



**Audit Review and Benchmarking Study
Final District Report
September 2004**

Presented to:

**Austin Independent School District
Austin, Texas**

Prepared by:

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Austin Independent School District Audit Review and Benchmarking Study Final District Report

Purpose of the Report

In December 2003, the Southern Regional Education Board (SREB) through *High Schools That Work (HSTW)* entered into an agreement with the Austin Independent School District (AISD) to conduct an audit review and benchmarking study of its 11 comprehensive high schools. This report addresses the extent to which the schools are currently meeting the goals specified by the Board of Trustees in Results Policy #3, the challenges it faces in achieving them and recommendations for improvement that can result in better school experiences and higher student achievement. The three goals from Results Policy #3 that were examined included:

- Students will explore and experience a wide range of career options in relation to their interests and aptitudes.
- Students will graduate as a Texas Scholar with a jumpstart on college and career success, including consideration of postsecondary credit, industry certification and scholarship opportunities.
- Students will demonstrate and understand the skills and knowledge to successfully enroll in postsecondary education, access financial aid, transition into the workforce, and be successful in a variety of jobs and careers.

To achieve these broad goals, the project staff recommended that four additional performance goals be part of the study. AISD agreed to the inclusion of these goals in the study as follows:

- Provide students meaningful, engaging, challenging and real-world assignments aimed at deepening subject matter understanding and retention.
- Take actions to get entering ninth-graders who are below state standards ready for challenging high school work.
- Enroll students in courses with high expectations and provide necessary extra help and support to enable them to meet rigorous standards.
- Set a clear vision and provide strong leadership and staff support to foster continuous improvement.

Together these goals focus on a mission of preparing **all** students for further education and careers.

How the Audit Was Conducted

There are four components to the study:

- data profiles,
- school visits,
- student surveys, and
- review of school and district reports.

Data profiles

In January and February 2004, data profiles were prepared for each school. Data sources used to prepare the profiles included the Academic Excellence Indicator System (AEIS) and Campus Accountability Data reports for each school, available on the Texas Education Agency Web site, and data provided by the school district. The data profiles included the following sections of information:

1. enrollment/attendance/dropouts;
2. graduation program options;
3. ninth-grade failure rates;
4. performance on standardized testing;
5. career/technical enrollments, completion rates and performance on exams;
6. postsecondary enrollment and remediation rates;
7. Advanced Placement/International Baccalaureate Courses and performance; and
8. teacher/pupil ratios and class sizes.

Some of the data requested could not be provided by the district. However, the data provided were sufficient to support many key conclusions for each school and the district as a whole. (See Appendix 1 for a copy of the data profile form.) Completed data profiles for all schools have been provided to the district.

School visits

Between March 1 and April 16, 2004, teams visited each of the 11 schools. The teams were made up of nine or more members drawn from outstanding district teachers, administrators and counselors, and district academic and Career and Technical Education (CATE) administrators with district approval, and were led by experienced school improvement consultants. Each school recommended representatives from its school to serve on other visiting teams.

Each school designated a coordinator to work with SREB staff in preparing for the visit. One of the requirements in preparation for the visit was a self-study to be completed by a representative sample of the faculty. Each school assembled an extensive notebook of information for the visiting team. The visits spanned three days, following a common protocol:

Day 3 (Morning) – The team leader presented an overview of the team’s findings, including school accomplishments, planned next steps, challenges and recommendations related to the study’s eight goals.

Following the visits, an in-depth report was prepared following a **Day 1 (Afternoon)** – Team members assembled for a three-hour orientation session with the team leader. Following the orientation, key school staff, led by the principal, made a presentation to the team addressing current accomplishments and activities, next steps planned and perceived challenges.

