Gap Analysis Report

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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Gap Analysis Report

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Executive Summary
Gap Analysis Report

In 2002, the North Texas P-16 Council approved a Gap Analysis Study to examine gaps in the achievement of students in the region that might have implications for our member school districts and institutions of higher education and their partners. For this work, we benefited from *Closing the Gaps* of the Texas Higher Education Coordinating Board and from data available through the Academic Indicator System for Texas Schools. Recognizing the report of the National Commission on the Senior Year, we focused our work on the senior year of high school, which is a watershed in the lives of individual students and for schools in their ability to support earlier and later academic success. Also, we focused on student achievement in mathematics and the English language arts.

Gaps noted for North Texas students included the following:

- Postsecondary entry and participation for African American and Hispanic students;
- Writing scores for Hispanic students;
- Enrollment in and passing tests related to AP/IB courses and scores on college entrance examinations for African American and Hispanic students;
- Need for qualified teachers in mathematics and bilingual education;
- Need for postsecondary remediation for African American and Hispanic college students; and
- Postsecondary graduation and success measures for economically disadvantaged students.

Council members agreed to focus on dual credit/concurrent enrollment programs for high school students, vertical alignment of curriculum across high school and college, and teacher recruitment and preparation as areas for developing and replicating programs to improve student achievement.

TABLE OF CONTENTS
Gap Analysis Report

OVERVIEW OF THE GAP ANALYSIS STUDY

The North Texas P-16 Council was formed to promote student achievement across all levels of education in the region that centers on the Dallas /Fort Worth Metropolitan Area. Membership of the Council includes the Regions 10 and 11 Education Service Centers, a number of school districts that serve urban populations in Dallas and Tarrant Counties; the community college districts of Dallas, Collin, and Tarrant Counties and the major public and private universities of the Metroplex. The Council's work has been facilitated by the participation of the Dallas and Fort Worth Chambers of Commerce and community-based organizations.

The work of the Council has been influenced by *Closing the Gaps* of the Texas Higher Education Coordinating Board, which noted in October 2000 that although Texas was then experiencing a diverse, vibrant, and growing economy, this prosperity could evaporate without an educated populous and workforce. The Texas Higher Education Plan focused on closing the gaps for Texas student participation in higher education, student completion of academic programs through higher education, national recognition of higher education programs, and research support for Texas institutions. The first of these four gaps has comprised the major focus of the North Texas P-16 Council to date. Seeking student participation and retention in higher education and success in the workplace, we recognize that the path to college begins in kindergarten, as students and their families understand both the benefits of education and the means by which it is gained.

Our vision of education for Texas students is informed by the Academic Excellence Indicator System (AEIS) for Texas schools, an accountability system designed to track the progress of schools in enabling K-12 students to meet increasingly rigorous standards for performance on tests designed to assess academic achievement. A critical part of the Accountability Rating System is closing the gaps in the achievement of racial and ethnic minority and economically disadvantaged students. The comparable performance of subgroups of students is an important factor in the Accountability Rating System for Texas schools.

In June 2002, the North Texas P-16 Council approved a Gap Analysis Study to examine gaps in the achievement of students in the region that might have implications for our members in designing partnerships across the levels of education. We agreed that this initial Gap Analysis effort would focus on mathematics and English language arts as the subjects of the Texas Academic Assessment System (TAAS), begun in 1984, and as the content areas required of virtually all students in their first year of postsecondary education.

Work of the Task Group

The Gap Analysis Task Group was formed through nominations from the P-16 Council. The participants in the Task Group included representatives from member four-year colleges and universities, feeder community colleges, and feeder high schools. Their task was to prepare and disseminate a Gap Analysis Report that would take into account current local, state, and national efforts; pilot an alignment model; and recommend action that will have a direct impact on alignment of curriculum, programs, and tests. The report was to 1) provide a vehicle for reaching the alignment goals of the North Texas P-16 Council and 2) target key policy-

influencing bodies at the local and state levels, thereby increasing the sustainability of our efforts.

The Gap Analysis Task Group met between September 2002 and April 2003 for the purposes of:

- Collecting data about students at different points in the education pipeline,
- Collecting data that illustrates gaps in the pipeline,
- Identifying issues in cross-level alignment that can be resolved by better communication among members,
- Identifying issues in cross-level alignment that must be addressed by policymakers and the wider community, and
- Identifying best practice in P-16 alignment efforts.

After reviewing the available data, the Group was also charged with:

- Piloting an alignment model that will have direct impact on student achievement, and
- Identifying sources of external funding to sustain alignment efforts.

Data to which the Task Group was directed included college and university admissions requirements, college entrance and high school exit assessment data and indicators of their alignment, high school and postsecondary student success indicators, subgroup data from relevant assessments, and exemplary programs of member institutions.

The Gap Analysis Task Group collected most of the data listed above. In March 2003, the Group submitted to the P-16 Council a progress report presenting 1) an overview of the gaps identified to this point, 2) a brief description of the National Commission on the High School Senior Year report, 3) a statement on a pilot alignment model, and 4) a timeline for completion of the report.

Focus on the Senior Year

Upon preliminary examination of the data and discussion with Sheila Byrd of The American Diploma Project for which Texas is a partner state, it was decided to focus on mathematics and English language arts achievement as they were related to the critical transition from high school to college. The Task Group reviewed the work of the National Commission on the Senior Year and decided to focus on the senior year. This decision was based on our belief that the senior year focus is timely, critical to alignment issues, and crucial to increasing the number of underrepresented students pursuing higher education. Also, such a focus is consistent with The American Diploma Project, the purpose of which is to help states 1) strengthen their efforts in standards-based reform and 2) align high school grade assessments in reading, writing and mathematics. Another reason for a focus on the senior year is funding possibilities. Opportunities for grants are increased when there is national interest in a specific P-16 issue.

Because of the focus on the senior year, 10^{th} grade, the last year of high school in which TAAS data were collected, became a focal point for the Task Group.

