environment for students who might otherwise struggle in typical instructional settings.**
- **All Texas public school districts operate mandatory Disciplinary Alternative Education Programs to serve students who have been removed from regular instruction.**
- **During the 2007-2008 school year, over 100,000 Texas public school students were transferred from regular instructional settings to a disciplinary alternative education setting.**

Alternative Education Campuses (AECs) are designed to serve students who struggle to succeed in a traditional academic environment. In Texas, AECs include Alternative Education Campuses of Choice, Residential Facilities, Disciplinary Alternative Education Programs (DAEPs), Juvenile Justice Alternative Education Programs (JJAEPs), and stand-alone General Educational Development (GED) programs. An AEC of Choice provides accelerated instruction to students at risk of dropping out (see "Students At Risk" in this volume), allowing students to accelerate their academic progress toward performing on grade level and completing high school. Residential Facilities include residential educational programs operated under contract with the Texas Youth Commission (TYC), detention centers and correctional facilities registered with the Texas Juvenile Probation Commission (TJPC), and private residential treatment centers.[124] DAEPs serve students who have been temporarily removed from their regular educational setting due to disciplinary actions,[125] while JJAEPs serve students who were expelled from their home school for engaging in delinquent conduct.[126]

Beginning in 1994, Texas developed a set of alternative performance measures to provide accountability for schools serving students at risk of dropping out, recovered dropouts, pregnant or parenting students, adjudicated students, students with severe discipline problems, and/or expelled students. Currently, only AECs of Choice and Residential Facilities are eligible to register for evaluation under Alternative Education Accountability (AEA) procedures, whereas performance data from DAEPs, JJAEPs, and stand-alone GED programs are attributed to the student's home campus. Schools rated under Alternative Education Accountability procedures may receive the following ratings, based on performance on the Texas Assessment of Knowledge and Skills (TAKS), completion rate, and dropout rates: AEA-Academically Acceptable, AEA-Academically Unacceptable, AEA-Not Rated-Other, or AEA-Not Rated-Data Integrity Issues.[127] As of June 2010, there were a total of 460 registered AECs in Texas which were eligible for alternative accountability.[128] Beginning with the adoption of the Texas Safe Schools Act in 1995, all Texas public school districts are required to operate DAEPs to serve students who have been removed from regular instruction for disciplinary purposes. In contrast to AECs of Choice, attendance and length of stay at a DAEP is compulsory for sentenced students. A student's assignment to a DAEP may be either mandatory, resulting

MANDATORY VS. DISCRETIONARY DISCIPLINARY ACTIONS IN REGION 4 (HOUSTON), 2008-09

Disciplinary Action	Mandatory		Discretionary	
	Number	Percent	Number	Percent
Expelled to JJAEP	456	39.8	689	60.2
Expelled	491	26.9	1332	73.1
Removed to a DAEP	6648	31.7	14334	68.3
In-School Suspension	1213	0.3	395994	99.7
Out-of-School Suspension	5779	3.6	156181	96.4
Total - All Disciplinary Actions	14587	2.5	568530	97.5

Source: Texas Education Agency

The majority (68.3%) of removals to a Disciplinary Alternative Education Program in the Greater Houston Area (Region 4) in 2008-09 were discretionary, or not resulting from a violation of state code.

from a violation specified under Chapter 37 of the Texas Education Code, or discretionary, based upon locally-adopted codes of student conduct.[129] During the 2008-2009 school year, there were 20,982 removals to DAEPs in Region 4 (Houston), 68.3% of which were discretionary. Similarly, 60.2% of expulsions to JJAEPs were discretionary. [130]

During the 2007-2008 school year, 103,727 Texas public school students were removed from their regular instructional setting to a disciplinary alternative education setting, including DAEPs and JJAEPs. Nearly one in five Texas students with a disciplinary placement in 2007-2008, or a total of 19,831 students, came from Region 4 (Houston). However, the percentage of students with a disciplinary placement is in fact lower in Region 4 (1.8%) than the state figure (2.1%) for the 2007-2008 school year. Houston's rate of 1.8% is on par with its rate of 1.7% a decade prior, though follows a trend of modest decline since a peak of 3.1% during the 2001-2002 school year. Among Harris County non-charter school districts, Channelview Independent School District had the highest rate of removals to a disciplinary setting during the 2007-2008 school year at 5.0%, followed closely by Goose Creek Consolidated Independent School District at a rate of 4.9%. At 0.5%, Katy Independent School District had the lowest rate of disciplinary placements of any Harris County school district.[131]

While ensuring that public schools are a safe place for learning, it is equally important that the programs in place to deal with disruptive students are not merely punitive, but also preventative and rehabilitative.

Policy Implication

Students placed in alternative education settings for disciplinary purposes are significantly more likely to drop out of school, thereby placing a burden on society by increasing the probability that the dropout will require government assistance or be incarcerated.[132] While ensuring that public schools are a safe place for learning is of paramount importance, it is equally important that the programs in place to deal with disruptive students are not merely punitive, but also preventative and rehabilitative. If Texas is going to keep its promise to its youth that bright futures are in store for them, disciplinary alternative education settings should be reserved for the most seriously disruptive students to get back on track. By providing training for teachers on student behavior management, the number of discretionary referrals to disciplinary programs can be decreased.

Limited English Proficiency and Bilingual Education

INDICATOR: The percentage of students in the Greater Houston Area (Region 4) who are identified as limited English proficient based on criteria defined in the Texas Administrative Code

Year	1994-95	1996-97	1998-99	2000-01	2001-02	2002-03
Indicator	14.4%	15.5%	15.2%	16.2%	16.8%	17.2%

Year	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Indicator	17.9%	18.2%	18.1%	18.4%	19.6%	20.2%

Source: Academic Excellence Indicator System, Texas Education Agency

INDICATOR: The percentage of students enrolled in bilingual education or English as a second language programs at schools in the Greater Houston Area (Region 4)

Year	1994-95	1996-97	1998-99	2000-01	2001-02	2002-03
Indicator	12.3%	13.5%	14.0%	14.6%	15.4%	15.9%

Year	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Indicator	16.7%	17.0%	16.9%	17.2%	18.4%	19.1%

Source: Academic Excellence Indicator System, Texas Education Agency

- If twenty or more LEP students of the same grade level are enrolled on a campus Texas law requires the campus to provide a bilingual or special language program.
- Dual immersion programs have been shown to be relatively successful, while English as a Second Language education programs do not prepare students for school success.
- During the 2008-2009 school year 20.2% of students in the Greater Houston Area were identified as LEP and 19.1% of those students were enrolled in bilingual or ESL programs.

Texas law requires that every student must be assessed within the first four weeks of school to determine the student's language of "primary proficiency."[133] If it is determined that a student is a limited English proficient (LEP) student, the parent must agree to the student's entry into, exit from, or placement in the special language program.[134] A parent may decide to disagree with his or her child's entry into the program, and this decision is referred to as "parental denial." After the initial determination, the language proficiency assessment committee of a district shall report the number of the LEP students on each campus to the district's board of trustees. Each district that has twenty or more LEP students in the same grade level must "offer bilingual education or a special language program."[135] For any district that is required to offer these programs, the district is required to offer "bilingual education in kindergarten through the elementary grades," "bilingual education, instruction in English as a second language (ESL), or other transitional language instruction in post-elementary grades through eight," and "instruction in English as a second language in grades nine through twelve."[136] In practice, LEP students receive bilingual education in kindergarten through the sixth grade and ESL instruction in seventh through twelfth grade, unless these students are enrolled in special education classes.

Dual immersion programs, referred to as 'bilingual education' programs, are programs in which students are taught in English for half the school day and the other half of the school day in the second language. The goal is to help students become bilingual in a second language. These programs have been relatively successful in helping non-English speakers learn English. In contrast, research shows that English as a Second Language education programs, which are used in Texas in grades seven to twelve, do not teach students the English language and literacy they need for school success. Segregation by language and ethnicity does not lead to higher academic performance, does not raise students' self-esteem, and often results in social isolation and high dropout rates.

During the 2008-2009 academic year, 20.2% of enrolled

students in the Greater Houston Area were identified as Limited English Proficient, while 19.1% of students were enrolled in bilingual or English as a Second Language programs.[137] The majority of early education and elementary school students are enrolled in bilingual education programs (78.7% in early education through Kindergarten and 75.1% in first through fifth), compared to the majority of students in middle and high school enrolled in English as a Second Language (88.7% in grades 6-8 and 100% in grades 9-12).[138] The most common language spoken among Limited English Proficient students in 2009-2010 was Spanish, with 170,742 speakers. Vietnamese was the next most common language, with 5,594 speakers. Other common languages include Urdu, Arabic, Chinese (Mandarin and Cantonese), Korean, Tagalog, and French.[139]

Policy Implication

Texas has the following stated policy regarding education of its language minority students: "Experience has shown that public school classes in which instruction is given only in English are often inadequate for the education of those students" whose primary language is not English.[140] ESL courses provide a program of "intensive instruction in English."[141] It is unclear then why Texas has chosen the blanket policy of providing ESL courses for grades nine through twelve, when "experience has shown" that a more individualized assessment of each student's needs is required, regardless of their grade level. The individual needs of each student should be assessed.

According to the Texas Education Agency, strategies for teaching English as a second language may involve the use of the student's home language. The Agency has also stated that this strategy and others may be used in any of the courses or electives required for promotion or graduation to assist the limited English proficient students to master the Texas Essential Knowledge and Skills (TEKS) test for the required subject(s).[142] However, because Texas policy also states that ESL courses provide a program of "intensive instruction in English," the extent to which a student's native language is used in ESL courses is questionable. One argument for a true dual-language program is that while the student is learning English, he or she is also keeping up with his or her peers in other non-language subjects, such as science, math and social studies, because they are taught in his or her native language.[143]

Special Education Students

INDICATOR: The percentage of students enrolled in special education in Harris County public schools

Year	1990-91	1992-93	1994-95	1996-97	1998-99	2000-01	2001-02	2002-03
Indicator	8.6%	9.2%	9.9%	10.2%	10.6%	10.2%	10.1%	10.0%

Year	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Indicator	10.0%	10.0%	9.7%	9.5%	8.9%	8.3%	8.0%

Source: Texas Education Agency

- The Individuals with Disabilities Education Act (IDEA), Section 504 of the Rehabilitation Act and No Child Left Behind Act of 2001 mandates services for children with disabilities.
- Harris County's public school districts spend nearly 10% of all funds on special education; during the 2007-2008 school year a total of $775,328 was spent.