Day 2 – Team members made brief observation visits to the majority of the classes for the purpose of understanding the instructional practices used and the level of student engagement. Group interviews were conducted with representatives of the freshmen and senior classes, teachers (both academic and CATE), counselors, administrators and parents. The team leader conducted a private interview with the principal. At the end of the day, the team convened to summarize findings:

- Report overview.
- Goals. For each study goal, the report answers four questions:
 - What has the school done to address the goal?
 - What does the school plan to do to address the goal?
 - What major challenge does the school face to address the goal?
 - What actions can the school take to address the challenge?
- Three-year improvement plan by goal. The plan outlines how each of the recommendations for each goal could be addressed over three years.
- Resources – School contacts and staff development providers in areas addressed in the report.
- Attachments – Sample scoring guides, strategies and other items providing more detailed information related to specific recommendations.

Each high school received a detailed report, and the district received copies of all reports. School teams met with SREB staff to review their reports in September.

Student surveys

Between April 1 and 20, a survey of seniors randomly selected by the district was completed at each high school. A survey coordinator at each school was responsible for contacting survey participants, notifying parents of selected students and conducting the survey.

The survey instrument consisted of two parts. The first part requested information about courses students had taken during high school. To complete this portion, school staff or the students, under the direction of the school staff, were required to use transcripts and a course-matching chart provided by the district staff to match courses taken to course selections on the survey instrument.

The balance of the survey consisted of 216 questions designed to obtain information about students’ experiences at the school. (See Appendix 2 for a copy of the survey report.)

A total of 1,036 students were surveyed. The survey sample closely matched the district's high school demographics – 50 percent Hispanic; 34 percent white; 13 percent African-American; and, four percent other. Three-fourths of the students surveyed had been at the school for four years.

Results for each school have been compiled, analyzed and compared to students' experiences at a select group of schools in the *HSTW* network. Schools and the district have received copies of each school's student survey report. An additional report showing results district wide has been provided, and some findings from that report are included in this report.

See Appendix 3 for a capsule view of each of the 11 high schools, drawn from information gathered during school visits and through the student surveys.

Study Findings

Information from the data profiles, school visits and student surveys was used to arrive at the study findings. **Together they provide a clear picture of the many achievements by the district's high schools, the promising future goals they have set for themselves and the challenges they face.**

Executive Summary

The Austin Independent School District (AISD) Board of Trustees has taken the first essential step to improving its high schools. It has established goals and performance indicators that set clear guidelines for what is expected from school leaders, teachers and students. The district's new standards-based curriculum is a critical underpinning for achieving all of the goals. Over the past nine months, the Southern Regional Education Board (SREB) through *High Schools That Work*, the nation's largest improvement network for high schools, has conducted an in-depth study of the progress of high schools to date in implementing the goals set forth in Results Policy #3.

In this report, we present our findings along with recommendations regarding how to move forward to make the Board's vision a reality. We have identified seven challenges that the district and its high schools face. To arrive at our conclusions, we developed comprehensive data profiles, conducted visits and surveyed students at the 11 high schools. In this summary, we offer our findings and key actions for each of the seven goals that were part of the study. In addition to the three goals in Results Policy #3, we added four additional goals that are crucial for achieving the other three.

Students will explore and experience a wide range of career options in relation to their interests and aptitudes.

Findings: The major way for Austin students to explore careers is through career and technical education (CATE) programs. There were 9,466 enrollments in CATE courses in fall 2003. Most students took only one or two courses with the largest enrollments in computer applications, audio/visual technology and graphic arts. Programs are not aligned to labor market needs. The most startling examples are in Information Technology, Health Services and Manufacturing – three of the areas with the greatest job potential in both Austin and the state of Texas. Offerings in all of these areas are extremely limited.

Student survey results showed that less than half of the students had experienced 10 of the district's performance indicators related to exploring career options. Only a third of the students had participated in a career exploration course or other activity where they visited CATE programs in their schools.

Recommendations: The district should rethink how to assist students and parents to explore career and educational opportunities. A key component of the plan would be **establishment of a teacher advisement system and development of a career and educational advisory curriculum** to be made an integral part of the school schedule. Schedule **annual meetings of advisers, students and parents** to discuss students' career and educational goals and a program of study that will prepare each student to meet his or her goals. A **revised career connections class** for ninth graders will allow students to explore career options early in high school. Very few students participate in **work-based learning programs**. The district should work closely with all high schools to make sure that such an experience is part of the program for every student who chooses to pursue a career/technical concentration.