DEMOGRAPHIC REFERENCES FOR THIS REPORT

In this report, the pipeline for North Texas students is described using data from multiple sources. When referring to K-12 students, we depend on Texas Education Agency reports that pertain to the Education Service Centers for Regions 10 and 11. Region 10 serves a diverse 7-county area, of which the most populous are Dallas and Collin Counties, with 2000 Census populations reported as 2,218.899 and 401,675, respectively. Region 11 serves an 11-county area, of which the most populous are Tarrant and Denton Counties, with populations of 1,446,219 and 432,976, respectively. Statistics from a few North Texas counties on the Oklahoma border are absent from the report because they are not in Region 10 or 11.

The population of North Texas changed rapidly between the 1990 and 2000 Censes. The populations of its largest counties are the most diverse. Table 1 shows the ethnic distribution of major population groups of Collin, Dallas, Denton, and Tarrant Counties as reported in the 2000 Census. Percentages do not equal 100 because of overlap among groups[1] and the fact that some groups are not reported here.

Table 1. Percentage Population Distribution by Race for Selected North Texas Counties

	% White	*% African American*	*% Hispanic*	*% Asian/ Pacific Isl.*	*% Native American*
Collin	81.5	4.6	13.1	6.9	0.5
Dallas	58.4	20.2	51.3	0.1	0.5
Denton	81.7	5.8	14.8	4.0	0.7
Tarrant	71.3	12.6	27.5	3.6	0.6

Source: 2000 Census

Table 2 shows the ethnicity of the K-12 students enrolled in public schools of Regions 10 and 11. Comparison of the distributions in Tables 1 and 2 shows that the percentage of white students attending public schools in Region 10 is lower than the percentage of white people living in Dallas or Collin Counties and that the same is true for Region 11 as compared to Tarrant and Denton Counties. African American and Hispanic students are more likely than white students to attend public schools, and these ethnic groups comprise a majority of the school population of Region 10, which is heavily influenced by enrollment statistics for Dallas County. Because the membership of the North Texas P-16 Council is based in densely populated, urban counties, we use the Regional statistics, knowing that they under-represent certain characteristics of our member districts.

[1] In the 2000 Census, the statistics reported as "Hispanic" here reflect a list of Latino cultures to be claimed by responders in addition to an identifier of ethnicity. In Table 1, we summarize the Latino categories as "Hispanic" and omit some of the smaller ethnic descriptors, using instead the categories of the Academic Excellence Indicator System for Texas Schools.

Table 2. Percentage of Students Enrolled by Ethnicity in Regions 10 and 11

	% White	*% African American*	*% Hispanic*	*% Asian/ Pac. Isl.*	*% Native American*
Region10	42.2	21.0	31.8	4.4	0.5
Region 11	59.9	13.2	22.9	3.6	0.5

Source: 2001-2002 Academic Excellence Indicator System

Regional statistics comparable to those provided by the Education Service Centers are not available for postsecondary education. Instead, the Texas Higher Education Coordinating Board reports demographic and performance data by institution. Since our members include several county community college districts, we generally report community college data by county or for the three counties of our members, averaging the statistics reported for the multiple campuses of the Dallas and Tarrant County districts. However, we did not average the data of the universities because of the greater variety of their missions, affiliations, and admissions standards. Since our university members include both public and private institutions, the state statistics to which institutional data are sometimes compared do not include data from our private university members.

OVERVIEW OF THE GAPS IDENTIFIED

Student Entry to Postsecondary Education

There is a gap in the percentage of Hispanic students who graduate from high school and the percentage of African American and Hispanic students who enter postsecondary education. Table 3 shows the ethnic distribution of K-12 students in Regions 10 and 11 and for community college students in the four counties of interest, a smaller area than the Regions. There is disparity by ethnicity in student entry into community college, the most accessible form of postsecondary education, with notably low rates of entry for Hispanic students.

Table 3. Percentage of Students Enrolled by Ethnicity in Regions 10 and 11 and Collin, Dallas, Denton, and Tarrant County Community Colleges

	% African American	*% Hispanic*	*% White*	*% Asian/ Pac. Isl.*	*% Native American*
Region 10	21.0	31.8	42.4	4.4	0.5
Region 11	13.2	22.9	59.9	3.6	0.5
Community Colleges	15.8	11.0	71.0	1.2	1.0

Source: 2001-2002 Academic Indicator System Report and Texas Higher Education Coordinating Board, 2000-2001

Lower Writing Scores for Hispanic Students

The Texas Assessment of Academic Skills (TAAS) reading, mathematics, and writing tests administered in grade 10 comprise the high-school exit test for Texas students. Examining overall and disaggregated 10th grade TAAS results for Region 10 and 11 students, and in both regions (Tables 4, 5 and 6), we observed significantly lower mean scores in writing for Hispanic students than for those in other groups. This pattern of low achievement in writing for Hispanic students was not evident in statewide data, so this appears to be a regional phenomenon.

Table 4. Region 10 Report of TAAS Indicators, Grade 10

% Passing TAAS 2002	*% State*	*% Region*	*% African American*	*% Hispanic*	*% White*	*% Native American*	*% Asian/ Pac. Isl.*	*% Male*	*% Female*	*% Econ. Disadv.*
Reading	94.5	94.7	93.5	88.3	98.2	98.1	94.9	93.9	95.4	89.1
Writing	**91.3**	**90.9**	91.1	**79.2**	96.6	93.6	91.3	88.6	93.1	81.9
Math	92.2	92.3	86.3	86.4	97.0	93.7	97.4	92.4	92.2	86.6

Source: 2001-2002 Academic Excellence Indicator System Report

Table 5. Region 11 Report of TAAS Indicators, Grade 10

% Passing TAAS 2002	*% State*	*% Region*	*% African American*	*% Hispanic*	*% White*	*% Native American*	*% Asian/ Pac. Isl.*	*% Male*	*% Female*	*% Econ. Disadv.*
Reading	94.5	95.3	91.3	87.8	97.9	99.1	94.5	94.3	96.3	89.1
Writing	**91.3**	**92.4**	91.0	**81.7**	95.3	96.3	91.5	89.6	95.2	83.8
Math	92.2	93.4	85.3	87.1	96.1	95.4	96.6	93.3	93.4	86.6

