## 2004 Gap Analysis Update

# North Texas P-16 Council

Region 10 Education Service Center Region 11 Education Service Center Brookhaven College Collin County Community College District Dallas County Community College District Mountain View College Tarrant County College District Cedar Hill ISD Dallas ISD DeSoto ISD Duncanville ISD Fort Worth ISD Irving ISD Lancaster ISD Richardson ISD Southern Methodist University Texas A&M University-Commerce Texas Christian University Texas Woman's University University of North Texas University of Texas at Arlington University of Texas at Dallas

### Community Representatives:

Fort Worth Chamber of Commerce Greater Dallas Chamber LULAC National Educational Service Centers Project Literacy North Texas Community College Consortium

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### **2004 Gap Analysis Update**

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### GAP ANALYSIS UPDATE

The Gap Analysis Report released by the North Texas P-16 Council in May 2003 presented an overview of gaps in the achievement of students in the Dallas Fort Worth region. One year later, the Gap Analysis Task Group was charged with updating this report. Major changes in the environment during the intervening year include replacement of TAAS by the TAKS and greater implementation of the accountability and teacher quality provisions of the *No Child Left Behind Act* (NCLB).

Changes in the Texas assessments, including elimination of state end-of-course tests for high school students, as well as introduction of the TAKS, make it impossible to compare statistics addressing any achievement progress from 2001-2002 to 2002-2003. Instead, we provide TAKS data that may serve as a baseline for later examination. The baseline data provided here include 3<sup>rd</sup>, 5<sup>th</sup>, 8<sup>th</sup>, and 11<sup>th</sup> grade test results, as opposed to the 10<sup>th</sup> grade data presented last year for TAAS. The test results reported reflect the addition of science and social studies assessments at certain grade levels. After the TAKS has been in place for at least three years, we should be able to provide a longitudinal view of student performance with this new measure. We do, however, continue to provide progress data on student participation in the recommended curriculum, advanced courses, and AP/IB and SAT/ACT tests.

Lack of updated data has limited our ability to assess progress in closing the gaps in postsecondary education. For example, TASP has been replaced by the THEA program for assessing basic skills. Although THEA is similar to TASP, no results have been reported. At the recommendation of the P-16 Council, and with the help of the Texas Higher Education Coordinating Board (THECB), we have added data about the incidence of dual credit enrollment in the region.

This year's report includes new information on teacher supply and demand. The focus is on teacher supply in the content fields assessed by the TAKS and in bilingual/ESL, as a field relevant to gaps in K-12 student achievement. NCLB provisions influence the teacher quality data reported here through replacement by the State Board for Educator Certification of disciplinary teacher certification in science and social studies with broad-field certification. This change was intended to increase the number of highly qualified teachers, as defined in NCLB.

#### FOCUS ON THE SENIOR YEAR

For the May 2003 report, the Task Group decided to focus on the senior year in high school with a particular emphasis on the tested areas of mathematics and English language arts. The decision to focus on the senior year led to collection of K-12 data for 10<sup>th</sup> graders, the last year of high school in which TAAS data were collected. With this same purpose in mind, this year we have collected data on 11<sup>th</sup> graders. However, with the addition of science and social studies and of 3<sup>rd</sup>, 5<sup>th</sup>, and 8th grade data, the focus has changed slightly. The perspective of this update will be an analysis of 11<sup>th</sup> grade data followed by an analysis of the lower grades in an attempt to ascertain the origins of the gaps evident in high school.

### DEMOGRAPHIC FRAMEWORK FOR THIS REPORT

To provide a frame for this update, we are reporting demographic data that show the ethnic distribution of the major population groups of Collin, Dallas, Denton, and Tarrant Counties as reported in the 2000 Census (Table 1). Percentages do not equal 100 because of overlap among groups.

	% White	% African American	% Hispanic	% Asian/ Pacific Isl.	% American Indian	% Econ. Disadv.
Collin	81.5	4.8	10.3	6.9	0.5	4.9
Dallas	58.4	20.3	29.9	4.1	0.6	13.4
Denton	81.7	5.9	12.2	4.1	0.6	6.6
Tarrant	71.2	12.8	19.7	3.8	0.6	10.6

Table 1. Percentage Population Distribution by Ethnicity for Selected North Texa	S
Counties	

Source: Census data, 2000; <u>http://quickfacts.census.gov/qfd/states/48/48113.html</u>

Table 2 shows the ethnicity and extent of poverty of the K-12 students enrolled in public schools of Regions 10 and 11. These Educational Service Regions actually comprise larger territories than the counties of interest, but the demographics of these urban counties do dominate their regions. Comparison of the distributions in Tables 1 and 2 shows that the percentage of white students attending school in Region 10 remains lower than the percentage of white people living in Dallas or Collin Counties. The same remains true for Region 11 as compared to Tarrant and Denton Counties. More African American and Hispanic students than white students attend public schools, and they comprise a majority of the school population of Region 10.

Table 2. Percentage of Students Enrolled by	v Ethnicity in Regions 10 and 11, 2003
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	% White	% African American	% Hispanic	% Asian/ Pacific Isl.	% American Indian	% Econ. Disadv.
Region 10	42.2	21.0	31.8	4.4	0.5	45.4
Region 11	59.9	13.2	22.9	3.6	0.5	36.0

Source: 2002-2003, Academic Excellence Indicator System Report

### **OVERVIEW OF THE K-12 GAPS IDENTIFIED**

### **TAKS Indicators**

The TAKS reading and mathematics tests administered in grade 3; reading, mathematics, and science tests administered in grade 5; reading, mathematics, and social studies tests administered in grade 8; and English language arts, mathematics, science, and social studies tests administered in grade 11 comprise the TAKS indicators for Texas students. Examining overall and disaggregated 11<sup>th</sup> grade TAKS scores for Region 10 and 11 students, and a composite of both

regions (Tables 3, 4 & 5), we observed mean scores significantly<sup>1</sup> lower than those of white students in English language arts, mathematics, science, and social studies for both African American and Hispanic students.