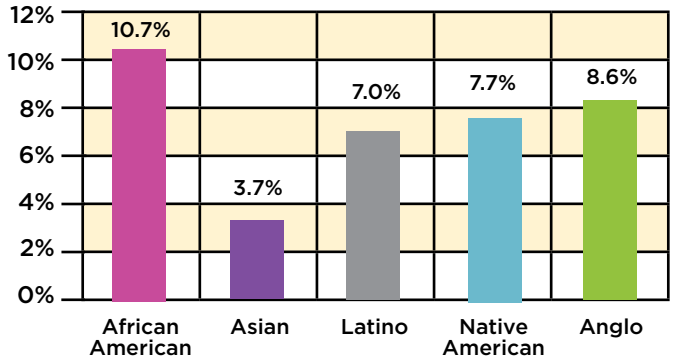
The Individuals with Disabilities Education Act (IDEA), Section 504 of the Rehabilitation Act and No Child Left Behind Act of 2001 mandate services for children with disabilities. IDEA provides a free, appropriate public education in the least restrictive environment to these students. IDEA covers students with educational disabilities ages 3-21 or until graduation that require special education services. The disabilities referenced under IDEA include: mental retardation, hearing loss, speech or language impairments, visual impairments, serious emotional disturbance, orthopedic impairments, autism, traumatic brain injury, other health impairments or specific learning disabilities.[144] Section 504 of the Rehabilitation Act of 1973 is the "umbrella" civil rights law covering persons who have a "physical or mental impairment that substantially limits one or more major life activity."[145] All students who qualify for special education and related services under IDEA are also covered by the provisions of Section 504. The law prohibits recipients of federal funding from discriminating against individuals with disabilities. As it relates to public education, the law states that a school cannot place a student in segregated classes or facilities "solely by reason of her or his disability." Students with disabilities must be given the same opportunities to participate in academic, non-academic and extracurricular activities as their non-disabled peers.

In the 2009-2010 school year, 64,696 students were receiving special education services in Harris County, which equates to 8.0% of all students in the county.

The No Child Left Behind (NCLB) of 2001 was enacted to hold schools accountable for performance of students who are struggling to learn. Federal funds are provided to states and local independent school districts so that they may accomplish the goals of NCLB through NCLB's Title I grant program. Title I is the law that supports students who are considered "disadvantaged." NCLB holds states and schools that accept Title I funds accountable for "providing a fair, equal, and significant opportunity to obtain a high quality education for all students."[146]

When a child needs special education or related services, a parent, teacher, counselor, principal, social worker, therapist or another individual involved in the education or care of the student can make a request for evaluation.[147] This need can arise when the student is not developing at

SPECIAL EDUCATION STUDENTS IN HARRIS COUNTY PUBLIC SCHOOLS BY RACE/ ETHNICITY, 2009-2120 SCHOOL YEAR



the same rate as other children or the student is experiencing unusual or prolonged difficulties with the general education curriculum, and varied rates of intervention have not helped. The school district must then give parents notice of the proposed evaluation and ensure the notice is understood. The parent must give his informed consent before the child is evaluated for the first time. Once consent is received, the student is then assessed in all areas related to the suspected disability, including health, vision, hearing, and motor abilities, language dominance and communicative status, sociological and emotional status, academic performance, and general intelligence. The school district is required to conduct the full individual evaluation within sixty calendar days of receiving parental consent, and a reevaluation shall occur at least once every three years. IDEA 2004 made changes in the request process for students with a suspected learning disability. Prior to the request process, the school must assure "the student has been provided appropriate, high-quality, research-based instruction in a regular classroom, delivered by qualified personnel."[148]

After the evaluation, the school typically conducts an ARD/IEP planning conference at which school personnel and the student's family come together to discuss results obtained from the evaluation, placement options, and other general information. Shortly after the planning meetings, Texas schools conduct an Admission, Review, and Dismissal (ARD) meeting. At this meeting, specific services and goals are discussed, and members of the ARD committee set annual measurable goals for the student, known as the IEP, or Individualized Education Program. This committee reconvenes at least once a year to review and revise the IEPs as necessary.[149]

Harris County public school districts spend nearly 10% of all funds on special education, or a total of $775,328 during the 2007-2008 school year.[150] In Harris County public schools, there were a total of 64,696 students enrolled in special education during the 2009-2010 school year, representing a decline from three years prior (2006-2007) when 72,455 students were enrolled.[151] Currently, African American students are most likely to be enrolled in special education (10.7% enrolled), followed by Anglo (8.6%), Native American (7.7%), Latino (7.0%), and Asian (3.7%). Over the past two decades, African American students have consistently been more likely than Anglo, Latino, or Asian students to be enrolled in special education. During the 2009-2010 school year, 8.0% of all students in Harris County public schools received special education services.[152]

Schools must provide sufficient staff to adequately meet the needs of special education students.

Policy Implication

Special education programs are designed to give students with disabilities the tools to learn in ways that best meet their needs. These students are placed in small groups outside of the general classroom so that they can receive more individualized attention. However, schools are not providing sufficient staff to adequately meet these students' needs, even though the numbers of students in special education are increasing. Furthermore, because many students receiving special education services do not take the same assessment tests as students in general education,[153] teachers and administrators often overlook them. When placed in the right setting, these students can thrive, and many of them are even able to overcome their disabilities. Schools must ensure that students are given that opportunity.

Students at Risk

INDICATOR: The percentage of students identified as at risk of dropping out of school in Harris County based on criteria defined in the Texas Education Code

Year	1990-91	1994-95	1998-99	2000-01	2001-02	2002-03	2003-04
Indicator	20.0%	42.1%	40.5%	44.3%	44.4%	44.7%	48.5%

Year	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Indicator	51.4%	55.1%	53.6%	53.9%	53.9%	52.0%

Source: Texas Education Agency

- Risk factors contributing to the likelihood of a student not completing high school include poor performance in school, low socioeconomic status, limited English proficiency, and living in a single-parent home.
- In 2009, over half of the general student population in Harris County was considered to be at risk of dropping out.
- In 2007, the 80th Texas Legislature authorized additional funding for dropout prevention for at-risk students.

Many factors contribute to a child's risk of dropping out of school before graduating. Some risk factors include low socioeconomic status, limited English proficiency, and living in a single-parent home. A student's performance in school also contributes to his or her risk of dropping out. Failing classes, poor attendance, low grade point average (GPA), and behavioral problems are warning indicators of a student at risk of dropping out.[154] Texas developed specific criteria for designating a student's at-risk status.[155] A student under the age of 21 meeting any of the following criteria is considered at risk of dropping out of school in the state of Texas:

- Has not advanced from one grade level to the next for one or more school years;
- Is in grades 7-12 and did not maintain at least a 70% average in two or more subjects in the current or prior semester;
- Did not perform satisfactorily on an assessment instrument (TAKS) administered to the student, and did not perform at least 110% of the level of satisfactory performance on that instrument the year before;
- Is in Pre-Kindergarten, Kindergarten, or grades 1-3 and has not passed a readiness test or assessment instrument administered during the current school year;
- Is pregnant or a parent;
- Has been placed in an alternative education program during the preceding or current school year;
- Has been expelled during the preceding or current

school year;
- Is currently on parole, probation, deferred prosecution, or other conditional release;
- Has a previous report of dropping out of school;
- Is of limited English proficiency;
- Is in the custody or care of the Department of Protective and Regulatory Services or has, during the current school year, been referred to the department by a school official, officer of the juvenile court, or law enforcement official;
- Is homeless; or,
- Has resided in the preceding school year or resides in the current school year in a residential placement facility in the district – including a detention facility, substance abuse treatment facility, emergency shelter, psychiatric hospital, halfway house, or foster group home.

In 2009, there were 424,595 students in Harris County that were considered at risk of dropping out—over half (53.9%) of the general student population.[156] In Texas, 2,285,954 students were considered at risk of dropping out, or 48.3% of the student population.[157] Of all school districts in Harris County, Humble ISD had the smallest percentage of at-risk students (31.8%), while Aldine ISD had the most at-risk students with 70.1% of its students identified as at-risk.[158] At-risk students are most likely to be minority and from economically disadvantaged backgrounds. In 2010, 47.8% of African American and 67.3% of Latino students were considered at-risk compared to only 23.2% of Anglo students.[159]

In 2009, 53.9% of students in Harris County public schools, compared to 48.3% of students in Texas, were considered at risk of dropping out.

In 2007, the 80th Texas Legislature passed House Bill 2237, which authorized additional funding for dropout prevention for at-risk students.[160] The Texas Education Agency (TEA) and school districts have implemented programs designed to keep students in school. One program uses an early warning system to let districts know when a student is becoming disengaged or falling behind in school. The Texas Ninth Grade Transition and Intervention Program (TNGTI) was developed to identify at-risk students and allow schools to intervene before they drop out. This program includes a summer transition program to develop the academic, social, and study skills of incoming freshman students, an early warning tool to monitor the progress of program participants throughout the ninth grade year, and targeted intervention for students who exhibit early warning signs of being off-track for graduation.[161]

Recognizing the off-track, at-risk students is the first step in keeping students in school.

Policy Implication

An effective early warning system that uses indicators based on accessible data can predict during one semester whether a student is on-track towards graduation.[162] Recognizing the off-track, at-risk students is the first step in keeping students in school. However, as the number of students identified as at-risk increases, Texas must also proactively implement new systems and policies that support the academic, emotional, and social needs of these students. Some of these strategies include lengthening the school day/year, intensive summer catch-up programs, restructuring schools to provide personalized learning, individualized education plans, mentoring, service learning, afterschool programming, early literacy development, and quality early childhood education.

Graduation and Dropout Rates

INDICATOR: The average freshman-to-senior graduation rate in the Greater Houston Area (26 independent school districts)

Year	2004	2005	2006	2008
Indicator	58	70	68	63*

Source: CHILDREN AT RISK using data from the Texas Education Agency
*Note: The 2008 graduation rate employs a new methodology, and is thus not directly comparable to previous years. The new calculation represents the percentage of first-time freshmen entering in 2004-2005 who graduated from any Texas public school within four years.

INDICATOR: The percentage of students from a class of ninth graders who drop out and do not return by the fall of their fourth school year and do not meet other completion requirements in the Greater Houston Area (26 independent school districts)

Graduating Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Indicator	11.4	11.4	8.4	6.9	5.7	6.8	5.4	6.2	10.4	14.3	13.6	11.9

Source: Secondary School Completion and Dropouts in Texas Public Schools Report-County Supplement, Texas Education Agency

- The median income for high school dropouts aged 25 and older in Harris County is significantly lower when compared to the median income of those of the same age who finished high school or attained a GED.
- While there are various means of tracking students, calculations from a number of independent research organizations indicate that more than one in three students never finish high school in Texas.
- For the class of 2008, TEA reported the percentage of students who graduated or were continuing their education after their expected graduation date was 10.5% in Texas and 18.7% in HISD.

Texas ranks last in the nation in the percentage of adults with high school diplomas; only 79.6% of Texans have a high school diploma.

Students drop out of school for a variety of reasons: poor grades, low attendance, grade retention, or behavioral problems. These problems stem from circumstances occurring in the student's life, such as: difficult transitions to high school, deficient basic skills, disengagement from one's school or home, and/or lack of guidance and encouragement from a caring adult.[163] Dropping out of high school correlates with a number of negative outcomes, both for the individual and for the state. For example, in 2008, 24.3% of the dropout population aged 25 and older lived below the poverty line.[164] The median income for high school dropouts aged 25 and older in Harris County was $19,993,[165] compared to a median income of $27,318 for those 25 and older in Harris County who finished high school or attained a GED.[166] Additionally, dropouts account for half of all prisoners in Texas prisons,[167] and more than two-thirds of inmates on death row never completed high school.[168] In Texas, a single cohort of dropouts has been estimated to result in a loss of up to $9.6 billion for the state.[169] According to a number of independent research organizations, more than one in three students never finishes high school in Texas.[170] However, the

Texas Education Agency (TEA) reports that for the class of 2008, only 10.5% of Texas students who started ninth grade dropped out.[171] The difference in these figures arises because there are various methods to calculate rates and various means of tracking and classifying students.