Source: 2001-2002 Academic Excellence Indicator System Report

Table 6. Composite Percentages for TAAS Indicators in Regions 10 & 11 Grade 10

Passing TAAS 2002	*% State*	*% All students (Reg. 10&11)*	*% African American*	*% Hispanic*	*% White*	*% Native American*	*% Asian/ Pac. Isl.*	*% Male*	*% Female*	*% Econ. Disadv.*
Reading	94.5	95.0	92.4	88.1	98.1	98.6	94.7	94.6	95.9	89.1
Writing	**91.3**	**91.7**	91.0	**80.5**	96.0	95.0	91.4	89.1	94.2	82.9
Math	92.2	92.9	85.8	86.8	96.6	94.5	97.0	92.9	92.8	86.6

Source: 2001-2002 Academic Excellence Indicator System Report

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

One of the goals of the North Texas P-16 Council is to track high school student completion of the Recommended High School Curriculum. Table 7 shows that in 2001, 51.3% of Region 10 students and 57.9% of Region 11 students were enrolled in the Recommended Curriculum and that smaller percentages of students from each region completed advanced placement courses. Table 8 shows, by school district, the percentages of graduates who completed the Recommended Curriculum and advanced placement courses and the demographic characteristics of each graduating class. The data show wide variation by district in percentages of students who complete the Recommended Curriculum. Variations do not appear to be consistently related to the demographic data presented.

Table 7. Percentage of Graduates Completing Recommended High School Curriculum and Advanced Placement Courses by Region

Region	*% Rec. Program (2001)*	*% Adv Courses (2001)*
Region 10	**51.3**	19.9
Region 11	**57.9**	18.1

Source: 2001-2002 Academic Excellence Indicator System Report[2]

Table 8. High School Graduating Class of 2001 Characteristics (within district for ethnicity and economic status)

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	.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	48.6	29.7	48.1	20.0	1.9	0.2	60.1	25.7

*Source: 2001-2002 Academic Excellence Indicator System Report; *Refer to footnote for Table 7.*

[2] The AEIS Glossary for 2001-2002 notes that **Recommended program** (Rec. Program) "shows the percent of graduates who were reported as having satisfied the course requirements for the Texas State Board of Education Recommended High School Program or Distinguished Achievement Program." The recommended program requires more from high school graduates than the minimum program. **Advanced courses** (Adv. Courses) is "based on a count of students who complete and receive credit for at least one advanced course in grades 9-12," and includes dual enrollment courses. Students graduating from the minimum program may be included among Advanced Course enrollments.

Advanced placement courses and college entrance examinations (SAT/ACT) contribute to college preparation. The percentages of African American and Hispanic students in our region enrolled in advanced courses, testing in Advanced Placement/International Baccalaureate (AP/IB) courses, and scoring at acceptable levels on national college entrance exams are lower than the state or regional averages. Tables 9, 10, and 11 show the percentages of students enrolled in advanced courses and taking AP/IB and SAT/ACT tests, by ethnicity, in Regions 10 and 11 and in the two Regions. Of particular note is the extent to which the percentages of African American students tested in AP/IB courses are lower than the percentages who take advanced courses. These percentages compare unfavorably with the regional averages. Although scores of Hispanic students tested in AP/IB courses are higher than those of African American students, performance of Hispanic students on other indicators is similarly low.

Table 9. Region 10 Report for Non-TAAS Indicators—Advanced High School Courses

Indicator (2000-01)	*% State*	*% Region*	*% African American*	*% Hispanic*	*% White*	*% Native American*	*% Asian/ Pac. Isl.*	*% Male*	*% Female*	*% Econ. Disadv.*
% Adv. Courses	19.3	19.9	**14.9**	**13.6**	23.4	15.0	39.0	17.7	22.0	13.1
AP/IB Results % Tested	14.3	19.2	**9.8**	**11.5**	23.3	13.6	42.5	16.8	21.4	n/a
% Taking SAT/ACT	62.9	62.3	**56.1**	**34.2**	69.4	58.3	82.9	61.0	63.4	n/a

Source: 2001-2002 Academic Excellence Indicator System Report

Table 10. Region 11 Report for Non-TAAS Indicators—Advanced High School Courses

Indicator (2000-01)	*% State*	*% Region*	*% African American*	*% Hispanic*	*% White*	*% Native American*	*% Asian/ Pac. Isl.*	*% Male*	*% Female*	*% Econ. Disadv.*
% Adv. Courses	19.3	18.1	**13.6**	**14.5**	23.4	18.6	39.8	17.4	21.4	12.8
AP/IB Results % Tested	14.3	14.8	**6.2**	**11.1**	16.9	13.8	34.5	12.5	15.9	15.9
% Taking SAT/ACT	62.9	65.4	**58.6**	**46.5**	70.0	76.9	85.2	60.5	65.1	n/a

Source: 2001-2002 Academic Excellence Indicator System Report

Table 11. Composite Percentages for Non-TAAS Indicator in Regions 10 & 11—Advanced High School Courses

	% State	*% All Students (Reg. 10&11)*	*% African American*	*% Hispanic*	*% White*	*% Native American*	*% Asian/ Pac. Isl.*	*% Male*	*% Female*	*% Econ. Disadv.*
% Adv. Courses	19.3	16.5	**14.3**	**14.1**	23.4	16.8	39.4	17.6	21.7	13.0
AP/IB Results % Tested	14.3	17.0	**8.0**	**11.3**	20.1	13.7	48.5	14.7	18.7	n/a
% Taking SAT/ACT	62.9	63.9	**57.3**	**40.4**	69.7	67.6	84.1	60.8	64.3	n/a

Source: 2001-2002 Academic Excellence Indicator System Report

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

Another indicator of the achievement level necessary for college entrance is the score on end-of-course examinations. In the state and in Regions 10 and 11, about 22 percent of students took the English II end-of-course examination, and about 17 percent took the Algebra I examination in 2002. Data in Tables 12 and 13 show that the percentages of African American and Hispanic students passing the exams are considerably lower than the passing percentages for all students, and that the regional percentages are lower, in varying degrees, than the state averages for both of these groups. For this indicator, economic factors are also related to lower than average pass rates.