Students will graduate as a Texas Scholar with a jumpstart on college and career success, including consideration of postsecondary credit, industry certification, and scholarship opportunities.

Findings: If earning college credit or industry certification in high school is a way to give students a jumpstart on college and career success, the district has a long way to go. The student survey showed that 54 percent of this year's seniors did not expect to earn any college credit in high school. The primary way Austin students earn college credit is through AP courses. The largest course enrollments are at the high schools considered to be the highest performing in the district – the ones where more students already go on to college. The fewest enrollments are at high schools with high minority populations and low achievement. AP enrollments do not mirror the student population. The percentage of white students taking AP courses was twice their population rate in the district while Hispanic students' AP enrollments were one-half their population rate. Pass rates on AP courses for the 75 percent of AP students who took the exams in 2003 are only 54 percent districtwide and at five high schools, two-thirds or more of the students failed to pass the exams.

District CATE staff reports that there are 16 industry-certified CATE programs in Austin high schools. Among 2004 graduates, only 19 students earned industry certification – 13 in cosmetology, four in Certified Nurse Assistant and two in A+, an information technology program.

Recommendations: The major challenge is to make it easier for students to earn college credit in high school by reaching more agreements with area colleges, especially Austin Community College (ACC), to offer college-level courses on high school campuses, through distance learning or on college campuses, with transportation provided by the district. An additional challenge is to enroll more minority students in AP courses and improve the percentage of students taking and passing AP courses. One option to consider is double-block classes in courses with the lowest pass rates to give students more time to master the curriculum. Attention should be given to improving the rigor of all AP courses and to preparing teachers to teach the courses to AP standards.

Work to gain industry certification for all CATE programs and expect students to take and pass the appropriate certification exam as the criteria for successful completion of the program. All CATE teachers should attain industry certification as a requirement for teaching the course.

Students will demonstrate and understand the skills and knowledge to successfully enroll in postsecondary education, access financial aid, transition into the workforce, and be successful in a variety of jobs and careers.

Findings: The majority of AISD seniors completed a set of academic core subjects that are not aligned with successful readiness for postsecondary studies, according to student survey findings. Forty-one percent completed four years of mathematics, including Algebra I and higher, 30 percent completed four years of college-preparatory English and 54 percent completed three lab-based college-preparatory science courses. The district's highest performing high schools based on TAKS pass rates and SAT scores had the greatest percentage of students who completed the curriculum described above. A third of the 2003 high school graduates completed the Minimum Graduation

Program. The senior year is being underutilized to prepare students for postsecondary education or a career with many students taking a light course load and leaving school after the fifth period.

Achievement gaps on TAKS tests are wide between white and minority students. In 2004, pass rates for white students were 80 percent or above for all tests and in the eleventh grade pass rates ranged from 93 to 96 percent for the four tests. Pass rates were considerably lower for all minority groups, dropping as low as 30 percent for African-American students in tenth-grade science and 33 percent in ninth-grade mathematics.

Very few students complete a concentration of mathematics and science, humanities or career/technical studies beyond the academic core. Sixty-two percent of seniors surveyed said they had not completed a concentration. Twenty percent of the survey respondents had completed a CATE concentration. For the most part, CATE programs do not currently offer students a coherent sequence of courses that would allow them to complete a concentration in a specific career field.

There is little application of academic concepts in CATE classes to build students' technical literacy. Students who are expected to read and analyze information in their field of study and to use mathematics, science and technology to solve typical problems found in the workplace perform at higher levels than those for whom this is not an expectation.

Recommendations: There are four critical first steps to take that will address this goal. First, raise graduation requirements to include four college-preparatory mathematics courses. Expect all students to meet that requirement along with other requirements currently specified for the Recommended or Distinguished Achievement diplomas. Second, require students to complete a concentration. Set a five-year goal to have at least 20 percent of high school graduates complete a mathematics and science concentration and another 20-30 percent complete a humanities concentration. The remaining students should complete a career/technical concentration.