GRADUATION AND COMPLETION RATES

Texas is widely recognized for its student-level reporting system, allowing the TEA to track students on an individual basis. TEA assigns each student a unique ID number and tracks students throughout the public school system to see if they graduate, continue high school after their expected graduation date, drop out, earn a GED, or leave the school system for another reason. TEA calculates multiple data to measure and report on the number of students who complete high school, including completion and graduation rates. The first is the longitudinal completion rate ("Completion Rate I"), which is used for standard accountability purposes. This rate is utilized in part to determine whether schools and districts receive the state ratings of Exemplary, Recognized, Academically Acceptable, or Academically Unacceptable. The longitudinal completion rate shows the percentage of students in the cohort who have graduated or are continuing their education after their expected graduation date. To count as a completer, the student must have received a high school diploma within four years or have reenrolled in school for a fifth year. Because this rate accounts for both graduates and continuers, it creates a

CHILDREN AT RISK VS. TEA DROPOUT RATES BY SCHOOLS FOR CLASS OF 2008* (REGION 4)

Campus	District	TEA Four-Year Graduation Rate	C@R Four-Year Graduation Rate	Graduation Rate Difference
TOP 10 CHILDREN AT RISK FOUR-YEAR GRADUATION RATES				
Debakey High School For Health Professions	Houston ISD	99	96	3
Eastwood Academy	Houston ISD	100	94	6
Performing & Visual Arts High School	Houston ISD	98	94	4
Kerr High School	Alief ISD	97	92	5
Carnegie Vanguard High School	Houston ISD	99	91	8
Clements High School	Fort Bend ISD	96	90	6
Harmony Science Academy	Harmony Science Academy	100	88	12
Taylor High School	Katy ISD	97	87	10
Stephen F Austin High School	Fort Bend ISD	96	87	9
Law Enfcmt-Criminal Justice High School	Houston ISD	95	86	9
LOWEST CHILDREN AT RISK FOUR-YEAR GRADUATION RATES				
Clear View Education Center	Clear Creek ISD	73	45	28
Challenge Early College High School	Houston ISD	40	43	-3
Wheatley High School	Houston ISD	65	43	22
Worthing High School	Houston ISD	61	43	18
Furr High School	Houston ISD	68	42	26
Girls & Boys Prep Academy	Girls & Boys Prep Academy	87	41	46
Sam Houston High School	Houston ISD	NA	39	NA
North Forest High School	North Forest ISD	41	38	3
Sharpstown High School	Houston ISD	54	35	19
Lee High School	Houston ISD	41	30	11

Source: Academic Excellence Indicator System, Texas Education Agency; CHILDREN AT RISK calculation using Texas Education Agency data

*Note: Schools with missing or insufficient data as well as alternative or disciplinary campuses were exluded from this list.

Graduation and Dropout Rates (cont.)

GRADUATION AND DROPOUT RATES BY SCHOOL DISTRICT, CLASS OF 2008

District	TEA Longitudinal Dropout Rate	TEA Completion Rate I	TEA Graduation Rate	CHILDREN AT RISK Four-Year Graduation Rate*
Aldine ISD	18	81	69	59
Alief ISD	18	81	69	57
Channelview ISD	17	82	71	57
Clear Creek ISD	2	97	92	74
Crosby ISD	13	86	80	67
Cypress-Fairbanks ISD	4	96	86	74
Dayton ISD	17	82	77	64
Deer Park ISD	2	97	87	75
Fort Bend ISD	6	94	88	76
Friendswood ISD	1	97	95	83
Galena Park ISD	9	91	78	68
Goose Creek CISD	12	87	76	64
Houston ISD	19	81	68	55
Huffman ISD	5	95	91	82
Humble ISD	9	90	83	74
Katy ISD	3	96	92	80
Klein ISD	7	92	85	73
La Porte ISD	8	90	86	74
North Forest ISD	50	50	41	36
Pasadena ISD	17	81	68	58
Pearland ISD	5	95	90	81
Sheldon ISD	13	86	76	56
Spring Branch ISD	10	89	84	69
Spring ISD	9	89	84	68
Tomball ISD	5	93	87	74
Waller ISD	6	93	89	72

Source: Academic Excellence Indicator System, Texas Education Agency; Information Request, Texas Education Agency

*Note: CHILDREN AT RISK calculations based on data provided by the Texas Education Agency. This graduation rate represents the percentage of first-time freshmen entering in 2004-2005 who graduated from any Texas public school within four years.

high depiction of the students who finish high school, and does not account for whether the continuers will drop out or eventually graduate.[172]

Under federal guidelines, TEA also calculates a graduation rate, which is reported to the Department of Education. To calculate this completion rate, TEA tracks a cohort or class of students, meaning the group of students who start ninth grade for the first time and the students who leave and enter that class over a four year period, to calculate a graduation rate. The graduation rate represents only the percentage of students who graduated high school within four years with a high school diploma. Since this number does not account for continuers who may or may not finish, it does not reflect the fact that some students take longer than four years to graduate. While this rate reflects the common public understanding of what it means to finish high school, graduating, it is not used for state accountabil-

ity purposes.[173] In Texas, the completion rate for the class of 2008 was 88%, while the graduation rate was only 79%, according to the Texas Education Agency.[174]

For both calculations, some students, based on 'leaver codes,' are removed entirely from the cohort and not included in the graduation or completion calculation because they left the public school system. Students removed from the cohort include those who have left the public school system to enroll elsewhere: those who leave to attend private school, a school outside Texas, or to be homeschooled. Students who leave to return to their home country, who are expelled, or who die are also removed. In addition to leavers, TEA also removes students from the calculations for whom TEA cannot find records in their system. Since TEA is unable to tell how many underreported students are dropouts, TEA reports them separately from graduation, completion or dropout rates.[175] Removing leavers and underreported students from their cohort results in a higher graduation or completion rate.

In past years, CHILDREN AT RISK has calculated its own graduation rate utilizing data from the Texas Education Agency, employing a methodology similar to that of the Manhattan Institute. This methodology compares the entering freshman class size with the number of graduating seniors four years later. The rate is adjusted for school growth or decline in the freshman class over the four years. Based on this calculation, CHILDREN AT RISK found that 68% of students graduated in the class of 2006,[176] compared to TEA's graduation rate of 80.4%.[177]

In 2009, CHILDREN AT RISK developed a new methodology to calculate graduation rates across the state. This methodology is unique in that it tracks first-time freshmen (those enrolled in ninth grade for the first time) to determine whether the cohort of students graduated from any Texas public school within a specified time frame (typically four or six years). Utilizing data from the Texas Education Agency, this measure relies on the state's ability to track individual students anywhere in the Texas public school system, but does not remove students from the cohort who leave school regardless of the reason. A benefit of this method is that students who have not been well-documented to have left for home schooling or left the country, for example, are not preemptively removed from the calculation. Furthermore, this calculation does not penalize schools for transferring students to other schools in the state by including students who graduated from the same campus or a different campus, as graduates. For the class of 2008, Texas' self-reported graduation rate (for federal accountability) was 79%[178] and Houston ISD's rate was reported as 68%.[179] In contrast, CHILDREN AT RISK's

four-year graduation rate for first-time freshmen entering ninth grade in 2004-2005 was 66% for Texas and 54% for Houston Independent School District (HISD).[180]

DROPOUT RATE

TEA calculates and reports annual dropout rates in addition to a four-year, longitudinal dropout rate to determine the percentage of students from a cohort who dropped out before completing their high school education. TEA changed part of its methodology to comply with the passage of Senate Bill 186, passed by the 78th Texas Legislature in 2003. The passage of the bill required Texas to comply with the No Child Left Behind Act by changing the way Texas reports dropouts to conform to the definitions developed by the U.S. Department of Education's National Center for Education Statistics (NCES). NCES defines a dropout as a student who is enrolled in public school in grades 7-12, does not return to public school the following fall, is not expelled, and does not graduate, receive a GED, continue school outside the public school system, begin college, or die. Students who are not considered dropouts include those who are expelled, return to their home country, or move to another educational setting, such as a private school or home school. TEA reported a longitudinal dropout rate for the class of 2008 of 10.5% in Texas and 18.7% in HISD.[181] In the cohort, more than 20% of Latinos and African Americans dropped out of HISD while less than 9% of Anglo students dropped out.[182]

Graduation and Dropout Rates (cont.)

It is essential to catch students as soon as they begin to fall behind or become disengaged in order to make a successful early intervention to get the student back on track to graduation.

Policy Implication

Dropouts cost the state in a number of ways: through higher rates of crime and incarceration, increased use of welfare and social services, a higher dependence on public health care systems, and most significantly, the loss of future economic activity that a high school diploma holder brings into the state. The current demand for a highly-educated labor market has created many barriers for those who lack high school diplomas to secure employment. Given the shifting forces at work in the 21st century economy, a high school diploma is the lowest baseline level of education necessary for a livable wage. The current education system will determine the quality of our future workforce, social service systems, and economy. The undeniable link between a quality education and prosperity necessitates that public officials address this dropout crisis with all due urgency.

A thorough and accurate understanding of why children drop out and an understanding of the magnitude of the dropout problem will allow schools, districts, and policymakers to develop effective programs to increase high school completion and success. Texas, considered a leader in creating and maintaining longitudinal data on its students, must take the lead in this arena as well. Public officials must implement an accurate and transparent system of monitoring dropout and graduation rates, especially where these rates are attached to accountability. Officials must also work to enhance graduation rates through focused school reform, and identifying districts and schools that are failing their students. Substantial work has been done to identify some of the essential components of high school reforms that relate to keeping students in school. It is time for us to take this knowledge and put it to use, or face the economic and societal consequences. Texas must realize that a failure to look to the future in addressing today's education challenges will result in disastrous economic consequences for our state in the present and well into the future.

TEA plans to make the early warning system available to all school districts across Texas. The early warning system will begin tracking students in middle school based on four indicators: attendance, grades, GPA, and behavior. The system will flag students who are not on-track to graduate, allowing the school and district time to intervene and attempt to keep the student in school. The system will flag students who miss more than 10% of class, fail a core class, have a low GPA, or have multiple behavioral referrals. While many students do not drop out until high school, students' disengagement may begin long before. It is essential to catch students as soon as they begin to fall behind or become disengaged in order to make a successful early intervention to get the student back on track to graduation.[183]

School Rankings

- CHILDREN AT RISK expanded the school ranking system to include eligible high schools statewide in addition to eligible elementary and middle school campuses.
- By using various indicators to evaluate campuses, CHILDREN AT RISK encourages a comprehensive examination of school quality and seeks to hold schools accountable for student performance.
- Even though the Greater Houston Area has several schools in the top rankings, a disproportionate number of Greater Houston Area high schools fall in the bottom quartile of the state.