% Passing TAKS 2003	% State	% Region	% African American	% Hispanic	% White	% Native American	% Asian/ Pac. Isl.	% Male	% Female	% Econ. Disadv.
Eng Lang Arts	69.8	74.1	63.5	66.3	79.5	70.2	85.0	67.1	80.5	62.9
Math	68.5	71.4	55.3	59.4	80.5	70.0	89.5	71.4	71.4	57.1
Science	67.9	71.5	56.5	58.0	80.9	70.6	88.1	71.2	71.8	55.8
Soc. Studies	90.2	92.1	89.1	86.7	95.3	95.5	94.2	91.2	93.0	86.2
All Tests	49.8	54.5	37.0	40.0	65.1	50.3	74.7	50.7	58.0	36.9

 Table 3. Region 10 Report of TAKS Indicators, Grade 11, 2003

Source: 2002-2003 Academic Excellence Indicator System Report

% Passing TAKS 2003	% State	% Region	% African American	% Hispanic	% White	% Native American	% Asian/ Pac. Isl.	% Male	% Female	% Econ. Disadv.
Eng Lang Arts	69.8	67.9	55.2	57.6	71.2	72.6	76.3	58.5	77.0	54.6
Math	68.5	69.8	50.9	56.9	75.0	81.9	82.3	68.9	70.7	54.1
Science	67.9	68.9	52.1	53.0	74.4	75.3	80.5	67.5	70.4	52.5
Soc. Studies	90.2	90.4	86.6	83.4	92.3	95.2	93.6	88.8	91.9	83.4
All Tests	49.8	50.0	31.6	35.9	55.5	59.8	63.0	44.5	55.4	32.7

Table 4. Region 11 Report of TAKS Indicators, Grade 11, 2003

Source: 2002-2003 Academic Excellence Indicator System Report

<sup>&</sup>lt;sup>1</sup> All reports of significant differences are at the 0.05 level and based on t-tests of independent samples.

% Passing TAKS 2003	% State	% All Students (Regions 10 & 11)	% African American	% Hispanic	% White	% Native American	% Asian/ Pac. Isl.	% Male	% Female
Eng Lang Arts	69.8	71.4	60.9	63.3	75.4	70.9	81.6	62.0	79.0
Math	68.5	70.7	53.8	58.5	77.8	74.5	86.7	703.	71.1
Science	67.9	70.4	55.1	56.3	77.7	72.2	85.2	69.6	71.2
Soc. Studies	90.2	91.3	88.3	85.5	93.8	94.9	93.9	90.1	92.5
All Tests	49.8	52.6	35.3	38.6	60.4	53.8	70.2	48.0	56.9

Table 5. Composite Percentages for TAKS Indicators in Regions 10 & 11, Grade 11, 2003

Source: 2002-2003 Academic Excellence Indicator System Report; Texas Education Agency Student Enrollment Reports for Region 10 and Region 11, 3/2/2004.

Note: We do not have a raw number for economically disadvantaged students by grade level to compute a composite percentage.

This pattern of lower achievement for African American and Hispanic students did not appear for the first time in 11<sup>th</sup> grade. In reviewing 3<sup>rd</sup>, 5<sup>th</sup> and 8<sup>th</sup> grade scores (Tables 6-12), we observed similar patterns. In 3<sup>rd</sup> grade, African American and Hispanic students in both regions scored significantly lower than white students in both reading and mathematics.

Table 6. Region 10 Report of TAKS Indicators, Grade 3\*, 2003

% Passing TAKS 2003	% State	% Region	% African American	% Hispanic	% White	% Native American	% Asian/ Pac. Isl.	% Male	% Female	% Econ. Disadv.
Reading	89.6	88.1	80.9	80.9	96.0	93.8	95.1	86.6	89.6	79.7
Math	90.8	90.2	82.2	85.7	96.6	95.0	96.5	90.7	89.6	84.1

Source: 2002-2003 Academic Excellence Indicator System Report

\*Does not include scores of Hispanic students taking the Spanish version of the test.

### Table 7. Region 11 Report of TAKS Indicators, Grade 3\*, 2003

% Passing TAKS 2003	% State	% Region	% African American	% Hispanic	% White	% Native American	% Asian/ Pac. Isl.	% Male	% Female	% Econ. Disadv.
Reading	89.6	91.8	84.5	84.8	95.9	94.7	92.8	90.9	92.7	84.1
Math	90.8	91.4	79.8	85.7	95.7	96.9	95.3	91.6	91.1	94.4

Source: 2002-2003 Academic Excellence Indicator System Report

\*Does not include scores of Hispanic students taking the Spanish version of the test

In 5<sup>th</sup> grade, African American students scored significantly lower than white students in reading, mathematics and science. Hispanic students scored only slightly better. Also of note is the fact that reading and writing scores took a sizeable drop from 3<sup>rd</sup> to 5<sup>th</sup> grade.

% Passing TAKS 2003	% State	% Region	% African American	% Hispanic	% White	% Native American	% Asian/ Pac. Isl.	% Male	% Female	% Econ. Disadv.
Reading	80.0	78.9	67.3	70.0	89.5	84.1	91.6	76.3	81.5	67.7
Math	86.3	84.8	73.4	79.5	92.8	84.9	96.6	85.0	84.6	76.7
Science	74.5	73.8	59.5	62.2	87.4	76.3	89.9	75.5	72.2	60.5

 Table 8. Region 10 Report of TAKS Indicators, Grade 5\*, 2003

Source: 2002-2003 Academic Excellence Indicator System Report

\*Does not include scores of Hispanic students taking the Spanish version of the test

### Table 9. Region 11 Report of TAKS Indicators, Grade 5\*, 2003

% Passing TAKS 2003	% State	% Region	% African American	% Hispanic	% White	% Native American	% Asian/ Pac. Isl.	% Male	% Female	% Econ. Disadv.
Reading	80.0	83.1	70.4	73.1	89.1	83.4	88.2	81.2	84.9	71.1
Math	86.3	88.2	76.7	81.1	92.8	93.8	93.9	88.5	87.9	80.0
Science	74.5	79.5	64.5	66.2	87.2	81.2	86.0	81.6	77.4	65.3

Source: 2002-2003 Academic Excellence Indicator System Report

\*Does not include scores of Hispanic students taking the Spanish version of the test

By 8<sup>th</sup> grade, the mathematics scores of African American and Hispanic students have taken a dramatic dip in both regions, while reading scores for both groups have improved. A new subject area, social studies, shows a more narrow gap but significant, for African Americans and Hispanics, when compared to white students.