The third action is to develop a master plan for career clusters, based on the U.S. Department of Education's career clusters, and a number of concentrations within each cluster. Work to align all programs with those offered at ACC or other area colleges. This action will also facilitate an increase in the number of students who graduate with some college credit.

Fourth, make technical literacy the focus of all CATE classes to improve students' academic skills, their retention of knowledge and their ability to work independently.

Provide students meaningful, engaging, challenging and real-world assignments aimed at deepening subject matter understanding and retention.

Findings: The district has developed sound standards, but the standards have not been moved into the curriculum in many classrooms. Further, many teachers are not using a range of research-based teaching standards to challenge and engage students. There is little evidence of widespread use of real-world assignments and almost no cross-curricular projects and activities in classrooms. Most seniors surveyed had not had a combination of experiences that represented an intensive emphasis on literacy, numeracy or science. The experiences measured have been proven to result in higher student

achievement. Twenty-three percent of the students had intensive numeracy experiences; 18 percent had intensive literacy experiences; and 16 percent had intensive science experiences.

Recommendations: Having standards will not do the job unless they are moved into classroom instruction. The first job is to launch a district-led effort to train school and teacher leaders in a process for looking at teacher assignments, student work and assessments against proficiency standards. Consider adopting the NAEP framework of basic, proficient and advanced level work as the basis for the development of rubrics to use in the process.

Expand professional development on research-based teaching strategies, aligned to school plans. Use teacher study teams, model classrooms, mentorship arrangements and district workshops to address professional needs given a high priority by schools. Adopt literacy goals and train all teachers on using reading and writing strategies to deepen students' learning in all subject-matter areas.

Take actions to get entering ninth-graders who are below state standards ready for challenging high school work.

Findings: The number of Austin students who enter high school unprepared for challenging high school work is 50 percent or greater at Lanier, Johnston, Reagan and Travis, based on the scores of 2003-04 freshmen on the eighth-grade TAKS exams in mathematics. At the first three schools, a third or more of the students failed to meet eighth-grade reading standards. Districtwide more than a third of students did not meet the mathematics standards and 17 percent did not meet the reading standards.

Students' problems continue in ninth grade. Failure rates in Algebra I in 2002-03 at five district high schools – Crockett, Akins, Lanier, Johnston and Travis – ranged from 45 to 65 percent. Four high schools – Johnston, Lanier, Reagan and Travis – had failure rates in English that exceeded 30 percent. Only 54 percent of ninth-grade students across the district met TAKS standards in mathematics in 2004. Seventy-seven percent of ninth-graders met reading standards – a better result, but still indicating that almost a quarter of students need additional help in this area.

During the school visits, the teams saw little evidence of efforts to address the problems of ninth-grade students. There were no special summer programs for low-performing entering students and few special ninth-grade classes.

- Recommendations:** The district needs an intensive emphasis on high school readiness to include
- A summer bridge program between the eighth and ninth grades for students who have failed to meet eighth-grade TAKS standards.
 - Ninth-grade catch-up courses to help students pass college-preparatory ninth-grade English and Algebra I.
 - Small learning communities with teacher teams who have time in their schedules to plan joint lessons and interdisciplinary units.
 - A support class to teach students essential habits of success.
 - A formalized process for middle grades and high school leaders and teachers to work together to identify readiness skills for high school work.

Enroll students in courses with high expectations and provide necessary extra help and support to enable them to meet rigorous standards.

Findings: The district has adopted a guiding philosophy that effort leads to ability, but many teachers have yet to adopt it. Evidence of high expectations such as expecting students to work hard to meet high standards, revise their work and complete homework daily are not required by more than about a third or less of teachers districtwide. Only 28 percent of seniors said it was essentially important to do well in high school.

Although about two-thirds of Austin seniors surveyed reported that teachers at their schools were frequently available to help them, about 40 percent felt that they were not always able to get extra help when they needed it. The system of extra help at most schools is funded primarily from outside sources and serves only a small segment of the student population who might need it. No plans appear to be in place for how to continue the programs once outside funding ends.