In an effort to raise community awareness of the "dropout crisis" facing Houston and the need for school reform, CHILDREN AT RISK designed a school ranking system in 2006 to publicly evaluate and rank high schools in the Greater Houston Area. In 2009, CHILDREN AT RISK began to include all eligible high schools in the state of Texas as well as extend the ranking system to include eligible elementary and middle school campuses. For the fifth Public School Rankings report released in 2010, CHILDREN AT RISK evaluated and ranked 5,864 public school campuses across Texas. The purpose of the school rankings is not only to provide a tool to parents and students regarding the quality of local schools, but also to provide information to campuses and districts on how they perform relative to their peers and on successful models of high-performing public schools. The school rankings aim to:

- Serve as an accessible guide for parents, educators, and community members regarding the performance of local schools;
- Generate conversation about how schools and districts are performing overall in creating college ready students;
- Encourage the use of data in public school reform; and
- Be transparent, accessible to the public, and open to scrutiny.

To rank public schools across Texas, CHILDREN AT RISK compiles and analyzes universal data collected by the Texas Education Agency through the Academic Excellence Indicator System, the Student Assessment Division (TAKS™ data), and through direct requests to the Agency. CHILDREN AT RISK emphasizes utilizing a diverse array of indicators to evaluate campuses to encourage a holistic examination of school quality. CHILDREN AT RISK seeks to hold schools accountable for students' performance on standardized testing in addition to numerous other measures such as performance on college entrance exams, participation in advanced coursework, student retention, and graduation rates. CHILDREN AT RISK examines fourteen indicators at the high school level, ten at the middle school level, and twelve at the elementary level.

At the high school level, CHILDREN AT RISK constructs a weighted index comprised of fourteen variables to measure student preparedness for post-secondary education. These measures include: the percentage of students achieving TAKS Commended Performance standards in Mathematics, English/Language Arts, Social Studies and Science; the percentage of ACT/SAT test-takers; mean SAT and ACT test scores; enrollment in advanced courses; completion of the Recommended High School Program; participation in AP/IB exams; performance on AP/IB exams; graduation rate; and attendance rate. Similarly, CHILDREN AT RISK constructs a weighted index based on ten indicators at the middle school level, evaluating the performance of schools in preparing students for secondary and post-secondary success. Middle schools

More than a third (36%) of Greater Houston Area high schools rank in Texas' bottom quartile.

School Rankings (cont.)

Houston Rank	Texas Rank	School Name	District
TEXAS TIER 1			
1	3	Debakey High School For Health Professions	Houston ISD
2	4	Carnegie Vanguard High School	Houston ISD
3	9	Kerr High School	Alief ISD
4	14	KIPP Houston High School	KIPP Inc Charter
5	15	Harmony Science Academy	Harmony Science Academy
6	17	YES Prep - Southeast Campus	YES Preparatory Public Schools
7	18	Eastwood Academy	Houston ISD
8	19	Perfor & Vis Arts High School	Houston ISD
9	22	Clements High School	Fort Bend ISD
10	26	Memorial High School	Spring Branch ISD
11	28	Westchester Academy For International	Spring Branch ISD
12	30	Cinco Ranch High School	Katy ISD
13	32	Taylor High School	Katy ISD
14	35	Stephen F Austin High School	Fort Bend ISD
15	40	Law Enfcmt-Crim Just High School	Houston ISD
16	41	Friendswood High School	Friendswood ISD
17	43	The Woodlands High School	Conroe ISD
18	44	Bellaire High School	Houston ISD
19	49	Stratford High School	Spring Branch ISD
20	56	Dulles High School	Fort Bend ISD
21	65	Clear Lake High School	Clear Creek ISD
22	69	Kingwood High School	Humble ISD
23	74	Carver High School For Applied Tech/Engin	Aldine ISD
24	92	Lamar High School	Houston ISD
25	93	Cy-Fair High School	Cypress-Fairbanks ISD
26	97	Cypress Creek High School	Cypress-Fairbanks ISD
27	99	Langham Creek High School	Cypress-Fairbanks ISD
28	102	Klein High School	Klein ISD
29	112	Kempner High School	Fort Bend ISD
30	130	Cypress Falls High School	Cypress-Fairbanks ISD
31	136	Westside High School	Houston ISD
32	146	Lawrence E Elkins High School	Fort Bend ISD
33	163	Jersey Village High School	Cypress-Fairbanks ISD
34	195	Katy High School	Katy ISD
35	201	Morton Ranch High School	Katy ISD
36	217	Clear Brook High School	Clear Creek ISD
37	235	Raul Yzaguirre School For Success	Raul Yzaguirre School For Success
38	237	Hightower High School	Fort Bend ISD
39	239	Foster High School	Lamar CISD
40	252	Pearland High School	Pearland ISD

Houston Rank	Texas Rank	School Name	District
TEXAS TIER 2			
41	264	Danbury High School	Danbury ISD
42	271	Brazoswood High School	Brazosport ISD
43	284	George Bush High School	Fort Bend ISD
44	285	Klein Collins High School	Klein ISD
45	330	Clear Creek High School	Clear Creek ISD
46	347	Tomball High School	Tomball ISD
47	349	Mayde Creek High School	Katy ISD
48	363	Needville High School	Needville ISD
49	375	Stafford High School	Stafford Msd
50	383	Cypress Springs High School	Cypress-Fairbanks ISD
51	387	Challenge Early College High School	Houston ISD
52	399	Barbers Hill High School	Barbers Hill ISD
53	402	Hargrave High School	Huffman ISD
54	450	Oak Ridge High School	Conroe ISD
55	458	Montgomery High School	Montgomery ISD
56	483	Cypress Ridge High School	Cypress-Fairbanks ISD
57	495	Klein Oak High School	Klein ISD
58	507	Barbara Jordan High School	Houston ISD

are evaluated based on the following variables: Commended Performance rates for TAKS Reading, Mathematics, Writing, Science, Social Studies, and all tests taken; attendance rate; and retention rates in 7th and 8th grades. Finally, elementary campuses are evaluated based on a twelve-measure weighted index. Indicators for elementary campuses are as follows: Commended Performance rates for TAKS Reading, Mathematics, Writing, Science, and all tests taken; attendance rate; retention rates in 4th and 5th grades; and average class size in grades one through three. One adjustment variable is included for all campuses: the percentage of students who are economically disadvantaged (i.e. students who qualify for free or reduced-price meals or other public assistance), as research has consistently shown that poverty is a predictor of whether or not a student will graduate and achieve post-secondary academic success.

The CHILDREN AT RISK ranking methodology employs a statistically straightforward method for ranking schools across various measures. Much like the methodology used by other institutions to rank higher education programs, CHILDREN AT RISK's method uses the z-score statistic to standardize the data and compute a ranking among campuses included in the analysis. The z-score, sometimes called a normal deviate, indicates presence above and below the population mean for a raw score. The standardization of scores makes it possible to compare scores from different distributions where measurement is based on different scales, such as graduation rates and mean SAT scores. When the variables used in the CHILDREN AT RISK ranking are examined in conjunction with each other, they provide a more accurate assessment of how well a campus has prepared students for the next level of their education. To calculate the school rankings, CHILDREN AT RISK first computes a standardized score, or z-score, for each of the measures, comparing a campus' performance against schools across the state. CHILDREN AT RISK then applies predetermined weights to each measure and aggregates the weighted values to produce a composite score. CHILDREN AT RISK assigns a rank order to each campus, which is determined as the order in which campuses are listed when the weighted composite z-scores are sorted from highest to lowest. Finally, elementary, middle, and high schools across the state are assigned 'Tiers' which represent quartiles, with 'Tier 1' schools in the top quartile and 'Tier 4' schools in the bottom quartile in the state.

CHILDREN AT RISK's rankings are computed at the elementary, middle, and high school levels across the state of Texas. The School Rankings' analysis is conducted at the state level before campuses are extracted to rank schools in smaller geographic areas (i.e. Houston, Dallas, Austin, and San Antonio). For the purpose of school rankings, the Greater Houston Area is defined as the following eight counties: Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller. In the Greater Houston Area, CHILDREN AT RISK rated 140 high schools, 253 middle schools, and 557 elementary schools in 2010.

High School Rankings (cont.)

Houston Rank	Texas Rank	School Name	District
TEXAS TIER 3			
59	518	Sweeny High School	Sweeny ISD
60	526	East Chambers High School	East Chambers ISD
61	557	Pasadena Memorial High School	Pasadena ISD
62	559	Hempstead High School	Hempstead ISD
63	561	Magnolia High School	Magnolia ISD
64	575	Royal High School	Royal ISD
65	580	B F Terry High School	Lamar CISD
66	581	Crosby High School	Crosby ISD
67	584	Angleton High School	Angleton ISD
68	601	Macarthur High School	Aldine ISD
69	613	Deer Park High School	Deer Park ISD
70	617	Hull-Daisetta High School	Hull-Daisetta ISD
71	618	Spring Woods High School	Spring Branch ISD
72	619	La Porte High School	La Porte ISD
73	621	Columbia High School	Columbia-Brazoria ISD
74	644	Willis High School	Willis ISD
75	645	Waltrip High School	Houston ISD
76	650	Tarkington High School	Tarkington ISD
77	656	Milby High School	Houston ISD
78	660	Thurgood Marshall High School	Fort Bend ISD
79	666	North Shore Senior High	Galena Park ISD
80	671	Sterling High School	Goose Creek CISD
81	686	Liberty High School	Liberty ISD
82	697	Westfield High School	Spring ISD
83	706	Lamar Cons High School	Lamar CISD
84	710	Waller High School	Waller ISD
85	714	Dobie High School	Pasadena ISD
86	732	Galena Park High School	Galena Park ISD
87	733	Conroe High School	Conroe ISD
88	735	Austin High School	Houston ISD
89	747	Spring High School	Spring ISD
90	755	Anahuac High School	Anahuac ISD

Houston Rank	Texas Rank	School Name	District
TEXAS TIER 4			
91	766	Reagan High School	Houston ISD
92	801	Taylor High School	Alief ISD
93	803	Chavez High School	Houston ISD
94	829	New Caney High School	New Caney ISD
95	830	Lee High School	Goose Creek CISD

96	834	Alvin High School	Alvin ISD
97	835	Hardin High School	Hardin ISD
98	837	Aldine High School	Aldine ISD
99	839	Caney Creek High School	Conroe ISD
100	843	Hastings High School	Alief ISD
101	852	Ball High School	Galveston ISD
102	869	Klein Forest High School	Klein ISD
103	875	Sam Rayburn High School	Pasadena ISD
104	876	Brazosport High School	Brazosport ISD
105	878	C E King High School	Sheldon ISD
106	879	Dayton High School	Dayton ISD
107	881	Scarborough High School	Houston ISD
108	891	Channelview High School	Channelview ISD
109	894	Nimitz High School	Aldine ISD
110	895	Splendora High School	Splendora ISD
111	916	Elsik High School	Alief ISD
112	918	Santa Fe High School	Santa Fe ISD
113	920	Eisenhower High School	Aldine ISD
114	924	Quest High School	Humble ISD
115	927	Texas City High School	Texas City ISD
116	931	Madison High School	Houston ISD
117	940	South Houston High School	Pasadena ISD
118	941	Worthing High School	Houston ISD
119	946	Dickinson High School	Dickinson ISD
120	950	Cleveland High School	Cleveland ISD
121	952	Washington B T High School	Houston ISD
122	958	Davis High School	Houston ISD
123	962	Humble High School	Humble ISD
124	966	Northbrook High School	Spring Branch ISD
125	968	Pasadena High School	Pasadena ISD
126	973	Westbury High School	Houston ISD
127	975	Willowridge High School	Fort Bend ISD
128	983	Sharpstown High School	Houston ISD
129	987	North Forest High School	North Forest ISD
130	988	Hitchcock High School	Hitchcock ISD
131	991	Furr High School	Houston ISD
132	998	Sterling High School	Houston ISD
133	999	Lee High School	Houston ISD
134	1004	La Marque High School	La Marque ISD
135	1005	Wheatley High School	Houston ISD
136	1007	Girls & Boys Prep Academy	Girls & Boys Prep Academy
137	1008	Kashmere High School	Houston ISD
138	1009	Yates High School	Houston ISD
139	1010	Clear View Education Center	Clear Creek ISD
140	1013	Jones High School	Houston ISD

High School Rankings (cont.)