Table 10. Region 10 Report of TAKS Indicators, Grade 8, 2003

% Passing TAKS 2003	% State	% Region	% African American	% Hispanic	% White	% Native American	% Asian/ Pac. Isl.	% Male	% Female	% Econ. Disadv.
Reading	88.7	88.6	81.5	81.5	95.5	89.0	95.2	87.0	90.1	80.4
Math	73.2	74.3	58.0	62.8	87.0	76.0	91.8	74.3	74.4	60.9
Soc.	93.1	93.6	91.3	88.2	97.3	98.3	98.2	92.6	94.5	88.9
Studies										

Source: 2002-2003 Academic Excellence Indicator System Report

% Passing TAKS 2003	% State	% Region	% African American	% Hispanic	% White	% Native American	% Asian/ Pac. Isl.	% Male	% Female	% Econ. Disadv.
Reading	88.7	89.9	81.6	81.7	93.9	84.3	95.3	88.7	91.1	81.1
Math	73.2	76.3	57.4	62.8	83.9	69.1	87.6	77.2	75.5	60.5
Soc.	93.1	94.2	90.4	<b>88.7</b>	<b>96.7</b>	89.6	97.0	93.6	94.8	88.9
Studies										

Table 11. Region 11 Report of TAKS Indicators, Grade 8, 2003

### Table 12. Composite Percentages for TAKS Indicators in Regions 10 & 11, Grade 8, 2003

% Passing TAKS 2003	% State	% All Students (Regions 10 & 11)	% African American	% Hispanic	% White	% Native American	% Asian/ Pac. Isl.	% Male	% Female
Reading	88.7	89.1	81.5	81.5	94.7	86.7	95.1	87.7	90.5
Math	73.2	75.1	57.8	62.7	85.4	72.9	90.1	75.5	74.8
Soc. Studies	93.1	93.8	91.0	88.3	96.9	94.4	97.6	93.0	94.6

Source: 2002-2003 Academic Excellence Indicator System Report; Texas Education Agency Student Enrollment Reports for Region 10 and Region 11, 3/2/2004.

Note: We do not have a raw number for economically disadvantaged students by grade level to compute a composite percentage.

### <u>Student Participation in the Recommended Curriculum, Advanced Courses, and AP/IB</u> and SAT/ACT Tests

The North Texas P-16 Council continues to track high school student completion of the Recommended High School Curriculum. New data show, by school district, the percentages of graduates who completed the recommended curriculum and advanced placement courses and the demographic characteristics of each graduating class. They show a significant improvement in the participation rate in the recommended curriculum and a slight improvement in the percentage enrolled in advanced courses (Table 13).

### Table 13. Percentage of 2001 and 2002 Graduates Completing Recommended High School Curriculum and Advanced Placement Courses by Region

Decion	% <i>Rec</i> .	% <i>Rec</i> .	% Adv Courses	% Adv Courses
Region	Program 2001	Program 2002	2001	2002
Region 10	51.3	59.4	19.9	20.5
Region 11	57.9	62.7	18.1	19.3

Source: 2002-2003 Academic Excellence Indicator System Report

Tables 14a and 14b further illustrate improvements over a one-year period in the percentages of students enrolled in the recommended curriculum by school district. It is important to note, however, that although the percentage increased in most school districts, there was a significant decrease in Richardson ISD, which offers students three options, one of which exceeds the requirements of the recommended curriculum.

Because of concerns with gap issues, it is interesting to note that five districts (Cedar Hill, Dallas, Desoto, Fort Worth and Lancaster) with majority African American and Hispanic student populations also have a majority of graduates completing the Recommended High School Curriculum. Cedar Hill tops the list with 83.5% of the graduating class of 2003 completing the recommended program. Information about completion of the recommended curriculum by sub-groups of students shows gaps, however, in the extent to which African America and Hispanic students completed the recommended curriculum, compared to white students.

District	% Rec. Program	% Adv. Courses*	% African American	% Hispanic	% White	% Asian/ Pac. Isl.	% Native American	% Econ.* Disadv.	% LEP*
Cedar Hill ISD	70.2	26.3	47.6	15.8	34.1	2.0	0.5	24.3	2.8
Dallas ISD	43.0	19.3	34.3	56.8	7.2	1.3	0.4	76.1	33.2
Desoto ISD	62.0	18.0	61.8	11.2	25.6	1.2	0.2	37.3	2.9
Duncanville ISD	36.4	20.1	44.2	24.5	28.4	2.5	0.3	40.2	8.3
Irving ISD	58.9	19.0	13.3	52.0	29.0	5.3	0.5	61.4	32.6
Lancaster ISD	32.1	16.4	70.6	14.7	14.0	0.4	0.2	44.8	5.6
Richardson ISD	64.6	21.6	23.5	22.5	44.7	9.0	0.3	38.4	18.2
Ft. Worth ISD	51.4	13.9	29.7	48.1	20.0	1.9	0.2	60.1	25.7

Table 14a. High School Graduating Class of 2002 Characteristics

Source: 2001-2002 Academic Excellence Indicator System Report

\* Statistics of this column represent district not graduating class, data

District	% Rec. Program	% Adv. Courses*	% African American	% Hispanic	% White	% Asian/ Pac. Isl.	% Native American	% Econ. Disadv.*	% LEP*
Cedar Hill ISD	83.5	25.6	51.7	16.2	29.8	1.9	0.5	26.1	3.8
Dallas ISD	65.8	19.2	42.3	44.0	10.9	2.4	0.4	77.6	32.1
Desoto ISD	71.8	19.4	53.1	7.0	38.6	.8	0.5	33.9	3.6
Duncanville ISD	52.1	19.2	39.3	16.1	42.1	2.3	0.1	45.5	9.7
Irving ISD	57.8	22.2	15.4	32.3	44.4	7.6	0.2	59.3	33.3
Lancaster ISD	58.7	17.6	67.1	8.7	23.4	.8	0.0	51.4	5.9
Richardson ISD	37.9	23.0	14.6	7.5	66.8	10.7	0.4	39.4	18.5
Ft. Worth ISD	55.3	13.9	32.7	35.5	28.2	3.5	0.1	64.3	25.6

Table 14b. High School Graduating Class of 2003 Characteristics

\* Statistics in this column represent district not graduating class, data.