Table 12. Percentage of Students Passing English II End-of-Course Exam by Ethnicity (2002)

	% Passing (for all test takers)	*% Passing African American*	*% Passing Hispanic*	*% Passing White*	*% Passing Native American*	*% Passing Asian/Pac. Isl.*	*% Passing Econ. Disadv.*
State	**69.0**	**58.4**	**60.9**	77.2	70.4	81.5	58.3
Region 10 ESC	**69.4**	**57.8**	**56.3**	79.6	72.4	24.3	54.0
Region 11 ESC	**71.8**	**57.0**	**57.9**	77.4	78.3	78.9	56.3

Source: 2001-2002 Academic Excellence Indicator System Report

Table 13. Percentage of Students Taking and Passing Algebra I End-of-Course Exam By Ethnicity (2002)

	% Passing (for all test takers)	*% Passing African American*	*% Passing Hispanic*	*% Passing White*	*% Passing Native American*	*% Passing Asian/Pac. Isl.*	*% Passing Econ. Disadv.*
State	**57.8**	**42.2**	**46.5**	71.5	62.6	81.2	45.1
Region 10 ESC	**56.7**	**40.0**	**41.7**	71.7	63.5	80.7	41.8
Region 11 ESC	**63.9**	**45.6**	**46.5**	72.5	64.5	80.9	47.5

Source: 2001-2002 Academic Excellence Indicator System Report

Summary of K-12 Findings

The gaps identified K-12 are: 1) lower African American and Hispanic student entry into postsecondary education; 2) lower 10th grade writing scores for Hispanic students; 3) 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; 4) and lower percentages of African American and Hispanic students passing end of course exams in English II and Algebra I. Programs proposed by the Task Group should address one or more of these gaps.

Concerns Raised by the TAKS Pilot

In reviewing our K-12 findings, Texas readers will note that they are based on the 2001-2002 AEIS report of TAAS results. Lower student performance is predicted on the more rigorous Texas Assessment of Knowledge and Skills (TAKS) to be implemented in 2003.

The Spring 2002 TAKS Field Test provided data that indicate how students of the future may perform on this test in English language arts and mathematics and also in social studies and science, which will be included in the new generation of state tests. Table 14 shows the TAKS performance on the mathematics Field Test of 10th graders using three performance criteria. The pass rate resulting from use of the Panel Recommended scoring system appears in the first row. The second and third rows report the pass rates resulting from use of scores one standard error of measure (SEM) and two SEMs below the Panel Recommended scores. The implementation plan for TAKS scoring provides for use of the two SEMs below the Panel Recommended score in the first year, with the one SEM criterion to be implemented in the second year, and the Panel Recommended score in the third year. If there is not improvement in mathematics achievement of tenth graders as measured by the TAKS over the next three years, we could expect that 36% of all tenth graders and as few as 19% of some subgroups might pass the test.

Table 14. Texas Assessment of Knowledge and Skills (TAKS) Standard Setting Summary Based on Estimated Proficiencies from Spring 2002 TAKS Field Test, Mathematics

Grade	*Passing Standard*	*% All*	*% Whites*	*% Hispanic*	*% African American*	*% Males*	*% Female*	*% Econ. Disadv.*
10	Panel Recommend.	36	46	26	19	36	36	24
	One SEM Below	46	56	36	29	46	47	35
	Two SEM Below	59	69	50	43	58	61	49

Source: Texas Education Agency, Spring, 2003

The scoring phase-in plan for the English language arts and other TAKS subtests is the same as that described for mathematics. Table 15 shows the Field Test scores of 10th graders in English language arts assessment, which includes essay writing. Subtest results show strikingly lower scores for African American students and for male students.

Table 15. Texas Assessment of Knowledge and Skills (TAKS) Standard Setting Summary Based on Estimated Proficiencies from Spring 2002 TAKS Field Test, English Language Arts

Grade	*Passing Standard*	*% All*	*% Whites*	*% Hispanic*	*% African American*	*% Males*	*% Female*	*% Econ. Disadv.*
10	Panel Recommend	36	44	32	21	29	44	30
	One SEM Below	40	46	36	25	31	48	34
	Two SEM Below	42	47	40	28	34	50	37

Source: Texas Education Agency, Spring, 2003

The focus of the work of the Gap Analysis Task Group was on student performance in mathematics and the language arts; however, we have included data from the science and social TAKS Field Test to demonstrate the need for attention to these areas. Tables 16 and 17 show the TAKS Field Test scores of 10th graders in social studies and science. Although the projected scores in social studies are not as low as in some other subjects, there are gaps for African American and Hispanic students. The projected scores in science are low for all students, with notable gaps for African American, Hispanic, and economically disadvantaged students.

Table 16. Texas Assessment of Knowledge and Skills (TAKS) Standard Setting Summary Based on Estimated Proficiencies from Spring 2002 TAKS Field Test, Social Studies

Grade	*Passing Standard*	*% All*	*% White*	*% Hispanic*	*% African American*	*% Male*	*% Female*	*% Econ. Disadv.*
10	Panel Recommend.	63	73	51	47	62	64	49
	One SEM Below	72	81	63	59	70	74	61
	Two SEM Below	80	86	75	71	78	83	73

Source: Texas Education Agency, Spring, 2003

Table 17. Texas Assessment of Knowledge and Skills (TAKS) Standard Setting Summary Based on Estimated Proficiencies from Spring 2002 TAKS Field Test, Science

Grade	*Passing Standard*	*% All*	*% White*	*% Hispanic*	*% African American*	*% Male*	*% Female*	*% Econ. Disadv.*
10	Panel Recommend.	34	47	20	19	35	32	19
	One SEM Below	49	63	34	33	49	48	33
	Two SEM Below	64	75	51	51	63	65	50

Source: Texas Education Agency, Spring, 2003

Student Participation in Postsecondary Education

The three community college district members of the North Texas P-16 Council are comparable to the state community colleges in their distribution of students by gender and ethnicity. All three districts fall below the state mean in their enrollment of Hispanic students, however, as shown in Table 18.