TOP 10 ELEMENTARY SCHOOLS IN THE GREATER HOUSTON AREA 2010

1. T H Rogers Elementary (Houston ISD)
2. Barbara Bush Elementary (Houston ISD)
3. Walker Station Elementary (Fort Bend ISD)
4. Henderson J Elementary (Houston ISD)
5. Hamilton Elementary (Houston ISD)
6. Two Dimensions Preparatory Academy (Two Dimensions Preparatory Academy)
7. Commonwealth Elementary (Fort Bend ISD)
8. Tough Elementary (Conroe ISD)
9. West University Elementary (Houston ISD)
10. River Oaks Elementary (Houston ISD)

TOP 10 MIDDLE SCHOOLS IN THE GREATER HOUSTON AREA 2010

1. TH Rogers Sec (Houston ISD)
2. Energized For Excellence Middle School (Houston ISD)
3. Lanier Middle (Houston ISD)
4. Fort Settlement Middle (Ford Bend ISD)
5. Sartartia Middle (Fort Bend ISD)
6. Project Chrysalis Middle (Houston ISD)
7. KIPP Academy Middle School (KIPP Inc. Charter)
8. Westbrook Intermediate (Clear Creek ISD)
9. Briarmeadow Middle School (Houston ISD)
10. Garland Mcmeans Jr High (Katy ISD)

TOP 10 URBAN COMPREHENSIVE HIGH SCHOOLS IN THE GREATER HOUSTON AREA 2010

1. Springs High School (Cypress-Fairbanks ISD)
2. Macarthur High School (Aldine ISD)
3. Spring Woods High School (Spring Branch ISD)
4. Waltrip High School (Houston ISD)
5. Milby High School (Houston ISD)
6. North Shore Senior High (Galena Park ISD)
7. Westfield High School (Spring ISD)
8. Galena Park High School (Galena Park ISD)
9. Austin High School (Houston ISD)
10. Reagan High School (Houston ISD)

Note: This list represents the top area comprehensive high schools that are located in urban districts and house majority (at least 50%) economically disadvantaged student populations.

TOP 10 MOST IMPROVED HIGH SCHOOLS IN THE GREATER HOUSTON AREA 2010

1. Westbury High School (Houston ISD)
2. Lee High School (Houston ISD)
3. Wheatley High School (Houston ISD)
4. Conroe High School (Conroe ISD)
5. La Marque High School (La Marque ISD)
6. Elsik High School (Alief ISD)
7. Austin High School (Houston ISD)
8. Westside High School (Houston ISD)
9. Willowridge High School (Fort Bend ISD)
10. Kerr High School (Alief ISD)

Note: This list represents area high schools that have shown the greatest improvement across the fourteen measures used in the rankings over the past three academic years – 2006-07, 2007-08, and 2008-09. Campuses with missing data points are excluded. CHILDREN AT RISK used weighted total aggregate z-score values for each campus for each academic year and computed the positive difference across years for total positive change over the last three years.

In the Greater Houston Area, small, theme-based schools were found at the top of the rankings alongside more traditional, comprehensive schools with high affluence. The top-rated area high schools in 2010 included three HISD magnets: DeBakey High School for Health Professions (#1), Carnegie Vanguard (#2), and High School for the Performing and Visual Arts (#8), and an internal charter, Eastwood Academy (#7). Three highly-regarded open-enrollment charter school systems originating in Houston, Knowledge Is Power Program (KIPP) Inc. Charter, Harmony Science Academy, and YES Preparatory Public Schools, were each represented in Greater Houston's top ten high school list: KIPP Houston High School (#4), Harmony Science Academy-Houston (#5), and YES Prep-Southeast Campus (#6). However, a disproportionate number of Greater Houston Area high schools (around 36%) fall in the bottom quartile, or fourth tier, in the state. This disparity increases when looking at economically disadvantaged high school students, nearly half of whom are enrolled in 'Tier 4' high schools.

CHILDREN AT RISK encourages parents to utilize the school rankings as an advocacy tool to better understand the performance of their local schools and demand improvement.

Policy Implication

The CHILDREN AT RISK Public School Rankings are designed to serve as a resource for parents, service providers, educators, policymakers, and other community members on the performance of schools in the Greater Houston Area and across Texas. Thus far, school and district administrators have utilized the school rankings to spur further data analysis, inform teacher and staff professional development, and target school interventions. The school rankings have also encouraged parents to contact their school or district; have conversations with neighbors, the Parent-Teacher Organization, and school board candidates on the quality of public schools; and informed decisions of where to send their children to school. CHILDREN AT RISK encourages parents to utilize the school rankings as an advocacy tool to better understand the performance of their local schools and demand improvement. Furthermore, by examining the characteristics of the high performing schools in the school rankings, particularly those serving diverse or disadvantaged student populations, we may uncover and learn from what works in our public education system. Among the high performing schools in the 2010 school rankings, common themes include small theme-based learning communities, more time on task, effective teachers, and high expectations for all students.

Advanced Placement and International Baccalaureate

INDICATOR: The percentage of 11th and 12th grade Houston ISD students who scored at or above the criterion for passing an AP or IB exam

Year	1995	1996	1997	1998	1999	2000	2001
Indicator	68.6%	71.0%	71.6%	73.1%	70.6%	70.5%	66.5%

Year	2002	2003	2004	2005	2006	2007	2008
Indicator	64.0%	66.8%	59.1%	54.7%	54.1%	50.5%	51.2%

Source: Academic Excellence Indicator System, Texas Education Agency

INDICATOR: The percentage of 11th and 12th grade students in the Greater Houston Area (Region 4) who scored at or above the criterion for passing an AP or IB exam

Year	1995	1996	1997	1998	1999	2000	2001
Indicator	68.6%	71.0%	71.6%	73.1%	70.6%	70.5%	66.5%

Year	2002	2003	2004	2005	2006	2007	2008
Indicator	68.4%	67.1%	64.5%	62.1%	61.0%	59.5%	58.3%

Source: Academic Excellence Indicator System, Texas Education Agency

- **Advanced Placement (AP) exams allow high school students the opportunity to receive credit or advanced placement at over 90% of the universities in the country.**
- **The AP and IB examinations allow high school students to get a head start on college-level coursework and to improve their writing skills and problem-solving techniques.**
- **The percentage of students passing the AP and IB examinations has decreased over the past few years in the state of Texas.**

Advanced Placement (AP) exams allow high school students the opportunity to receive credit or advanced placement at over 90% of the universities in the country. There are more than 30 AP courses and exams across multiple subject areas. Different high schools offer varying AP classes in literature, languages, history, and math.[184]

The International Baccalaureate Organization is a non-profit educational foundation established in Geneva, Switzerland in 1968.[185] The purpose of the organization is to promote quality education to children around the world.[186] Students aged 16-19 are allowed to take Diploma Programme courses and in some cases receive International Baccalaureate (IB) diplomas.[187] At the end of the course examinations or two-year course study, students can take IB examinations; the IB diploma is awarded to students who gain at least 24 points on these examinations.[188] College recognition of the IB diploma may be in the form of recruitment, admission, placement, credit and/or scholarships, depending on the institution's policies.[189] Currently there are six public high schools in Harris County that offer IB courses and diplomas: Bellaire High School, Dwight D. Eisenhower High School, Humble High School, Klein Oak High School, Mirabeau B. Lamar Senior High School, and Westchester Academy for International Studies.[190]

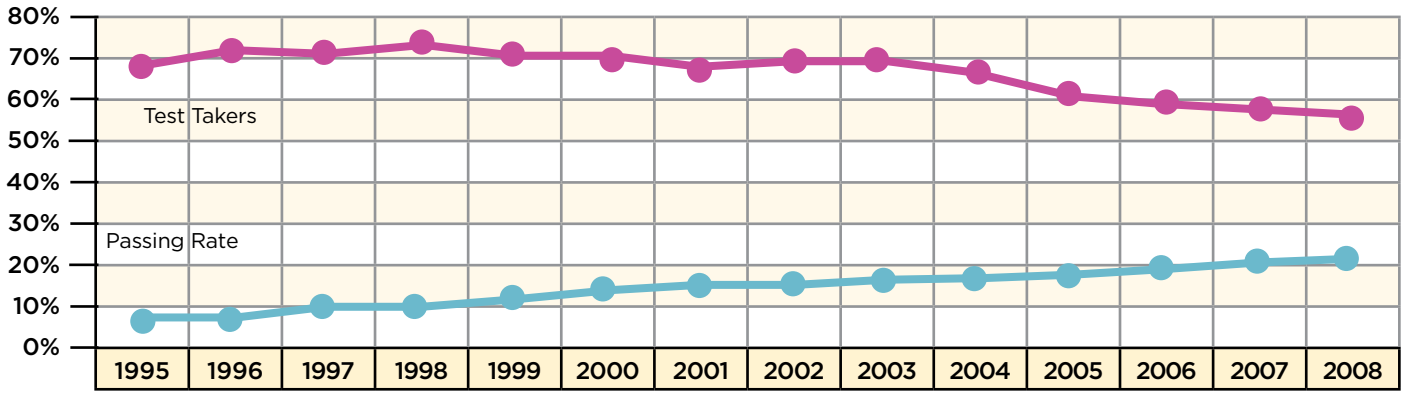
The AP and IB examinations allow high school students to get a head start on college-level coursework and to improve their writing skills and problem-solving techniques. Research has established a strong relationship between student participation in AP and IB programs and future college success. A 2008 study found that AP students had better four-year college graduation rates than those students who did not take AP.[191] Completion of college within four years represents a significant cost savings to students. Similarly, the Educational Policy Improvement Center reported in 2009 that IB standards are highly aligned with the Knowledge and Skills for University Success (KSUS) college-ready standards, indicating that "…students who learn IB curriculum in high school enter college with the type of knowledge and skills not only expected by college faculty but also with skills known to promote academic

success in entry-level courses."[192]

The indicator percentages tracked come from the Texas Education Agency (TEA) and are calculated by the number of AP and IB examinees scoring at or above the criterion, on at least one exam, out of the total number of AP and IB examinees.[193] The percentage of students passing the AP and IB examinations has decreased over the past few years in the state of Texas. In 1997, 71.2% of students in HISD taking AP or IB exams passed at least one exam. Over the years, there has been a steady decline in the number of students passing exams, although more students are taking the test on a yearly basis than when the test was first offered. In 2008, just slightly more than half (50.1%) of students who took an AP or IB exam passed at least one exam.[194] Students in the Greater Houston Area passed these exams at a rate slightly higher than the state average, but these numbers have also decreased over the past three years. In 2008, 58.3% of students in the Greater Houston Area who took an AP or IB exam passed at least one, compared to 50.1% of students in Texas.[195]

When considering these numbers, it is important to take into account how the numbers of students taking the AP and IB exams changes each year. The number of examinees has been increasing in Texas due to the additional state funding appropriated by the 79th Texas Legislature in 2005 to the TEA for the AP/IB Incentive Program. In 2008, 24.1% of all HISD students took the AP and IB exams; this is more than double the percentage of students who took exams in 2000 (11.2%).[196]

GREATER HOUSTON AREA AP/IB TEST TAKERS VS. PASSING RATES, 1995-2008



The state legislature should continue to fund the AP/IB Incentive Program to encourage continued participation in the AP and IB exams.