The same pattern of increase can be seen in other Non-TAKS Indicators. Although the percentages of African American and Hispanic students in our region enrolled in advanced courses, testing in AP/IB courses, and scoring at acceptable levels on national college entrance exams is still lower than the state or regional averages, these percentages have increased over the past year (Tables 15, 16 & 17). As in the original report, it should be noted that the percentages of African American students tested in AP/IB courses remain almost 5 points lower than those taking advanced courses, and these percentages remain more than 10 points lower than for white students. Also, there remains a huge gap, when compared to white students, in the percentage of African Americans (over 30 percentage points) and Hispanic students (over 20 percentage points) in both Regions 10 and 11 who scored at or above the criterion on the SAT/ACT exams (Tables 18 & 19).

### Table 15. Region 10 Report for Non-TAKS Indicators—Advanced High School Courses,2002

Indicator (2002-03)	% State	% Region	% African American	% Hispanic	% White	% Native American	% Asian/ Pac. Isl.	% Male	% Female	% Econ. Disadv.
% Adv. <sup>2</sup> Courses	19.4	20.5	14.9	13.0	25.0	17.4	40.6	18.2	22.8	12.9
AP/IB <sup>3</sup> Results % Tested	15.0	19.5	9.8	11.6	24.3	13.6	39.9	17.1	21.7	n/a

Source: 2002-2003 Academic Excellence Indicator System Report

Note: Percentages are relative to the number of students in the graduating class of 2002 for Region 10.

Indicator (2002-03)	% State	% Region	% African American	% Hispanic	% White	% Native American	% Asian/ Pac. Isl.	% Male	% Female	% Econ. Disadv.
% Adv. <sup>2</sup> Courses	19.4	19.3	10.1	11.4	22.5	14.8	33.5	17.7	21.0	9.6
AP/IB <sup>3</sup> Results % Tested	15.0	16.3	6.2	10.3	18.6	7.1	28.2	14.8	17.6	n/a

 Table 16. Region 11 Report for Non-TAKS Indicators—Advanced High School Courses,

 2002

Note: Percentages are relative to the number of students in the graduating class of 2002 for Region 11.

### Table 17. Composite Percentages for Non-TAKS Indicators in Region 10 & 11 – Advanced High School Courses, 2002

Indicator (2002-03)	% State	% Region	% African American	% Hispanic	% White	% Native American	% Asian/ Pac. Isl.	% Male	% Female	% Econ. Disadv.
% Adv. <sup>2</sup> Courses	19.4	19.7	12.8	12.3	23.9	16.3	37.6	17.9	22.0	11.5
AP/IB <sup>3</sup> Results % Tested	15.0	18.1	8.2	11.0	21.9	10.8	34.9	16.1	19.9	n/a

Source: 2002-2003 Academic Excellence Indicator System Report

Note: Percentages are relative to the number of students in the graduating class of 2002 for Regions 10 & 11.

Table 18. Region 10 Rep	ort for Non-TAKS Indicators –	SAT/ACT Results, 2002

$SAT/ACT Results^4$	State	Region 10	African American	Hispanic	White	Native American	Asian/ Pac. Isl.	Male	Female
% of Students Tested	61.9	61.0	57.9	29.1	66.7	66.4	79.8	59.7	62.0
% of Students scoring at/above Criterion <sup>5</sup>	26.6	32.3	6.5	15.0	41.9	32.5	48.6	35.3	29.8

Source: 2002-2003 Academic Excellence Indicator System Report

Note: Percentages are relative to the number of students in the graduating class of 2002 for Regions 10 & 11.

$\frac{SAT/ACT}{Results^4}$	State	Region 11	African American	Hispanic	White	Native American	Asian/ Pac. Isl.	Male	Female
% of Students Tested	61.9	63.2	58.6	36.8	64.8	91.2	80.9	61.8	64.3
% of Students scoring at/above Criterion <sup>5</sup>	26.6	31.9	6.3	17.1	36.7	17.7	40.6	35.0	29.2

Table 19. Region 11 Report for Non-TAKS Indicators - SAT/ACT Results, 2002

Note: Percentages are relative to the number of students in the graduating class of 2002 for Regions 10 & 11.

*Notes:* <sup>2</sup> *Advanced Courses* indicator is based on a count of students who complete and receive credit for at least one advanced course in grades 9-12. The definition of advanced courses includes dual enrollment courses.

<sup>3</sup> AP/IB Results: This indicator refers to the results of the College Board Advanced Placement examinations and the International Baccalaureate (IB) examinations taken by Texas Public school students in a given school year. Three values are calculated for this indicator: (1) the percent of students in grades 11 and 12 taking at least one AP or IB examination, (2) the percent of scores at or above the criterion score (3 on AP or 4 on IB) number of grade 11 and 12 AP & IB examination scores, (3) the percent of examinees with at least one AP or IB score above the criterion score: number of grade 11 and 12 AP or IB examinees who scored at or above criterion *divided by* number of grade 11 and 12 AP or IB examinees.

<sup>4</sup> SAT/ACT Results: These include the College Board's SAT and ACT, Inc.'s ACT Assessment. Both testing companies annually provide the agency with testing information on the most recent test participation and performance of graduating seniors from all Texas public schools. Only one record is sent per student. If a student takes an ACT or SAT test more than once, the agency receives the record for the most recent examination taken.

<sup>5</sup> Criterion Score: For college admissions tests, the criterion scores are at least 24 on the ACT (composite) and at least 1110 on the SAT (total). For AP and IB tests, the criterion scores are at least 3 on AP tests, and at least 4 on IB tests. See also SAT/ACT Results and AP/IB Results.

Retrieved from: http://www.tea.state.tx.us/perfreport/aeis/2003/glossary.html

### Students Passing the End of Course Examination in English II and Algebra I

We have no new data for this entry.