Table 18. Community College District (CCD) Enrollment by Ethnicity Comparing P-16 Member CCDs with State Enrollment, Fall 2001

District	*CCD Total Enrollment*	*% White*	*% African American*	*% Hispanic*	*% Asian/ Pac. Isl.*	*% Native American*	*% Int'l*
State CCs	478,313	52.0	11.1	29.0	3.9	0.5	2.6
Collin CCCD	14,179	73.5	5.7	7.5	6.7	0.5	6.0
Dallas CCCD	50,191	41.9	24.9	19.1	6.3	0.6	5.7
Tarrant CCD	29,817	67.0	11.7	14.6	5.4	0.8	0.5

Source: Texas Higher Education Coordinating Board

Table 19 presents undergraduate enrollment data by ethnicity for the public and private university members of the P-16 Council. The state comparison information pertains to graduate and undergraduate enrollment at public institutions of higher education. These data suggest that although the universities in our region vary in the extent to which they serve students by gender and ethnicity, all fall below the state mean in their enrollment of Hispanic students. Reference to Table 2, which shows enrollment of students by ethnicity in K-12 schools of Regions 10 and 11, verifies that the lack of Hispanic students in higher education is not because of their failure to be represented in the regional feeder population.

Table 19. University Enrollment by Ethnicity for State Public Institutions Compared to P-16 Council Members, Fall 2001

Member Universities	*Total Enrollment*	*% White*	*% African American*	*% Hispanic*	*% Asian/ Pac. Isl.*	*% Native American*	*% Int'l*
State Public Universities[1]	430,770	57.1	10.1	**20.0**	5.8	0.5	6.9
SMU[2]	10,064	80.6	5.8	**6.9**	6.2	0.5	6.8
TAMU-Commerce	7,934	71.5	16.3	**4.8**	1.2	1.1	5.1
Texas Christian University[3]	8,074	77.7	5.2	**5.8**	2.0	0.5	5.0
TWU	7,887	65.2	16.8	**10.4**	4.2	0.6	2.9
UNT	27,858	70.1	9.2	**8.2**	4.0	0.8	5.3
UT-Arlington	21,180	55.0	11.7	**10.6**	9.7	0.7	10.9
UT-Dallas	12,455	51.8	6.7	**6.7**	18.0	0.4	16.0

Note: [1]Statistics provided for total sum (UG + Grad) university enrollments
Source: Public university data from Texas Higher Education Coordinating Board Statistical Report 2002; [2]SMU data from www.smu.edu Facts, reporting Fall 2000; [3]TCU Highlights from www.tcu.edu, reporting Fall 2002.

Need for Remediation in Postsecondary Education

Scores on the Texas Academic Skills Program (TASP) indicate student need for remediation of basic skills after their entry into postsecondary education. Table 20 shows passing percentages in all three subtests of the TASP and numbers of exemptions granted (typically on the basis of SAT/ACT results) for all state public university students and for member public universities.[3]

Table 20. TASP Passing Percentages and Exemptions for Incoming Public University Students

Public Universities	*TASP Tested*		*# Exempted from TASP*
	Total Tested	*% Passing*	
State Total	44,077	47.7	30,785
TAMU-Commerce	467	56.1	323
TWU	718	54.7	9
UT-Arlington	2,622	63.3	1,319
UNT	3,788	55.0	2,298
UT-Dallas	507	41.4	747

Source: Texas Higher Education Coordinating Board, 2002

Tables 21, 22, 23, and 24 refer to TASP overall and subtest performance for university and community college students. These data show wide gaps between the overall TASP pass rate and pass rates for African American students in all public postsecondary institutions and in community colleges statewide, as well as in our region. TASP pass rates for Hispanic students are also consistently below the mean. Comparing the pass rates of African American and Hispanic students in our region and in member community college districts to those of community college students statewide shows the relative success of the Dallas Community College District in closing these gaps.

[3] The breakdown of TASP passing rates by ethnicity on the Texas Higher Education Agency website did not enable presentation of data comparable to what is presented for community colleges students in Tables 22, 23, 24, and 25. However, the rates of students requiring remediation presented in Table 26 provide comparable information.

Table 21. Community College TASP Passing Percentages (All Three Subtests) on the Initial Attempt by Ethnicity

Overall TASP Test Pass Rates for Initial Attempt	*% Total*	*% White*	*% African American*	*% Hispanic*	*% Asian/ Pac. Isl.*	*% Others*
All public post-secondary Institutions	**39.9**	48.2	**23.6**	**31.8**	40.1	36.8
State CCs	**33.1**	41.1	**18.3**	**23.5**	32.4	35.0
P-16 Council CCDs Mean Percent	**34.9**	42.7	**27.3**	**30.7**	29.2	43.2
Collin CCCD	**38.6**	41.5	**16.2**	**36.1**	22.0	63.6
Dallas CCCD	**37.7**	53.3	**35.0**	**36.8**	42.0	48.9
Tarrant CCD	**28.4**	33.4	**12.6**	**19.3**	23.7	17.1

Source: Texas Higher Education Coordinating Board, FY 2001

Table 22. Community College TASP Writing Test Pass Rates on the Initial Attempt by Ethnicity

TASP Writing Test Pass Rates for Initial Attempt	*% Total*	*% White*	*% African American*	*% Hispanic*	*% Asian/ Pac. Isl.*	*% Others*
All public post-secondary Institutions	**73.1**	81.7	**61.1**	**65.5**	57.5	58.0
State CCs	**69.3**	78.5	**55.2**	**59.7**	51.7	59.9
P-16 Council CCDs Mean Percent	**69.8**	76.9	**54.3**	**62.0**	47.3	75.5
Collin CCCD	**67.8**	71.8	**52.4**	**60.9**	36.4	95.5
Dallas CCCD	**76.6**	86.0	**65.8**	**71.4**	63.8	71.3
Tarrant CCD	**65.0**	73.0	**44.7**	**53.8**	41.8	59.8

Source: Texas Higher Education Coordinating Board, FY 2001

Table 23. Community College TASP Reading Test Pass Rates on the Initial Attempt by Ethnicity

TASP Reading Test Pass Rates for Initial Attempt	*% Total*	*% White*	*% African American*	*% Hispanic*	*% Asian/ Pac. Isl.*	*% Others*
All public post-secondary Institutions	**70.1**	77.2	**57.8**	**63.4**	62.5	65.7
State CCs	**65.8**	73.5	**52.7**	**57.4**	54.6	63.9
P-16 Council CCDs Mean Percent	**67.9**	73.2	**51.3**	**66.5**	51.9	74.4
Collin CCCD	**64.1**	66.4	**43.8**	**70.7**	42.4	90.9
Dallas CCCD	**74.5**	82.7	**62.9**	**71.4**	64.1	73.1
Tarrant CCD	**65.0**	70.5	**52.7**	**57.4**	49.1	59.2