Policy Implication

The pressure to improve high school students' academic results has led many schools and districts to encourage the enrollment of more students in advanced courses; business and state policy leaders have supported this practice.[197] However, schools must be careful to ensure that students actually learn the advanced content implied by the course labels. Lack of student academic preparation and teacher capacity has led many schools and districts to relax standards so that students can pass the course and graduate.[198] This practice appears to be most prevalent with low-income and minority students. This is especially disturbing in light of research indicating that the percent of a school's students who take and pass AP exams is the best AP-related indicator of whether the school is preparing its students to graduate from college.[199]

Gifted and Talented Students

INDICATOR: The percentage of students enrolled in Gifted and Talented programs in Harris County public schools

Year	1990-91	1994-95	1998-99	2000-01	2001-02	2002-03	2003-04
Indicator	7.3%	7.1%	8.1%	8.2%	7.2%	7.0%	7.1%

Year	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Indicator	7.2%	7.3%	7.4%	7.3%	7.4%	7.7%

Source: Texas Education Agency

- Gifted and Talented programs are required in all Texas public school districts.
- The largest groups of students who participate in the Gifted and Talented program in Harris County are Asian and Anglo students.
- During the last two decades figures of participation in Gifted and Talented programming has not increased significantly for minority students.

In Texas, Gifted and Talented programs are required in all public school districts. The state defines a "gifted and talented student" as a child or youth who performs at or shows the potential for performing at a remarkably high level of accomplishment when compared to others of the same age, experience, or environment and who: (a) exhibits high performance capability in an intellectual, creative, or artistic area; (b) possesses an unusual capacity for leadership; (c) excels in a specific academic field.[200]

The Texas Legislature passed legislation for the first time regarding the education of gifted students in 1977. In 1979, state funds for providing services to gifted children were made available, but providing such services was optional for school districts. In 1987, The Texas Legislature mandated that all school districts identify and serve gifted students at all grade levels. In 1990, The Texas State Plan for the Education of Gifted/Talented Students was adopted, and in 1999 the Texas Performance Standards Project for Gifted/Talented Students was created. The identification process for recognizing gifted and talented students consists of teacher recommendations and evaluations, achievement and aptitude tests, and/or good grades.[201] School districts are not required to reassess students once they are identified for services in the Gifted/Talented program. The students remain in the program unless they choose to exit.[202]

Students may be identified by one or more of four core areas of language arts, mathematics, science, and social studies. There are many ways to allow students to do advanced work reflecting depth and complexity within the general school curriculum. Examples of learning opportunities that emphasize content from the four areas and that can be included in the regular school day may include a combination of following: (a) interdisciplinary curriculum; (b) special units from the each of the areas; (c) differentiation of each of the core areas in regular classes; (d) acceleration in a discipline that is a particular area of strength; (e) Advanced Placement (AP) and International Baccalaureate (IB) classes with appropriate modification for Gifted/Talented students; (f) Independent Study courses; (g) dual/concurrent enrollment; and (h) and Education Service Center (ESC) seminars.[203]

Gifted and talented students may be served in a regular classroom if the classroom teacher has 30 hours of professional development in gifted education and an additional six hours of professional development annually in gifted education. But the key issue is whether or not the teacher has time and/or resources to provide instructions and guidance for gifted and talented students at an appropriately challenging level. Administrators and counselors who are responsible for programming decisions for gifted and talented students are required to receive six hours of professional development that includes nature and needs of gifted and talented students and program options for those students. Any campus or district level administrator (including the superintendent) or counselor who has authority to make scheduling, hiring, and/or program decisions should also have the six hours of training.

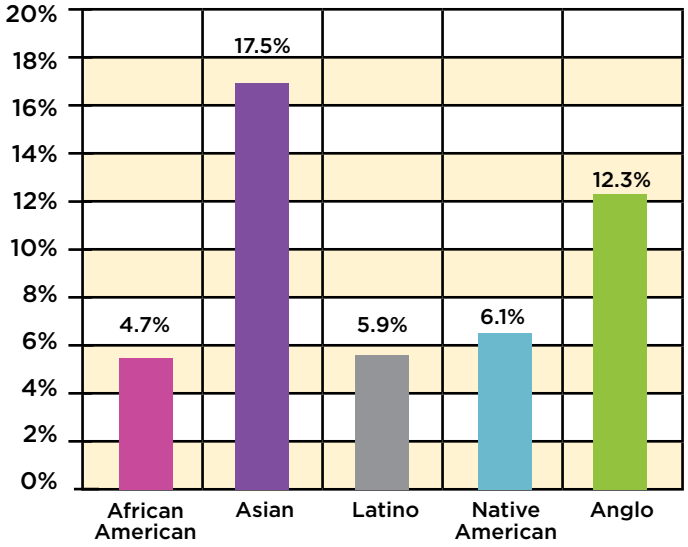
According to the National Association for Gifted Children, gifted children spend 80% of their time in the regular classroom, yet only 61% of classroom teachers have had any training in meeting their needs.[204] As a result, and also as a result of achievement tests that can leave their talents undetected, many potentially gifted students go un-

Students in Houston ISD are nearly twice as likely to be enrolled in Gifted and Talented programs as are students statewide (12.5% versus 7.5% in 2009).

recognized. Currently, the largest groups of students who participate in the Gifted and Talented program in Harris County are Asian and Anglo students at rates of 17.5% and 12.3%, respectively, compared with relatively low rates of participation among Latino (5.9%), African American (4.7%), and Native American (6.7%) students. During the last two decades, these figures have not increased significantly for minority students.[205]

In 2008, Congress allocated $7.5 million for the Jacob K. Javits Gifted and Talented Students Education Act, which funds the National Research Center on the Gifted and Talented and funds grants that focus on identifying and serving students who are traditionally under-represented in gifted and talented programs—students from culturally, linguistically, and ethnically diverse backgrounds—to help reduce gaps in achievement and to encourage the establishment of equal educational opportunities for all U.S. students.

GIFTED AND TALENTED STUDENTS IN HARRIS COUNTY PUBLIC SCHOOLS BY RACE/ETHNICITY, 2009-2010 SCHOOL YEAR



In Harris County, 7.7%, or 62,159 students, students were enrolled in the Gifted and Talented program during the 2009-2010 school year.[206] During the 2007-2008 school year, Harris County school districts spent a total of $64,119,067 on the Gifted and Talented program, 0.8% of total expenditures.[207]

College Admissions Testing

INDICATOR: The mean ACT score for graduates in the Greater Houston Area (Region 4)

Year	1992	1994	1996	1998	2000	2001	2002	2003	2004	2005	2006	2007	2008
Indicator	20.5	20.8	20.7	20.8	20.7	20.7	20.3	20.3	20.6	20.5	20.5	20.8	21.2

Source: Academic Excellence Indicator System, Texas Education Agency

INDICATOR: The mean SAT score for graduates in the Greater Houston Area (Region 4)

Year	1992	1994	1996	1998	2000	2001	2002	2003	2004	2005	2006	2007	2008
Indicator	882	897	1006	1003	1001	1000	1000	1004	1000	1004	1003	1002	994

Source: Academic Excellence Indicator System, Texas Education Agency

- **Texas continues to rank in the lowest quartile for average SAT scores, in 2009 ranking 45th in mean SAT scores.**
- **In 2009 Texas ranked 35th in mean ACT scores.**
- **While minorities continue to be underrepresented in higher education, an impressive 54% of 2009 college-bound SAT takers in Texas were from minority backgrounds, indicating the potential of college-bound minority students.**

The SAT is a nationally recognized college admission test that examines a prospective student's ability in math, reading and writing. Almost all colleges and universities in the United States accept SAT scores to use as a variable in the selection of incoming students.[208] Similar to the SAT, the ACT test assesses a prospective college student's knowledge and readiness for higher learning. The multiple choice section of the ACT examines skills based on four educational areas: reading, math, science, and English. The test also includes an optional short essay section.[209]

In March of 2005, The College Board fully implemented a new 800 point writing section of the SAT to better reflect a student's written understanding and expression. The addition of the writing section increased the maximum test score from 1600 to 2400.[210] Also in 2005, the math and reading components were altered to cover current high school curriculum. Within the math section, quantitative comparisons were removed and new questions were created to cover areas typically taught during junior high school math classes. Analogies were also removed from the reading component of the exam, which now includes short and long reading passages.[211] Through two comprehensive studies performed by the College Board and the University of California (Validity of the SAT for Predicting First-Year College Grade Point Average and Differential Validity and Prediction of the SAT), the adjustments to the SAT exam were found to improve its validity and prediction of a college-ready student.[212]

Over the past three years, the average verbal, math, and writing scores for Texas students have dropped slightly. For example, the average verbal score has dropped from 492 in 2007 to 486 in 2009, while the average math score has only dropped one point over the past three years (502 in 2007 to 501 in 2009). The Texas student test scores for the relatively new writing section have also experienced a decline, dropping from 482 in 2007 to 475 in 2009. All three average test scores for Texas students consistently fall below test scores of students nationally. In 2009, Texas students' verbal, math and writing scores stood 15, 9 and 18 points below the national average, respectively.[213]

Furthermore, the overall mean SAT score for the class of 2009 in Texas was 1467, 42 points below the national average score of 1509. Texas reports a state average for combined reading and math scores of 992, while the national average in reading and math was 1016 for the class of 2009.[214] With a mean score of 994 for the class of 2008, the Greater Houston Area also falls below the national average.[215] When comparing mean SAT scores of the graduating class of 2009 for all 50 states, Texas continues to rank in the lowest quartile. In fact, the state was ranked the lowest it has been in 4 years at 45th in the nation.[216]

Unlike the SAT, the ACT tests a student's educational development through four curriculum-based skill areas: English, mathematics, reading, and science, along with an optional writing section.[217] The ACT was first administered in 1959 and currently stands as the entrance exam preferred by most four-year colleges. Many students feel more comfortable taking the ACT over other entrance exams because of its similarity to content taught in high school.[218] In 2009, the national average ACT composite score was 21.1 out of 36 possible points.[219] The ACT reports "College Readiness Benchmark Scores" that signify the "minimum score needed on an ACT subject-area test to indicate a 50% chance of obtaining a B or higher or about a 75% chance of obtaining a C or higher in the corresponding credit-bearing college courses, which include English Composition, Algebra, Social Science and Biology."[220] Twenty-three percent of Texas high school graduates in 2009 who took the ACT met all four of the College Readiness Benchmarks.[221]