### Summary of K-12 Findings

The major gaps identified K-12 are: (1) African American and Hispanic students scoring lower than white students on all TAKS indicators; (2) significantly lower mathematics scores for African American students; and (3) a lower percentages of African American and Hispanic students enrolled in advanced courses, testing in advanced placement courses, and achieving acceptable scores on national college entrance exams. Overall, gaps remain in all areas of TAKS Indicators. Although there has been slight progress in terms of the non-TAKS Indicators, African American and Hispanic students remain behind white students in all areas noted. We will be in a better position to gauge the effects of longer-term achievement efforts after a three-year period of observation.

### GAP ANALYSIS IN POSTSECONDARY EDUCATION

### **Student Participation in Dual Credit Courses**

Offering dual credit classes to students enrolled in high school is one way to facilitate the transition of students from high school to college. Although statistics about dual credit were not included in last year's Gap Analysis Report, except within the Non-TAAS Indicators, recent action of the Texas Legislature to facilitate dual credit suggests this as a statistic of interest.

Tables 20a and 20b show a decrease in the number of students in the four counties of interest enrolled in dual credit classes offered through public colleges and universities from 2002 to 2003. In spite of a general drop in dual credit enrollment, Collin County, El Centro, and North Central Texas College increased participation.

Institution	White	African American Hispani		Other	Total
Collin County	394	20	28	24	466
Brookhaven	18	22	24	18	92
Cedar Valley	229	216	62	25	532
El Centro	2	8	22	2	34
Mountain View	118	32	39	18	207
North Lake	296	47	85	57	487
Richland	85	3	2	11	101
Navarro College	56	1	4	0	61
North Central	293	4	17	2	316
Texas College					
UT- Arlington	30	0	2	9	41
UNT	16	2	0	2	20
<b>Total</b> <sup>6</sup>	1558	355	286	168	2367

 Table 20a. Fall 2002 Students Enrolled in Dual Credit Courses\* in Collin, Dallas, Denton and Tarrant Counties for Texas Community and State Colleges

Source: CBM001 Student Report, Texas Higher Education Coordinating Board

\* Courses in which the student receives both public high school and college credit and for which both the public high school and the college receive state funding (ADA and formula funding)

Institution	White	African American	Hispanic	Other	Total
Collin County	424	13	30	24	491
Brookhaven	11	6	9	5	31
Cedar Valley	149	142	26	25	342
El Centro	6	27	66	5	104
North Lake	54	6	15	9	84
Richland	66	3	0	3	72
Navarro College	63	2	2	1	68
North Central	337	4	15	5	361
Texas College					
UT- Arlington	22	3	2	6	33
UNT	10	1	3	3	17
<b>Total</b> <sup>6</sup>	1163	209	182	87	1641

 Table 20b. Fall 2003 Students Enrolled in Dual Credit Courses\* in Collin, Dallas, Denton and Tarrant Counties by Texas Community and State Colleges

Source: CBM001 Student Report, Texas Higher Education Coordinating Board

\* Courses in which the student receives both public high school and college credit and for which both the public high school and the college receive state funding (ADA and formula funding)

There were decreases in the percentages of African American (15% in 2002; 12.7% in 2003) and Hispanic students (12% in 2002; 11.1% in 2003) completing dual credit courses from 2002 to 2003. Both years show gaps in the percentages of African American and Hispanic students involved compared to their representation in the public school population.

### **Student Participation in Postsecondary Education**

We have no new data about student sub-group participation in postsecondary education.

### **Need for Remediation in Postsecondary Education**

We have no new data to report.

### **Postsecondary Graduation and Success Measures**

Table 21 shows 3-year persistence rates, including transfer to other postsecondary institutions, for community college students by ethnicity. The persistence rates for African American and Hispanic students are consistently below those of white students. Comparing local to state statistics suggests mixed success by council member institutions in fostering the persistence of students from under-represented groups.

<sup>&</sup>lt;sup>6</sup> Because statistics for postsecondary institutions enrolling fewer than 10 students were omitted, totals exceed the presented observations.

District	% Total	% African American	% Hispanic	% White	% Asian/ Pac. Isl.	% Native American	% Int'l
State CCs	52.0	44.0	47.0	56.0	59.0	44.0	37.0
Collin CCCD	50.0	39.0	49.0	51.0	62.0	56.0	43.0
Dallas CCCD	48.4	43.7	45.6	50.4	60.9	45.7	55.3
Tarrant CCCD	51.0	48.0	46.3	53.0	58.3	42.3	31.3

### Table 21. Community College Student 3-Year Persistence Rates by Ethnicity for the Incoming Fall 1999 Cohort through Fall 2002

Source: Texas Higher Education Coordinating Board, 2001-2002 College Profiles

Table 22 shows other student success measures available for North Texas public and private university students, including the percentages of first year students and economically disadvantaged first year students retained from Fall 2000 to Fall 2001, the percentages of credit hours of enrollment completed by first year students, and 6-year degree completion rates. These data convey gaps in first year retention for students who are economically disadvantaged. Comparison of these student success statistics with those of the previous year shows gains in all areas for TAMU-Commerce, and gains in one or more areas for some of the other universities.

#### Table 22. Student Success Measures for P-16 Council Universities

Member Universities	% Freshman Retention from Fall 2000 to Fall 2001	% of First-time Full-time Econ. Disadv. Students Retained	% of Semester Credit Hours Completed	% Completion Rates*
Statewide Public Universities	65.4	47.3	92.9	43.9
SMU	85.8	N/A	N/A	69.0
TAMU- Commerce	66.3	49.4	94.0	36.3
Texas Christian University	81.0	N/A	N/A	64.0
TWU	66.6	61.1	93.9	43.8
UNT	67.4	52.8	93.9	36.8
UT- Arlington	67.3	56.3	91.8	30.7
UT- Dallas	77.2	76.2	91.5	55.1

Source: Texas Higher Education Coordinating Board, 2001-2002, and independent institutions' research offices and websites \* Based on six year graduation and persistence rates

Dased on six year graduation and persistence rates

More detailed information about the 6-year completion rate of students at member universities over time appears in Table 23. Public university data distinguish between students who graduated from the university entered and from another public university. These data show that at all but the most selective of the public universities (UTD), fewer than half of the students who

enter graduate within six years. UT-Arlington shows steady improvement in graduation rates over the three-year period.