Source: Texas Higher Education Coordinating Board, FY 2001

Table 24. Community College TASP Math Test Pass Rates on the Initial Attempt by Ethnicity

TASP Math Test Pass Rates for Initial Attempt	*% Total*	*% White*	*% African American*	*% Hispanic*	*% Asian/ Pac. Isl.*	*% Others*
All public post-secondary Institutions	**51.8**	58.2	**34.1**	**43.9**	71.6	61.8
State CCs	**44.5**	51.2	**27.6**	**35.8**	63.7	53.7
P-16 Council CCDs Mean Percent	**48.0**	52.4	**28.7**	**42.6**	59.8	59.2
Collin CCCD	**50.1**	50.9	**27.6**	**45.9**	62.7	68.2
Dallas CCCD	**53.7**	62.3	**37.1**	**49.3**	68.7	63.7
Tarrant CCD	**40.2**	44.0	**21.5**	**32.5**	48.0	45.6

Source: Texas Higher Education Coordinating Board, FY 2001

Table 25 shows the percentages of TASP taking students from North Texas universities who required remediation, by ethnicity. Percentages of African American TASP takers requiring remediation exceeded the percentages of all students requiring remediation at every institution. The right column of the table shows that at each institution, a majority of students who received remediation were retained at each public university.

Table 25. Percentage of Public University Students Requiring Remediation based on TASP Scores with Retention Rates

Public Universities	*Total % Needing Remediation*	*% White needing remediation*	*% African American needing remediation*	*% Hispanic needing remediation*	*% Asian/ Pac. Isl. & Native American needing remediation*	*% Other needing remediation*	*FY 2001 % Retention Rates of TASP Students w/Remediation*
TAMU-Commerce	**25.9**	20.3	**59.6**	17.6	12.5	36.4	57.0
TWU	**44.7**	34.7	**68.6**	45.7	37.0	51.9	63.8
UNT	**28.0**	22.3	**53.8**	34.8	39.6	16.7	66.5
UT-Arlington	**24.4**	15.5	**46.1**	28.3	29.2	42.1	58.1
UT-Dallas	**23.7**	18.2	**39.4**	28.2	27.0	41.8	73.7

Source: Texas Higher Education Coordinating Board, FY 2001

Postsecondary Graduation and Success Measures

Table 26 presents 3-year graduation or persistence rates, including transfers to other post-secondary institutions, for community college students by gender and ethnicity. These data show gaps in graduation or persistence for African American students in the three community college districts of Council members. The gaps are similar to the statewide data for this group of students.

Table 26. Community College Student 3-Year Graduation or Persistence Rates by Ethnicity for Incoming Fall 1998 Cohort through Fall 2001

District	*% Total*	*% White*	*% African American*	*% Hispanic*	*% Asian*	*% Native American*	*% International*
State CCs	**50.0**	54.0	**42.0**	47.0	56.0	41.0	33.0
Collin CCCD	**49.0**	49.0	**46.0**	49.0	57.0	12.0	75.0
Dallas CCCD	**47.3**	50.3	**40.9**	45.6	54.3	41.0	42.5
Tarrant CCD	**50.2**	59.0	**40.0**	46.3	58.8	58.3*	54.5

*Source: Texas Higher Education Coordinating Board; *Cohort total of 12 with 7 graduating or persisting.*

Student success measures available for North Texas public and private universities included percentages of first year students retained from Fall 1999 to Fall 2000, percentages of credit hours of enrollment completed, and 6-year degree completion rates. These data, shown on Tables 27 and 28, convey the gap in first year retention for students who are economically disadvantaged.

Table 27. Student Success Measures for P-16 Council Universities

Member Universities	*% Freshman Retention from Fall 1999 to Fall 2000*	*% of First-time Full-time Econ. Disadv. Students Retained*	*% of Semester Credit Hours Completed*	*% Completion Rates*
Statewide Public Universities	66.1	**46.6**	92.5	42.0
SMU	85.0	**N/A**	N/A	71.0
TAMU-Commerce	60.8	**52.2**	92.7	38.7
Texas Christian University	81.0	**N/A**	N/A	64.0
TWU	67.6	**54.3**	93.8	39.0
UNT	67.6	**48.6**	93.4	36.0
UT-Arlington	65.6	**53.8**	91.4	30.5
UT-Dallas	77.4	**56.3**	89.7	50.5

Source: Texas Higher Education Coordinating Board, June 2002 and independent institutions' institutional research offices and websites

Table 28 develops more detailed information about the 6-year completion rate of students at member universities, where public university data distinguish between students who graduated from the university of entry and another public university. These data show that at all but the most selective public university (UTD), fewer than half of the students who begin graduate within six years.

Table 28. University Student 6-year Completion Rate Trends for Public University P-16 Council Members

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

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

Preparation of K-12 Teachers

An area of concern for a P-16 Council has to be the extent to which postsecondary and other teacher preparation entities of the region are addressing the needs of local school districts for well qualified teachers. Table 29 shows the numbers of mathematics, English language arts, bilingual/ESL Spanish, and all teachers prepared by the preparation entities of North Texas over a 3-year period. Although there are annual increases in the numbers of teachers prepared, the numbers of mathematics and bilingual teachers prepared in the region are far below those needed by K-12 schools, as verified from a survey of district human resource officers conducted by the University of North Texas in 2000.

Table 29. Educator Certificates Issued Through Entities in North Texas

Subject	*1999-2000*	*2000-2001*	*2001-2002*	*3 Year Total*
Bilingual/ESL-Spanish	173	250	354	777
English/Language Arts	636	733	1,008	2,377
Mathematics	168	216	315	699
All Certification Areas	3,416	4,268	5,753	13,437

Source: State Board for Educator Certification

Table 30 augments the teacher preparation picture by providing information about the numbers of 2000 graduates of teacher preparation programs of P-16 Council members. These include most, but not all, of the entities in the Metropolitan area. Table 30 also provides some

information about the ethnicity of the teachers prepared by member entities. In spite of the success of some preparation entities in reversing the current national failure to attract minority candidates into teaching, preparation entities collectively do not prepare a teaching force whose ethnic distribution is comparable to that of the K-12 students served.