Recommendations: The district can encourage more teachers to make the extra effort to help students meet high standards through the adoption of certain district policies that communicate commitment to high achievement. District policies on the level of work required to earn an A or B, homework and revision of work to meet standards are among those that might be considered. The system of extra help available at district high schools needs to be expanded and strengthened to help students meet course standards. This may require the allocation of additional resources to fund programs beyond school hours and a revision of school schedules to provide time for extra support during the school day.

The district could train teachers on how to use student study teams. These teams have been found to be effective in raising student achievement and making reaching high standards “an in thing” for students.

Set a clear vision and provide strong leadership and staff support to foster continuous improvement.

Findings: For the most part, teachers, students and parents were complimentary of their school administrators, especially the principals. Yet, over and over we heard teachers express their desire for more involvement in decisions regarding their school. The high schools are still operating under the old philosophy of the principal as the Lone Ranger – the one totally responsible for the school’s vision, overall achievement, adoption of new programs and goals and the way the school is perceived in the community. It is a job that is far too big for any one person!

A number of schools are in the early planning stages of moving to small learning communities. In some cases, progress has been held back while waiting for a grant from the U.S. Department of Education’s Smaller Learning Communities Program.

The seven-period, 50-minute schedules that all district high schools operate on is a deterrent to implementation of many practices that have proven to be effective in raising student performance.

Teachers are found to become burned-out quickly if they have more than two preparations daily. Common planning time is more difficult to achieve. There is less instructional time available for project work, labs, interdisciplinary activities and teamwork. Teacher lecture becomes the easiest way to transmit a lot of information in a short time. Teachers see at least 120 students a day and are less likely to get to know these students personally.

Recommendations: There are several recommendations that work together to address this challenge. First, the district could establish its own Leadership Academy to train teams from each school to work together to address issues at their school. Over a three-year period, the teams can tackle the challenges outlined in their individual school reports and take actions to involve their entire school in the process.

Second, one of the first challenges each team may want to address is how to organize their school into small learning communities. Suggestions in this report on the development of career clusters can be used as an organizing framework by many of the schools. It is important that small learning communities not be used as a way to organize students into groupings by perceived ability.

Third, we strongly recommend that the district study a number of models for providing larger instructional blocks of time and arrive at one that will work best for AISD. In addition to addressing the disadvantages of the current schedule, a new schedule can facilitate the ability to create small learning communities, allow more time for extra support services during the school day and expand the number of credits students can take during high school.

Conclusion

In this report, we have outlined a comprehensive improvement plan for the district. We urge members of the Board of Trustees and district officials to give careful consideration to the challenges we discuss in more detail in the full body of the report. Further, *High Schools That Work* is prepared to provide additional information and support services as the district considers the recommendations we have made. It will take considerable time and effort to carry out the actions we have outlined. Yet as progress is made the district will see improvements in practices and achievement, even as it faces challenges of a changing population mix and higher expectations for every administrator, teacher, student and parent.

Findings and Recommendations

This report takes an in-depth look at the challenges the district faces and how they might be addressed to accomplish the performance goals specified in the Board of Trustee's Results Policy #3. First it is important to enumerate those things that the district is doing right.

The district is moving in the right direction.

The district is making progress on a number of performance indicators including:

- On the 2004 Texas Assessment of Academic Knowledge and Skills (TAKS), student performance in every tested area is up. Except for ninth-grade scores at Johnston High School, every high school increased or had no change in the percentages of students meeting the state standards on all tests.
- On the Scholastic Aptitude Test (SAT), the college admissions exam most widely taken by Austin students, the district's mean composite score has remained fairly consistent and is well above both state and national averages.
- The percentage of students completing more rigorous Recommended and Distinguished Achievement diploma programs has risen from 58 percent in 2002 to 66 percent in 2003. The percentage of students completing the two diploma programs has risen at seven of the 11 high schools, based on 2003 graduation data. (Since Akins High School graduated its first class in 2003, no comparative data are available for the school.)
- Ninth-grade course failure rates are high but have been reduced in three of the four academic content areas from 2002 to 2003.