Texas ranks as one of the top five states in numbers of ACT-tested high school graduates.[222] Both the national and Texas average ACT scores have remained steady over the past three years, and Texas ranks similarly to national

MEAN SAT SCORE BY RACE/ETHNICITY FOR GREATER HOUSTON AREA (REGION 4) AND TEXAS

	Class of 2003		Class of 2004		Class of 2005		Class of 2006		Class of 2007		Class of 2008	
	Region 4	Texas	Region 4	Texas	Region 4	Texas	Region 4	Texas	Region 4	Texas	Region 4	Texas
Asian American	1091	1074	1071	1070	1098	1095	1097	1096	1091	1095	1093	1100
Anglo	1070	1054	1066	1050	1079	1059	1074	1059	1074	1056	1075	1060
Latino	907	911	905	913	916	902	921	903	927	914	918	897
African American	854	841	850	843	858	855	862	860	866	867	853	855

Source: Academic Excellence Indicator System, Texas Education Agency

COMPARISON OF VERBAL, MATH, AND WRITING SAT SCORES

Class of	Verbal		Math		Writing	
	Texas	National	Texas	National	Texas	National
2003	493	507	500	519	NA	NA
2004	493	508	499	518	NA	NA
2005	493	508	502	520	NA	NA
2006	491	503	506	518	487	497
2007	492	502	507	515	482	494
2008	488	502	505	515	480	494
2009	486	501	506	515	475	493

Source: Texas and College Bound Seniors, 2006, 2007, 2008, 2009, College Board

College Admissions Testing (cont.)

ACT COMPARISON

Class of	Texas	National
2003	20.1	20.8
2004	20.2	20.8
2005	20.2	20.9
2006	20.3	21.1
2007	20.5	21.2
2008	20.7	21.1
2009	20.8	21.1

Source: ACT High School Profile Report, The Graduating Class of 2007: Texas. ACT, Inc.

standings. Compared to all 50 states, Texas is ranked 35th in the average ACT score for the class of 2009, a slight improvement from the SAT state rankings mentioned earlier.[223] In 2009, Texas students scored an average of 20.8 on the ACT, while nationally students scored a 21.1 average. Only 22% of Texas students from the graduating class of 2009 taking the ACT met all four benchmarks, compared to 23% of students nationally.[224] Furthermore, only 63% of test-takers in Texas were considered prepared for college-level English Composition, 44% were ready for Mathematics, 49% prepared in Reading, and 26% in Science.[225] High school graduates from the class of 2008 in the Greater Houston Area achieved an average ACT score of 21.2, comparable to the Texas and national score averages.[226]

Minority and low-income students continue to be underrepresented in higher education. In particular, African-American and Hispanic minorities continue to fall behind their peers in test scores. For the class of 2008, African-American students in Texas scored, on average, over 200 points less on the SAT than white students, while Hispanic students scored an average of 163 points less than white students.[227] For the past five years (2005-2009), the ACT average test scores have shown a similar pattern with African-American and Hispanic students scoring approximately 5 and 4 points lower, respectively, than white students.[228] However, minority SAT testing participation has gradually increased nationally and in Texas. In the United States, 39% of 2009 college-bound seniors who took the SAT were minority students.[229] Fifty-four percent of 2009 college-bound seniors taking the SAT in Texas were of minority backgrounds.[230] While this large percentage may partly be a factor of Texas' demographics, it does indicate the potential of college-bound minority students. Texas must focus on improving college readiness and ensure preparation to raise its lagging SAT and ACT scores in addition to combating the continued underrepresentation of minorities in higher education.

In 2009, Texas ranked 35th in mean ACT scores and 45th in mean SAT scores out of 50 states and the District of Columbia.

Policy Implication

The SAT and ACT scores of Texas students continue to fall within the bottom half of the nation. In addition, minority students continue to suffer from underrepresentation in higher education. In order to increase the quantity of students on the college track and to ensure that they are fully prepared, Texas must focus particular attention to the improvement of college admission testing attendance and scores. With college readiness in mind, Texas must strive to challenge high school students to a new level, leaving them with the skills necessary for success throughout college and into their professional lives.

Student Assessment: TAKS

INDICATOR: The percentage of students in Harris County meeting the panel recommendation standard on the Texas Assessment of Knowledge and Skills (TAKS) in all subjects and in all grades

Year	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Indicator	46%	55%	59%	62%	66%	70%	72%	76%

Source: Texas Education Agency

- **All students must pass the TAKS for English Language Arts, Mathematics, Science, and Social Studies in the 11th grade to be eligible to graduate.**
- **Asian students are consistently more likely to meet the Panel Recommendation and Commended Performance benchmarks at rates of 92% and 37% respectively.**
- **End of Course Assessments are currently voluntary, but will be required of students taking these courses starting with the freshman class of 2011-2012.**

In 1999, the 76th Texas Legislature established the Texas Assessment of Knowledge and Skills (TAKS) to test the Texas Essential Knowledge and Skills (TEKS). TEKS is the state-mandated basic curriculum that determines the objectives and guidelines of the TAKS. The TAKS was first administered in the 2002-2003 school year, replacing and improving upon the Texas Assessment of Academic Skills (TAAS) exams.[231] Pearson Educational Measurement, the Texas Education Agency, and Texas Educators collaborated to create the TAKS.

The TAKS is administered to students in grades 3 through 11 each year. Reading is given in grades 3 through 9, Mathematics in grades 3 through 10, Writing in grades 4 and 7, and Science in grades 5 and 8. Spanish versions were previously available for grades 3 through 6, but are now only available through grade 5.[232] Students must pass their reading and mathematics TAKS in fifth and eighth grade to advance to the next grade.[233] Students in third grade no longer need to pass their reading TAKS to advance as was previously required.[234] All students must pass the TAKS for English Language Arts, Mathematics, Science, and Social Studies in eleventh grade to be eligible to graduate. Various retesting opportunities are available to those who fail on their initial attempt.[235] Modified versions are available for students receiving special education services.[236]

In 2010, 76% of students in Harris County met the Panel Recommendation standard on the Texas Assessment of Knowledge and Skills across all grades and subjects, as did 76% of students statewide. The Harris County figure

PERCENTAGE OF STUDENTS MEETING 'PANEL RECOMMENDATION' AND 'COMMENDED PERFORMANCE' STANDARDS ON TAKS IN HARRIS COUNTY BY GRADE

Year	3rd Grade		5th Grade		8th Grade		11th Grade	
	Panel Rec.	Commended	Panel Rec.	Commended	Panel Rec.	Commended	Panel Rec.	Commended
2002-03	67%	11%	33%	2%	47%	4%	37%	1%
2003-04	77%	16%	47%	8%	52%	6%	54%	2%
2004-05	79%	17%	59%	10%	56%	9%	58%	3%
2005-06	79%	20%	68%	10%	44%	6%	63%	5%
2006-07	80%	20%	72%	13%	52%	8%	67%	6%
2007-08	82%	21%	76%	16%	65%	12%	72%	6%
2008-09	83%	27%	78%	19%	68%	13%	76%	11%
2009-10	84%	26%	83%	20%	75%	14%	83%	10%

Source: Texas Education Agency

Student Assessment: TAKS (cont.)

In 2010, 76% of students in Harris County and 76% statewide met the Panel Recommendation standard on the TAKS test.

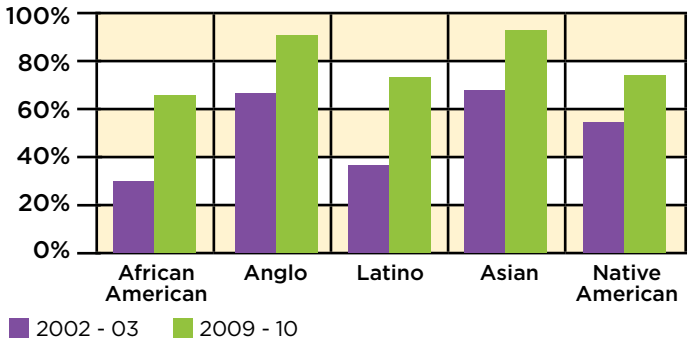
represents an increase from the previous year (72%) and follows an upward trend of students meeting the Panel Recommendation standard on the TAKS since its first implementation in 2003 (46%). However, as in 2003, significant disparities currently exist in meeting the Panel Recommendation and Commended Performance benchmarks of the TAKS across racial groups. Asian students are consistently more likely to meet the Panel Recommendation and Commended Performance benchmarks at rates of 92% and 37%, respectively, followed by Anglo students, 88% of whom met Panel Recommendation and 25% of whom met Commended Performance in the 2010 administration of the TAKS. They are followed by Latino students (73% Panel Recommendation and 10% Commended), Native American students (74% Panel Recommendation and 14% Commended), and African American Students (66% Panel Recommendation and 8% Commended). Although the gap between Asian and African American student pass rates (at Panel Recommendation) shrank from 39% in 2003 to 26% in 2010, the gap between these groups actually increased when looking at the more stringent Com-

STUDENTS MEETING 'PANEL RECOMMENDATION' STANDARD ON TAKS ALL GRADES, ALL TESTS, BY DISTRICT

District	2003	2004	2005	2006	2007	2008	2009
Aldine	43	52	59	66	70	71	73
Alief	36	45	52	58	61	66	69
Channelview	33	45	48	53	60	61	65
Crosby	46	56	57	64	69	70	72
Cypress-Fairbanks	63	70	73	75	76	79	80
Deer Park	62	72	75	80	80	82	83
Galena Park	44	56	59	65	68	73	77
Goose Creek	43	55	62	68	69	71	74
Houston	35	45	49	56	60	65	69
Huffman	49	59	63	68	70	76	79
Humble	56	63	67	73	74	77	79
Katy	67	75	78	82	83	85	86
Klein	61	68	70	75	75	77	81
La Porte	51	65	67	71	69	74	77
North Forest	19	29	31	36	40	50	54
Pasadena	45	55	61	65	65	67	68
Sheldon	34	40	48	56	61	64	66
Spring	46	54	59	64	65	67	67
Spring Branch	60	67	73	77	79	78	78
Tomball	55	66	72	77	80	82	82
Average Score:	47	57	61	66	69	72	74

Source: Academic Excellence Indicator System, Multi-Year History, Texas Education Agency

PERCENTAGE OF STUDENTS IN HARRIS COUNTY MEETING THE "PANEL RECOMMENDATION" STANDARD ON TAKS IN ALL GRADES AND ALL SUBJECTS BY RACE/ETHNICITY



mended Performance benchmark, growing from 10 to 29 percentage points.[237]

Senate Bill 1031 of the 2007 Legislature added End of Course Assessments to the graduation requirements, including tests in Algebra I, Algebra II, Geometry, Biology, Chemistry, Physics, English I, English II, English III, World Geography, World History and United States History. By the spring of 2010, seven tests were in place and two were being field-tested. End of Course Assessments are currently voluntary, but will be required of students taking these courses starting with the freshman class of 2011-2012.[238]

Texas must continue to improve its public education for its students and should shift the focus from testing to actual learning.