Table 30. Teaching Certificates Issued in 2000 through Member Preparation Programs

Member Entities	*Total No. of Certificates Issued*	*Certificates Issued, White*	*% of Certificates, White*	*Certificates Issued, Minority*	*% of Certificates, Minority*
Dallas ISD	280	94	33.6	186	66.4
Collin CCCD	12	10	83.3	2	16.7
ESC 10	386	301	78.0	85	22.0
ESC 11	468	378	80.8	90	19.2
Fort Worth ISD	14	2	14.3	12	85.7
SMU	30	17	56.6	13	43.4
TAMU-Commerce	531	439	82.7	92	17.3
Texas Christian University	133	123	92.5	10	7.5
TWU	294	196	66.7	98	33.3
UNT	635	548	86.3	87	13.7
UT-Arlington	471	344	73.0	127	27.0
UT-Dallas	148	121	81.7	27	18.3
All members	3402	2573	69.1	829	30.9

Source: [1]Texas Higher Education Coordinating Board FY2001; [2]State Board for Educator Certification for FY2002; [3]Year not provided in TCU data at www.tcu.edu.

Summary of Postsecondary Findings

The gaps identified for postsecondary education are: 1) lack of participation in higher education in our region by Hispanic students, 2) lower TASP scores for African American, and to a lesser extent Hispanic, students than for community college students in general, 3) lower 3-year graduation or persistence rates of African American students in community college compared to other students, 4) low retention rates of full-time economically disadvantaged students in 4-year university programs, and 5) severe need for bilingual teachers and teachers of mathematics in our region. Programs proposed by the Task Group will address one or more of these gaps.

BEST PRACTICE IN THE REGION

As part of the data collection for the region, the Task Group identified best practices related to P-16 alignment among the Council members. These alignment programs are described in the appendix of this report. We found in analyzing these data that common themes included dual credit, summer bridge programs, and vertical alignment efforts.

Prior to undertaking the Gap Analysis Study, the Council had already endorsed the Texas Recommended High School Curriculum as a tool to promote achievement and successful college entry. The value of this approach was documented in a February 2003 report of the Texas Higher Education Coordinating Board, which concluded that students who complete the Recommended Curriculum in high school enroll in higher education at a higher rate and are retained in higher education at a higher rate than those who complete a less demanding curriculum. This study also confirmed that full-time students in higher education are retained at a higher rate than are part-time students regardless of the high school diploma received[4]. These findings are consistent with those of the National Commission on the Senior Year, which recommended that all students take at least two years of formal education beyond high school and recommended a default "college prep" curriculum, with informed parental consent required for any other selection.[5]

The key recommendation of the Commission, for our purposes, is part of its "Triple A Plan." This plan calls for increased alignment between all levels of education through the creation of a seamless P-16 system, from preschool to postsecondary education, "in which standards, curriculum, and assessment efforts are aligned and integrated" (p. 20).

Region 10 and 11 data clearly show achievement gaps that keep some students, mostly African American and Hispanic students, not only from making the transition from secondary to postsecondary education, but also from access to the high school curriculum necessary for that transition. Although several alignment efforts are in place within school districts and with particular higher education partners, there does not seem to be a regional effort that has at its foundation fully-committed postsecondary involvement. As a P-16 Council with a membership that represents the majority of the North Texas region, we are in a unique position to have significant positive impact on student achievement among our member institutions.

SETTING CONTINUING GOALS

A commitment of the Task Group was to recommend to the Council a pilot project focused on alignment across the levels of education that would engage its secondary and postsecondary members and that could be brought to scale as a model of regional excellence. Before making such a recommendation, however, the Task Group sought the advice of the P-16 Council. After hearing a review of the gaps identified by the Task Group, the Council's reactions reflected the following recommendations.

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[4] Planning and Information Resources Division, Texas Higher Education Coordinating Board. (2003, February). *Student performance and the recommended high school program.* Available http://www.thecb.state.tx.us.

[5] National Commission on the High School Senior Year. (2001, October). *Raising our sights: No high school senior left behind*. Princeton, NJ: Woodrow Wilson National Fellowship Foundation.

1. The Council needs to continue to track English language arts and mathematics achievement data, adding science and social studies as we move into the TAKS era.

2. Practices of secondary teachers whose students, including African American and Hispanic students, perform successfully on the TAKS are a good starting point for disciplinary discussions of vertical alignment.

3. There is need to attend, along with focus on the TAKS, to successful completion of end-of-course tests, AP/IB exams, and SAT/ACT tests, with particular attention to students from groups whose success on these measure has been low.

4. Recruitment and retention of mathematics and science teachers must be a priority for our region, with its high-tech industrial base.

5. There is urgent need to recruit and retain bilingual and ESL educators who can assist students in their learning and lead colleagues in implementing teaching and learning strategies that maximize the achievement of English language learners.

6. Every academic and community resource we can find 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 to replicate best practices in remediation to assure student success in postsecondary education, and to assure that remediation is aligned with the connected curricula.

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 Council must seek implementation of strategies that make high school more rigorous and anticipate college entry for all students, including dual credit, advanced placement, and bridge programs.

10. 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.

11. The Recommended High School Curriculum should become the standard curriculum from which more rigorous graduation requirements of core subjects at every grade level will be developed.

12. Future educator clubs and secondary teaching academies should be started to seed pipeline programs for teachers and support candidates through community college and university majors and teacher preparation programs.

13. Programs are needed to ease the entry of bilingual para-educators and internationally certified teachers into teaching in our region.

14. Businesses in our region need to become involved in discussions of how candidates from groups underrepresented in education now can be supported as they complete the education needed for leadership on the job and how qualified graduates can be assured of employment.

Many possible alignment projects are suggested by these recommendations. From these, the Task Group selected a focus on dual credit because of the potential of this strategy to bridge the transition from high school to college and because of the extent to which it is already practiced by our members. The Council selected this priority, adding to it vertical cross-level alignment and teacher education as areas for activity in the coming year.

CONCLUDING REMARKS

As has been noted by several national alignment initiatives, the state of Texas has taken great strides in its effort to close the gaps in academic performance between those who have all the benefits of access to postsecondary education and those who are struggling to graduate from high school. As has been noted by a national commission, the problems that serve to maintain or widen this gap do not start in high school, but they start at the very beginnings of formal education. In identifying these gaps within our region, we have made progress toward achieving what the state of Texas wants to achieve—an educational environment in which every child has the opportunity to pursue education to its fullest extent.