There is a new standards-based curriculum and help on how to teach it.

The district developed curriculum standards based on the Texas Essential Knowledge and Skills (TEKS). Standards for language arts, mathematics, science and social studies are available on a Web site accessible to teachers. Instructional Planning Guides (IPG) have been developed by teachers to provide guidance on:

- Pacing instruction;
- Research-based best instructional practices that have been adopted by the district, based on the Institute for Learning's *Principles of Learning*;
- Instructional resources;
- Assessment strategies;
- Descriptions of student work that meets standards; and
- Teacher notes for specific core academic courses.

The IPGs are organized by subject and grade level, with segments for each six-week grading period.

The Board of Trustees has set performance goals.

The broad goals outlined in Results Policy #3 establish clear expectations. To add more specificity, the Board adopted a set of indicators to address the goals.

The Institute for Learning's *Principles for Learning* guide instruction.

Teachers, principals, and central office instructional leaders are expected to form communities of learners and to become leaders of learning. The framework includes a set of organizational characteristics, leadership competencies and research-based *Principles of Learning*. Through implementing the framework, the district and schools are learning to make continuous improvements in classroom instruction and instructional leadership a key expectation at every level of the organization. School leaders are expected to routinely use the *Principles of Learning* to create an effective learning environment, conduct learning walks to assess teaching quality, provide instructional coaching for teachers, and analyze student work.

The district has a vision for quality and relevant CATE programs.

The district recognizes the need to expand access to coherent sequences of quality career/technical courses in high-demand career fields that are benchmarked to postsecondary standards. The intent is to work with ACC and other postsecondary institutions and employers to create seamless programs that result in many more students leaving Austin high schools with postsecondary credits and with long-term career goals. By expanding access to a variety of CATE programs, the district will prepare students to make informed decisions about their futures.

Several effective extra-help programs are in place.

During school visits, team members heard high praise for Project ADVANCE, AVID and Gear Up programs. The challenge is to extend the benefits of these programs beyond the small groups they currently serve to ensure that all students who need additional support receive it.

The district believes that effort creates ability.

The district's greatest strength is the belief that almost all students can achieve at higher levels if schools create the conditions that motivate students to make the effort. Imbuing this guiding philosophy of effort in every teacher and every student at every school will make the most difference in whether students succeed or fail. An effort-based system of education promises each student the assistance necessary to meet rigorous achievement standards.

The challenges and recommendations in this report build on these strengths.

Challenges Facing the District

To accelerate progress on stated goals, SREB found that the district and high schools face seven major challenges. They include:

- Give all students access to a rigorous academic core and a focused area of in-depth study.
- Improve transitions from the middle grades to high school and from high school to college.
- Improve the quality of instruction and raise standards and expectations.
- Align CATE offerings to postsecondary and industry standards and enroll more students in these programs.
- Create a strengthened education and career advisement program through a teacher advisement system.
- Strengthen the support system to help struggling students.
- Develop strong building-level leadership teams involving administrators and teacher leaders.

Based on the visits to each of the schools and the completion of extensive interviews and the student survey, some campuses have made greater progress than others in meeting these challenges. While there are wide differences in student achievement from school to school, none of the schools has addressed any of these challenges to the level required to eliminate it from the list. Even at those schools that have the best standardized test scores and exemplify evidence of many good practices, minority students – who are the majority at many AISD high schools – are performing significantly lower than white students. **The future quality of life for the city and state hinges on raising the educational level of all students.**

This section addresses each of the seven challenges and provides a rationale for each and recommendations to address the challenge.

Challenge 1: Give all students access to a rigorous academic core curriculum and to a focused area of in-depth study.

There are four issues to consider in an evaluation of the district’s curriculum. First, what are students expected to take; second, how rigorous are the courses; third, where are the gaps in achievement for different groups; and fourth, do students complete an in-depth area of study.

What are students expected to take?