Policy Implication

Attaining Panel Recommendation on the Texas Assessment of Knowledge and Skills test is not a true indication of the quality of education that our children receive. Texas must continue to improve its public education evaluation system if its students are to be competitive with those from other states and countries in the global marketplace. By shifting the focus of curriculum in Texas from a yearly test to actual learning could result in significant overall improvement in the school system, as administrators, teachers, and students would not be under the pressure inherent in such a high-stakes test.

Math and Science

INDICATORS

5TH GRADE MATH: Percentage of Harris County students who met Panel Recommendation on 5th Grade math TAKS

Year	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Indicator	64%	71%	87%	89%	91%	90%	91%	93%

Source: Texas Education Agency

8TH GRADE MATH: Percentage of Harris County Students who met Panel Recommendation on 8th Grade math TAKS

Year	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Indicator	51%	56%	60%	67%	72%	82%	85%	88%

Source: Texas Education Agency

11TH GRADE MATH: Percentage of Harris County Students who met Panel Recommendation on 11th Grade math TAKS

Year	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Indicator	50%	69%	71%	76%	79%	80%	82%	89%

Source: Texas Education Agency

5TH GRADE SCIENCE: Percentage of Harris County Students who met Panel Recommendation on 5th Grade science TAKS

Year	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Indicator	37%	53%	61%	72%	76%	82%	84%	88%

Source: Texas Education Agency

8TH GRADE SCIENCE: Percentage of Harris County Students who met Panel Recommendation on 8th Grade science TAKS

Year	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Indicator	NA	NA	NA	49%	57%	70%	73%	79%

Source: Texas Education Agency

11TH GRADE SCIENCE: Percentage of Harris County Students who met Panel Recommendation on 11th Grade science TAKS

Year	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Indicator	53%	64%	70%	74%	76%	81%	86%	92%

Source: Texas Education Agency

- U.S. students score significantly lower than their peers in Asian and European countries in mathematics and science.
- In Harris County, 93% of fifth grade and 88% of eighth grade students performed at the 'Panel Recommendation' benchmark on the math section of the TAKS in 2010, compared with 92% of fifth graders and 87% of eighth graders statewide.

Considering the demands of the global economy of the 21st century, the importance of exceptional math and science education in primary and secondary grades cannot be understated. The Trends in International Mathematics and Science Study (TIMSS) has measured the math and science knowledge and skills of fourth and eighth graders around the world since 1995. According to the most recent administration of this study in 2007, U.S. fourth-graders were significantly outperformed by eight European and Asian nations in mathematics and four Asian nations in science. By eighth grade, U.S. students scored significantly lower than their peers in five Asian nations in mathematics and nine Asian and European nations in science. Nations that consistently outperformed U.S. students in math and science include Singapore, Chinese Taipei, and Japan.[239]

Debakey High School for Health Professionals was identified as the top high school for math and science in the Greater Houston Area.

In Texas, performance in mathematics and science in public schools is primarily measured for accountability purposes through the Texas Assessment of Knowledge and Skills (TAKS). This examination is administered in grades three through eleven in Mathematics and in grades five, eight, ten, and eleven in Science. In third through eighth grades, Texas students' mathematics skills were tested in the following areas in 2010: numbers, operations, and quantitative reasoning; patterns, relationships, and algebraic reasoning; geometry and spatial reasoning; concepts and use of measurement; probability and statistics; and mathematical processes and tools.[240]

In Harris County, 93% of fifth grade and 88% of eighth grade student performed at the 'Panel Recommendation' benchmark on the math section of the TAKS in 2010, compared with 92% of fifth graders and 87% of eighth graders statewide. In secondary grades (nine through eleven), the following objectives were covered in the mathematics section of the 2010 TAKS: functional relationships; properties and attributes of functions; linear functions; linear equations and inequalities; quadratic and other nonlinear functions; geometric relationships and spatial reasoning; two- and three-dimensional representations; measurement and similarity; percents, proportions, probability, and/or statistics; and, mathematical processes and tools.[241] For the exit-level TAKS examination (Grade 11), 89% of Texas students met the panel recommendation in Mathematics (the lowest passing rate for any subject area) as well as 89% of Harris County eleventh-graders. Harris County students' performance on the Mathematics section of the TAKS has increased over time as passage rates were in the 50-60% range in the 2002-2003 school year and now hover around 90%.

In fifth grade, science subjects covered on the Texas Assessment of Knowledge and Skills include nature of science, life sciences, physical sciences, and earth sciences.[242] In 2010, 88% of Harris County fifth grade students and fifth graders statewide met panel recommendation. In eighth grade, students are tested on the following items: nature of science; living systems and the environment; structures and properties of matter; motion, forces, and energy; and earth and space systems.[243] In 2010, 78% of Texas eighth-graders met the panel recommendation standard in TAKS Science, compared to 79% of Harris County eighth grade students. For the exit-level science exam, eleventh-graders in Texas are tested on their knowledge and skills in the following areas of scientific inquiry: nature of science; organization of living systems, interdependence of organisms and the environment; structures and properties of matter; and, motion, forces, and

TOP 10 HIGH SCHOOLS FOR MATH & SCIENCE IN THE GREATER HOUSTON AREA, 2010

Houston Rank	Campus	District
1	Debakey High School For Health Professions	Houston ISD
2	Clements High School	Fort Bend ISD
3	Carnegie Vanguard High School	Houston ISD
4	Kerr High School	Alief ISD
5	Cinco Ranch High School	Katy ISD
6	Memorial High School	Spring Branch ISD
7	Taylor High School	Katy ISD
8	Stephen F Austin High School	Fort Bend ISD
9	Bellaire High School	Houston ISD
10	Dulles High School	Fort Bend ISD

Note: This list represents the top area high schools in math and science. This ranking examined math and science specific college readiness indicators, including advanced course offerings, AP math/science participation and success rates, and performance on the math and science sections of college entrance exams.

Math and Science (cont.)

energy.[244] Ninety-one percent of eleventh grade students statewide 'Met Standard' on the exit-level science portion of the TAKS as compared to 92% of Harris County eleventh graders.

For the first time, CHILDREN AT RISK produced a list of the "Top 10 High Schools in Math and Science" for the Greater Houston Area in 2010 as part of its annual "School Rankings." To gauge excellence in secondary math and science education, CHILDREN AT RISK developed a weighted index comprised of thirteen measures: 'Commended Performance' rate on the exit-level TAKS Mathematics; 'Commended Performance' rate on the exit-level TAKS Science; advanced course offerings in mathematics and science; percentage of students (grades 11-12) taking an AP examination in a math subject; passing rate of AP mathematics test-takers; percentage of students (grades 11-12) taking an AP examination in a science subject; passing rate of AP science test-takers; graduation rate; percentage of graduates taking the SAT or ACT college entrance examination; mean score on the Mathematics section of the SAT; mean score on the Mathematics section of the ACT; mean score on the Science section of the ACT; and the percentage of students who are economically disadvantaged. All data used in this analysis was reported by the Texas Education Agency, and campuses with missing data were excluded. Based on these measures, the 'Top 10' area high schools in math and science were identified as follows: (1) Debakey High School For Health Professions, Houston ISD; (2) Clements High School, Fort Bend ISD; (3) Carnegie Vanguard High School, Houston ISD; (4) Kerr High School, Alief ISD; (5) Cinco Ranch High School, Katy ISD; (6) Memorial High School, Spring Branch ISD; (7) Taylor High School, Katy ISD; (8) Stephen F Austin High School, Fort Bend ISD; (9) Bellaire High School, Houston ISD; and, (10) Dulles High School, Fort Bend ISD.

Curriculum for math and science needs to be expanded to include hands-on experiential learning techniques and more time on task.

Policy Implication

Trends in Harris County show that the percentages of students who are meeting panel recommendation on TAKS are increasing, but the standards need to be reexamined to ensure that students are truly learning the necessary knowledge and skills in math and science. Although students are performing well on standardized tests, curriculum for math and science needs to be expanded to include hands-on experiential learning techniques and more time on task. In addition, the global economy demands students with exceptional abilities in math and science. Young students who have a strong foundation in math and science have numerous opportunities in both higher levels of education as well as the job market, as long as these subjects are being adequately taught and tested at the secondary school level.

Agenda for Change

EARLY CHILDHOOD EDUCATION

- Increase payment made under the child care subsidy program to the market rate so that child care facilities are better equipped to have appropriate child-to-staff ratios, qualified staff, and necessary equipment.
- Implement universal pre-kindergarten to provide equality of access to parents that do not meet income guidelines or are unable to pay the costs of private child care. Increase access to full day programs to allow parents to continue to work during the day and provide financial flexibility for their family.
- Continue to push for federal support of the Head Start program so that parents with children living at or near the poverty line can have access to child care. Increase salaries of Head Start and pre-kindergarten teachers to be comparable with the pay levels of other teachers.

DROPOUT PREVENTION

- Continue to support the state and school districts as they develop early warning systems to identify students who are at risk of dropping out of school.
- Support evidence-based strategies for improving the graduation rates of disadvantaged students to improve the academic progress of the rising number of students at risk of dropping out of school.
- Encourage the Texas Education Agency to reexamine its graduation rate calculation in Texas and the method in which it removes "leavers" from the cohort. By removing students from the cohort without adequate documentation, graduation rates for school districts are improperly increased.

EXPANDED LEARNING TIME

- Extend learning time (i.e. longer day or longer year) for Houston's students to foster higher achievement in five key ways: increasing time on task, broadening and deepening coverage of curriculum, providing more opportunities for experiential learning, strengthening ability to work with diverse ability levels simultaneously, and deepening adult-child relationships.
- Ensure funding for extended learning opportunities, especially for low-income and at-risk students, to lessen the summer learning loss, provide enrichment opportunities, and increase student achievement.

TEACHER PREPARATION

- Provide incentives to exceptional teachers to work in high needs schools and/or subjects, such as those in high poverty neighborhoods, bilingual classrooms, and science and mathematics courses.
- Mandate behavior management training for teachers to help decrease disciplinary problems in the classroom, and encourage school districts to limit the number of discretionary referrals to Alternative Education Programs (AEPs). In Greater Houston, 68% of the 20,982 removals to alternative disciplinary sites were discretionary.

COLLEGE READINESS

- Continue to provide an array of opportunities and encouragement for students to pursue college-level course Placement examinations and Dual Credit programs.
- Encourage all students to prepare for college admissions, including taking college entrance examinations, completing college-level coursework, visiting college campuses, and completing college admittance and financial aid applications.
- Measure and monitor 'college-ready' benchmarks, rather than minimum standards, on student evaluations and assessments, including the Texas Assessment of Knowledge and Skills (TAKS).

SUPPORT OF EDUCATIONAL PROGRAMS

- Continue supporting the development of Career and Technical Education programs that align with college and career expectations of the 21st century workforce.
- Monitor the enrollment of economically disadvantaged and minority youth in educational programs, such as Gifted and Talented and Career and Technical Education, to ensure that they are equally represented and have full access to the benefits of these programs.
- Encourage the implementation of dual language bilingual programs to support the academic growth of Limited English Proficient students across core subject areas.