	Fall	1992 Cohort		Fall	1993 Cohort		Fall	1994 Cohort	
Univ. of Initial Enrollment	% Graduating This Institution	% Graduating Another University	Total %	% Graduating This Institution	% Graduating Another University	Total %	% Graduating This Institution	% Graduating Another University	Total %
TAMU- Commerce	35.5	6.8	42.3	33.0	5.4	38.4	38.7	7.7	46.4
TWU	36.3	7.5	43.8	36.9	12.0	48.9	39.0	9.5	48.5
UNT	35.5	12.3	47.8	38.3	11.4	49.7	36.0	10.7	46.7
UT- Arlington	19.1	8.4	27.5	27.6	6.7	34.3	30.5	7.0	37.5
UT-Dallas	46.7	10.0	56.7	52.9	6.5	59.4	50.5	9.4	59.9

Table 23. University Student 6-Year Completion Rate Trends for Public University P-16
Council Members

Source: Texas Higher Education Coordinating Board Statistical Reports: University Profiles, 2001

In summary, examination of college student success measures confirms that students who are Hispanic, African American and/or financially disadvantaged are less likely to persist in college. Intervention programs can positively affect student success. The P-16 Council is beginning to track dual credit enrollment, one of the student success programs supported by the Texas Legislature.

### GAPS IN THE TEACHER SUPPLY

### **Areas of Teacher Shortage**

Table 24 shows the numbers and percentages of emergency permits issued to teachers in the content fields where more than 1000 teachers are employed state-wide. In Texas, emergency permits are issued to teachers who may be certified, but not in the content field they are teaching. The number of emergency permits issued is an indicator of teacher shortage in a field. There are state-wide teacher shortages in some of the fields addressed by the TAKS, including biology and mathematics. The severe shortage of teachers for Bilingual/ESL is also of interest because of concerns about the performance of Hispanic students in the region.

SUBJECT	Number of Teachers	Number of Teachers on Permit	Percentage of Teachers on Permit
Bilingual/ESL	10,556	2,493	23.6%
Special Education	15,105	1,310	8.7%
Spanish	5,133	392	7.6%
Biology	4,680	318	6.8%
Theatre Arts	2,267	129	5.7%
Music	7,038	328	4.7%
Mathematics	20,997	879	4.2%
Art	4,015	164	4.1%

 Table 24. Number and Percentage of Texas Public School Teachers on Emergency Permits

 by Selected Subjects, 2002

SOURCE: Fuller, E. and Akin, B. 2002, SBEC; PEIMS, TEA, July 16, 2002

Table 25 indicates the extent to which the emergency permits issued were held by teachers in Regions 10 and 11 and in the P-16 Council member school districts in 2002-2003. These data indicate that approximately 25% the emergency certificates issued state-wide are in Regions 10 and 11. These, along with district statistics, reflect regional teacher shortages.

Permits by Type	State	Reg 10	Reg 11	Cedar Hill	Dallas	Desoto	Duncan- ville	Ft. Worth	Irving	Lancaster	Richard- son
Emergency (certified)	3106	433	425	10	131	0	9	216	36	0	7
Emergency (uncertified)	7553	1617	404	21	585	66	24	101	121	0	40
Non- renewable	2191	243	173	9	63	13	6	72	12	0	13
Temporary Classroom Assignment	1000	187	92	0	20	0	4	23	23	0	4
District Teaching	1086	53	83	0	18	0	0	57	13	0	0
Temporary Exemption	20	0	1	0	0	0	0	0	0	0	0
TOTAL	14956	2533	1178	40	817	79	43	469	205	0	64

Table 25. Number of Emergency Certificates Issued Through Member Districts, 2002-2003

Source: State Board for Educator Certification, 2/2004

Another indicator of teacher shortage is the extent to which teachers are teaching out of their fields of certification. Figures 1, 2, and 3 show the extent to which teachers with less than full certification are assigned to teach the initial high school courses in TAKS-tested subjects and in Spanish by the ethnicity of the student populations of their schools.

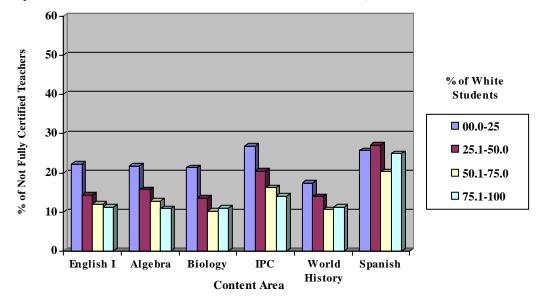
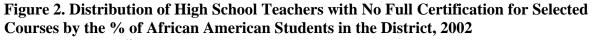
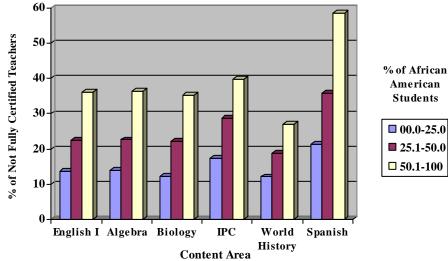


Figure 1. Distribution of High School Teachers with No Full Certification for Selected Courses by the % of White Students Enrolled in the District, 2002

Source: Dr. Ed Fuller, PEIMS, TEA, Co-Director of Research Teacher Certification Records, SBEC 2/27/03





Source: Dr. Ed Fuller, PEIMS, TEA, Co-Director of Research Teacher Certification Records, SBEC 2/27/03

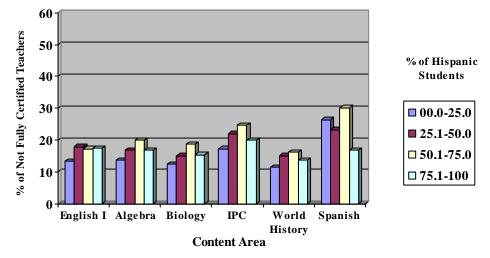


Figure 3. Distribution of High School Teachers with No Full Certification for Selected Courses by the % of Hispanic Students Enrolled in the District, 2002

Source: Dr. Ed Fuller, PEIMS, TEA, Co-Director of Research Teacher Certification Records, SBEC 2/27/03

Except in Spanish, fewer than 15% of teachers working in schools that serve 50% or more white students are not fully certified. By contrast, except in world history, more than 35% of the teachers in schools that serve 50% or more African American students are less than fully certified. For schools that serve more than 50% Hispanic students, the extent of full teacher certification falls between those for predominantly white and predominantly African American high schools.