The P-16 Council has identified gaps in the following areas:

- Student entry to postsecondary education
- Writing scores for Hispanic students
- Students enrolled in recommended curriculum and advanced courses, testing in AP/IB courses, and taking entrance examinations
- Students passing the end-of-course exams in English II and Algebra I
- Preparation of K-12 teachers
- Student participation in postsecondary education
- Need for remediation in postsecondary education
- Postsecondary graduation and success measures

We need to recommend programs that can contribute to close some, if not all, of these gaps and can be brought to scale in our region. Most importantly, we need the support of the community, legislative allies, and others to make these recommendations a reality.

Appendix

Best Practice Models

Throughout the collaboration process, members of the P-16 Council have offered suggestions of programs that they believe exemplify the types of best practices needed for closing the gaps. The action priorities chosen by the Council focus on developing dual credit/concurrent enrollment for high school students, vertical curriculum alignment across all levels, and teacher recruitment and preparation programs. The best practices of Council members are grouped according to these action priorities and described below.

Dual Credit/Concurrent Enrollment for High School Students

Tarrant County College (TCC), North Lake College and Texas A&M University-Commerce

A particularly salient characteristic of the program at TCC includes the easily accessible information for students about the nature of the financing of concurrent/dual enrollment. For example, "students concurrently enrolled at TCC and in a high school program may qualify for a tuition and fees waiver for courses approved by their school" was easily found (TCC website: http://somedia.tccd.net/south/misc/tuition.html).

Irving Independent School District and North Lake College (NLC) of the Dallas County Community College District

This program provides a guide to dual credit/concurrent enrollment that is very easily accessed on their website (www.northlakecollege.edu/academics/dualcredit.htm). The guide defines dual credit and concurrent enrollment, addresses requirements for eligibility, highlights the benefits of such credit, provides students with information to start the process of enrollment, and lists the courses approved for the program. The NLC program operates in partnership with the Irving High School Academy enabling students to take NLC courses at the high school and emphasizing the importance of alignment programs.

Texas A&M University – Commerce (TAMU-C)

The program includes information about concurrent enrollment as part of their easily accessible freshman admission web pages. The requirements and conditions of enrollment are outlined concisely in one web page, http://www7.tamu-commerce.edu/admissions/undergraduate_admissions/concurrent_highschool_enrollment.asp.

Vertical Alignment Across Levels

Project Literacy/America's Promise partnership with Dallas Independent School District

Project Literacy has partnered with higher education institutions in the Dallas/Fort Worth Metroplex to provide college students the opportunity to serve as academic coaches or teacher aides to students in all K-12 grades. This project focuses on at-risk children in an effort to boost the youngsters' self-efficacy and academic performance with the hope that the same children might strive to obtain post-secondary education. The project has expanded significantly since its inception and has plans to partner with teacher education programs in the area in an effort to complement the academic training future teachers experience.

Southern Methodist University's Infinity Project

The Infinity Project has been reported as a partnership between Southern Methodist University (SMU) and Texas Instruments (TI). As the SMU website states, it is first program designed to "help school districts incorporate state-of-the-art engineering and advanced technology into the high school curriculum. The program is designed to help students understand the real-world relevance of science and math and attract them to high-tech careers" (www.smu.edu/newinfo/releases/00076.html). As an alignment effort, the program also hopes to increase the number of engineering graduates from colleges because engineering faces a shortfall of U.S. graduates annually and a severe retention problem overall. Two important features of the program were highlighted:

The summer pre-collegiate engineering program was described as a five week college-oriented course to expose students to "modern engineering design in a fun and informal way" (http://theinstitute.smu.edu/summer/html). The engineering "redshirt" year is directed toward students with demonstrated ability to be successful in engineering school while lacking needed background knowledge or skills, and has enabled students to experience supplemental courses designed to improve study skills, time and financial management abilities, and traditional academic knowledge in areas such as math and science.

University of North Texas TRIO Center and Transfer Articulation Website

The University of North Texas (UNT) has been mentioned regarding two best practices. First the Transfer Articulation Website (http://essc.unt.edu/registrar/articulation) provides an index of tools for addressing alignment between community college curricula and that of UNT. At this easy to access web page, the viewer can access college/school/departmental advising sites, common core curriculum guides, and transfer guides for students attempting to enter UNT from any of the adjacent community college districts. The second program of interest is the UNT TRIO Center for Student Development administering the following programs: Talent Search, Upward Bound, Discovery, and McNair Scholars. The goal for all these programs has been to develop and retain as many at risk and first generation students at the University as possible, thus serving as alignment tools. Discovery exemplifies the nature of the TRIO Center's programs by providing tutoring, mentor/counselors for academic, career, and personal issues, workshops covering issues such as diversity, computer facilities, and events to enable participant fellowship.

Talent Search encourages children in grades 6-12 and those who have not graduated from a high school program to engage in postsecondary studies, thereby performing important alignment functions while facilitating students' preparation for postsecondary study.

Teacher Recruitment and Preparation Programs

Dallas County Community College District's (DCCCD) Tomorrow's Teachers
This program has become "a first-of-its-kind, collaborate initiative among Dallas County independent school districts, the Dallas County Community College District and area four-year universities. The overall objective of the kindergarten-through-college program is to transform Dallas-area students into Dallas-area public school teachers" (www.dcccd.edu/vcea/partner/Teachers/index.html). Examples of practices included in the program are field trips to colleges, teaching opportunities for elementary school students, tutoring opportunities, work-study and internship programs, involving student teachers, and educating parents about financial aid.

Texas A&M University – Commerce (TAMU-C) the Mayo College's Teacher Leadership Program

The Mayo College Teacher Leadership Program has been implemented as part of the Texas A&M system Regent's initiative on teacher education. Students involved in the program live in a themed residence hall and attend three-block arranged classes together. This particular format engages students multi-dimensionally via the linked courses and enables them to foster support networks with each other to enhance their learning and build their confidence about the choice to become a teacher. Information can be found at the Mayo College website http://www7.tamu-commerce.edu/mayocollege/.