Table 26 presents information about teacher certification in P-16 Council member school districts. The table shows the percentages of teachers certified in the content areas of the TAKS and in Bilingual/ESL who taught at the middle and high school levels last year. The percentages of educators certified in these fields are generally higher in high schools than middle schools. Member school districts regularly make teaching assignments to educators who are not certified in the content field they are teaching, with the lowest incidence in Fort Worth and Richardson ISDs in 2002-2003.

Grade Level	Subject Area	Cedar Hill	Dallas	DeSoto	Duncanville	Ft. Worth	Irving	Lancaster	Richardson
Middle School (Grades 6-8)	Bilingual / ESL	100.0	38.5	54.1	58.0	75.1	76.1	0.0	51.2
	English / Lang. Arts	69.9	61.1	37.0	60.6	59.8	73.5	43.8	64.2
	Mathematics	35.0	46.8	38.9	48.2	54.6	72.6	6.3	70.3
	Science	77.8	66.9	32.7	81.2	65.3	55.4	18.2	70.8
	Social Studies	28.9	72.7	67.7	43.0	61.5	68.8	37.5	56.0
High School (Grades 9-12)	Bilingual/ ESL	0.0	34.9	100.0	92.0	68.8	38.3	0.0	100.0
	English / Lang. Arts	79.4	71.6	64.7	74.5	67.2	86.4	49.2	86.5
	Mathematics	83.7	78.0	62.9	85.5	81.7	81.4	31.8	88.6
	Science	76.0	60.9	50.5	58.9	69.4	71.0	19.2	66.3
	Social Studies	66.7	67.2	70.6	77.7	66.7	73.7	67.2	81.3

 Table 26. Percentage of Certified Educators\* by Subject Area of Interest in Member

 Districts, 2002-2003

Source: http://www.sbec.state.tx.us/Reports/WhoisTeaching/frm\_whois\_main.asp \*FTE

In summary, teacher shortages in North Texas seem to be high for the state. At the high school, and even more at the middle school level, member districts regularly assign teachers to TAKS-related content fields in which they are not certified. There are gaps in the extent of teacher qualification for schools that serve students of color, and this is particularly true for African American students.

### **Teacher Preparation in Shortage Areas**

Table 27 shows trends in the numbers of teaching certificates issued in TAKS-tested content fields through regional teacher preparation entities in each of the last four years. In all fields except English/language arts, there were annual increases in the numbers of teachers prepared, with dramatic increases for Bilingual/ESL-Spanish. In science and social studies, however, these statistics do not include certificates issued through 2002 in specific disciplines such as physics,

chemistry, economics, government, etc. The move of the state toward broad-field certification has reduced the number of college graduates eligible for certification while having the potential to reduce the extent to which certificated individuals are assigned to teach outside their fields.

Subject	1999- 2000	2000- 2001	2001- 2002	2002- 2003	4 Year Total
Bilingual/ESL- Spanish	173	250	354	776	1,553
English/Language Arts	636	733	1,008	449	2,286
Mathematics	168	216	315	330	1,209
Science	108	164	292	338	902
Social Studies	48	70	178	203	499
All Certification Areas	3,416	4,268	5,753	5,333	11,086

Table 27. Educator Certificates Issued Through Teacher Preparation Entities in Regions10 and 11

Source: State Board for Educator Certification, 2/2004

Table 28 shows the contribution in 2003 of the individual teacher education entities to the pool of teachers in these content areas of interest. Of the five largest providers of teachers in the region, three (DISD, ECAP, and Region 10) offer Alternative Certification Programs (ACP) only. These providers account, in particular, for the increased numbers of Bilingual/ESL teachers prepared in the region. The work of alternative certification program providers does not address the need for new college majors in areas of high demand.

Certifying Entity	Bilingual/ ESL	English/ Language Arts	Mathematics	Science	Social Studies	Total Number of Certificates Issued through Entity
Arlington Baptist College	0	0	0	0	0	23
Brookhaven College	0	0	33	0	0	33
Collin County Comm. College	0	2	7	6	5	43
Dallas Baptist Univ.	0	18	3	2	2	33
Dallas ISD	220	44	28	27	0	692
Education Career Alt. Prog.	97	62	33	47	29	822
Fort Worth ISD	2	0	0	0	0	6
LeTourneau Univ.	0	43	17	16	18	210
Midwestern State Univ.	0	16	11	10	6	144
Paul Quinn College	0	6	6	1	2	22
Region 10 ESC	110	60	68	46	22	918
Region 11 ESC	10	22	13	27	8	269
Southern Methodist Univ.	2	3	2	1	4	40
Tarleton State Univ.	45	59	25	19	33	468
TAMU- Commerce	4	48	31	24	21	628
Texas Christian Univ.	6	29	4	4	14	206
Texas Wesleyan Univ.	30	13	6	8	7	147
Texas Woman's Univ.	40	41	12	10	11	360
Univ. of Dallas	0	5	1	3	4	26
Univ. of North Texas	0	79	8	31	37	567
UT-Arlington	15	54	26	22	21	368
UT-Dallas	0	54	28	43	37	259
Total	581	658	362	347	281	6284

Table 28. Initial Educator Certificates for Areas of Interest by Teacher Education Entity in2003

Source: State Board for Educator Certification, 2/2004

Note: 32.3% of all certificates issued were in critical shortage areas

Comparison of the regional demand statistics in Tables 25 and 26 with supply statistics in Table 28 suggests that through alternative certification, providers are addressing the teacher shortage. Their work with mid-career changers who are baccalaureate degree holders does not address the need for new college majors in high need areas over time.

### **Teacher Supply by Ethnicity**

Table 29 shows the ethnicity, white or minority, of the teachers prepared through P-16 Council member entities. Of these, DISD has been most successful in preparing large numbers of minority teachers. Programs in which the percentage of minority teachers prepared increased from 2002 to 2003 included DISD, ESC 11, TCU, TWU, UNT, UT-Arlington, and UT-Dallas.

Member Entities	Total No. of Certificates Issued	Certificates Issued, White	% of Certificates, White	Certificates Issued, Minority	% of Certificates, Minority
Brookhaven					
Collin CCCD	31	27	87.1	4	13.0
Dallas ISD	687	224	33.0	463	67.3
ESC 10	737	588	80.0	149	20.2
ESC 11	259	206	80.0	53	20.4
Fort Worth ISD	4	1	25.0	3	75.0
SMU	30	22	73.3	8	27.0
TAMU- Commerce	495	394	80.0	101	20.4
TCU	144	125	87.0	19	13.2
TWU	233	152	65.2	81	35.0
UNT	449	346	77.1	103	23.0
UT- Arlington	323	225	70.0	98	30.3
UT- Dallas	217	153	71.0	64	30.0
All Members	3609	2463	68.2	1146	32.0

Table 29. Teaching	Certificates	Issued in 2003	<b>Through Member</b>	• Preparation Programs

Source: State Board for Educator Certification, 2/2004

We examined the assignment of newly certified teachers by type of preparation and by the ethnicity of the student populations served. In 2002, schools that served 50% or more white students employed 45% of the state's new teachers. By comparison, schools that served 50% or more minority students employed 54% of the new teachers. Also, teachers certified through examination or through alternative programs tended to be concentrated in schools that serve 75% or more minority students. A consistent body of research demonstrates the positive relationship of teacher experience to student achievement. Although there do not appear to be consistent differences in quality between traditionally and alternatively prepared teachers, retention of alternative route teachers tends to be shorter, perpetuating a gap for African-American and Hispanic students in the experience and extent of preparation of teachers.

In summary, white candidates continue to be overrepresented among the teachers prepared in Regions 10 and 11 compared to the student populations served in these regions. Disproportionate numbers of new teachers are assigned to schools that serve large numbers of students of color.

### Summary of Postsecondary Findings

Data from the update continue to confirm gaps in the college persistence rates of African American, Hispanic, and economically disadvantaged students. The Council will continue to track data on dual credit as a transition from high school to college.

Because of the role of higher education in teacher education, regional patterns in teacher supply and demand were addressed. Shortages of teachers certified in TAKS-tested fields and in bilingual/ESL were documented in member school districts as reflected by emergency permits issued and by percentages of teachers teaching out of field. Shortages are especially prevalent in schools that serve a majority of students of color.

The number of new teachers prepared in the region in content areas of interest is generally on the rise, with much of the increased production due to alternative program providers. Their work does not address, however, the future need for candidates with college majors in the appropriate content areas.

In spite of the increased supply of teachers, few teacher education entities are preparing teachers of color in proportion to the student population of the region. Also of concern is the extent to which newly prepared teachers are concentrated in schools that serve large percentages of Hispanic and African American students.

### UPDATED RECOMMENDATIONS

Last year the North Texas P-16 Council made recommendations on the basis of its Gap Analysis Report. In the updated recommendations that follow, new recommendations are printed in italics. One recommendation pertaining to implementation of the Recommended High School Curriculum was removed.

- 1. The Council needs to continue to track the achievement of students in English language arts, mathematics, science, and social studies as we move into the TAKS era.
- 2. Practices of teachers whose students, including African American and Hispanic students, perform successfully on the TAKS are a good starting point for discussions of vertical alignment of content curriculum.
- 3. There is need to attend, along with focus on the TAKS, to successful completion of AP/IB exams, and SAT/ACT tests, *with particular attention to reasons that participation and success of student from certain sub-groups has tended to be low.*

- 4. The Council must seek implementation of strategies such as dual credit, advanced placement, and bridge programs that make high school more rigorous and that anticipate college entry for all students.
- 5. Model policy for dual credit, advanced placement, and bridge programs should be developed to maximize the impact of these programs on student learning and college entry and retention.
- 6. Every possible academic and community resource needs to be directed to improving college entry and retention for students from ethnic and income groups that are underrepresented in higher education.
- 7. There is need for focus on the role of counselors and student services personnel in closing the gaps with attention to how factors such as counselor preparation and certification, bilingualism, and experience support the academic success of students.
- 8. Resources of the National Writing Project and other cross-level staff development programs need to be focused on the achievement gaps noted in our region.
- 9. The Texas Higher Education Coordinating Board statistical indicators should be updated as regularly and consistently as are those of the Texas Education Agency.
- 10. The Council should continue to track the qualifications of teachers, including substitute teachers, in our region.
- 11. There is need to replicate best practices in remediation to assure student success in postsecondary education and alignment of remediation with the connected curricula.
- 12. Future educator clubs and secondary teaching academies should be implemented to seed pipeline programs for teachers, supporting candidates through community college, university content majors, and teacher preparation programs.
- 13. Recruitment and retention of mathematics and science teachers must be a priority for our region, with its high-tech industrial base.
- 14. There is urgent need to recruit and retain bilingual and ESL educators who can assure student learning and lead colleagues in implementing teaching and learning strategies that maximize the achievement of English language learners.
- 15. Programs are needed to ease the entry of bilingual para-educators and internationally certified teachers into teaching in our region.
- 16. *There is a need to study the extent to which regional teacher education programs prepare candidates for urban schools.*

- 17. The P-16 Council should continue to study articulation agreements that ease transitions of future teachers from the community college to university teacher education and support transfer of students who have completed the proposed Associate of Arts in Teaching degree.
- 18. Businesses in our region need to become involved in discussions of how candidates from groups currently underrepresented can be supported in higher education and how qualified graduates can be assured of employment.
- 19. Updates to the Gap Analysis Report should include member practices that are successful in closing the gaps.

The North Texas P-16 Council will continue to address recommendations through work groups. Currently functioning work groups include dual credit/concurrent enrollment, teacher education, and gap analysis update. The executive committee may form new groups to address issues that relate to the achievement of North Texas students.