The district has three diploma options for students – the Minimum, the Recommended, and the Distinguished Achievement Programs. The district has decided to make the Recommended Program the minimum requirement for all future graduates and its schools have made progress in increasing the percentages of students completing this program. Yet, in 2004, 14 percent of students district wide participating in the student survey said they would complete the Minimum Program and only 10 percent said they expected to complete the Distinguished Achievement Program. **A minority student or a student from a poor family is at least twice as likely to complete the Minimum Program and five to eight times less likely to complete the Distinguished Achievement Program.** (See Table 1.)

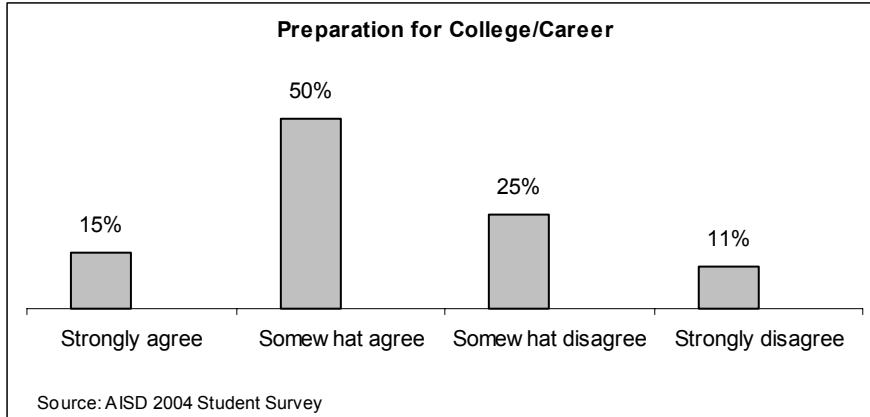
Table 1 Graduation Program Expected To Be Completed by 2004 AISD Graduates							
Type of Graduation Program	Total AISD	Race/Ethnicity				**Socio-Economic Level	
		African-American	Hispanic	White	*Other	Low	High
Minimum	14%	16%	18%	7%	10%	19%	9%
Recommended	76	80	78	73	69	79	74
Distinguished Achievement	10	4	3	20	21	2	17

*Other includes American Indian, Asian and Hawaiian Pacific Islander.
 **Defined by mother’s educational level as a high school graduate or less.
 Column percents within each demographic group may not sum to 100 percent due to rounding error.
 Source: AISD 2004 Student Survey

For the past 18 years, *HSTW* has conducted a biennial assessment of seniors at its network schools. Students take tests in reading, mathematics and science that are linked to the tests administered by the National Assessment of Educational Progress (NAEP). Those results are matched to courses students took in high school. Over time, results indicate that the single most important predictor of student achievement in high school is the courses taken. The more rigorous the courses; the higher students’ achievement.

One important goal that AISD has set for its high schools is to prepare students for successful admission to and success in college. The survey of district seniors found that more than a third did not believe they were prepared for this experience just weeks before high school graduation. (See *Figure 1.*)

Figure 1
High School Courses Successfully Prepared Student for College/Career



How rigorous are the courses?

Team observations during school visits found that core academic courses classified as regular courses are not rigorous enough to prepare students for postsecondary study without many having to take remedial or developmental courses. Extensive use of drill sheets, low-level questioning and teacher lecture dominated instructional practices in many of these classes. The lack of rigor helps to explain why some students who have taken the right courses still fail to perform at high levels.

AISD requirements for the three graduation programs are shown in Table 2. These program requirements are less rigorous than the those recommended by *HSTW*, which are:

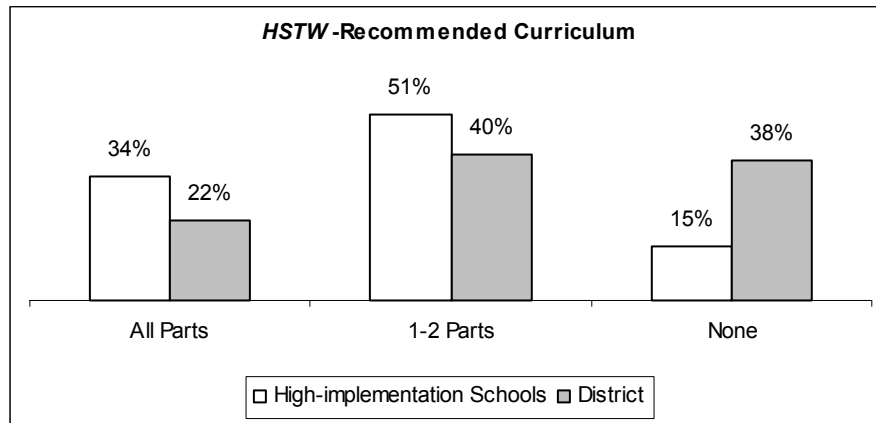
- Four credits in college-preparatory/honors English;
- Four mathematics credits, including Algebra I, geometry, Algebra II and above;
- Three science credits at the college-preparatory level;
- Three years of college-preparatory social studies; and
- Mathematics in the senior year.

Academic Core	Distinguished	Recommended	Minimum
English/Language Arts	4.0	4.0	4.0
Mathematics (must include Algebra I, Algebra II and Geometry)	3.0 [#]	3.0 [#]	3.0 [*]
Science (must include Biology and Integrated Physics and Chemistry)	3.0	3.0	2.0
Social Studies	3.5	3.5	2.5
Languages other than English	3.0	2.0	0.0
Advanced Measures	4	n/a	n/a
Other requirements and electives	7.5	8.5	10.5
Total Credits	24	24	22

Source: AISD Secondary School Information Guide, Section 3.
[#]Algebra I, Algebra II and Geometry required. ^{*}Algebra I and Geometry required.

Twenty-two percent of AISD students completed the *HSTW*-recommended curriculum compared to 34 percent of career/technical students who completed this curriculum at high-implementation¹ *HSTW* high schools.² (See Figure 2.) An African-American or Hispanic student is more than twice as likely to **not** have completed the *HSTW*-recommended curriculum. In comparison, 81 percent of students in the Distinguished Achievement Program completed all of the *HSTW* curriculum components and 87 percent of students in the Minimum Program completed none of the components. (See Table 3.)

Figure 2



Sources: AISD 2004 Student Survey; 2002 *HSTW* Assessment Report

Implementation <i>HSTW</i> -Recommended Curriculum	Total AISD	Race/Ethnicity				Graduation Program		
		African- American	Hispanic	White	*Other	Minimum	Recom- mended	Distin- guished
All parts	22%	15%	11%	40%	30%	1%	18%	81%
One to two parts	40	40	41	39	50	13	49	18
None	38	46	48	21	20	87	33	1

*Other includes American Indian, Asian and Hawaiian Pacific Islander.
Source: AISD 2004 Student Survey

In 2004, the majority of AISD seniors completed a set of academic core subjects that are not aligned with successful readiness for postsecondary studies. For example:

- 41 percent completed four years of mathematics, Algebra I and higher compared to 53 percent at high-implementation schools;

¹ In a number of areas, the experiences of Austin students are compared to those of students at a group of 50 **high-implementation high schools** in the *HSTW* network that have most fully implemented the *HSTW* key practices. (See Appendix 10 for the key practices.) The high-implementation schools had 20 percent African-American students, 14 percent other minority and 66 percent white. All groups of students, regardless of racial and socioeconomic backgrounds had significantly higher achievement if they were in high schools that had more fully implemented the *HSTW* design.

² Students at *HSTW* schools had completed a career/technical concentration of four credits in a planned career sequence. AISD students were representative of all seniors.

- 30 percent completed four years of college-preparatory/honors English compared to 55 percent at high-implementation schools; and
- 54 percent completed three lab college-preparatory level science courses compared to 71 percent at high-implementation schools.

AISD schools will continue to sort students into high- and low-level academic courses until a major effort is undertaken to improve middle grades and high school transition that result in preparing more students for higher-level academic courses by the middle of grade nine. At present, many students are taking a mathematics course the senior year to make up for a mathematics course failed in grade nine. Yet, many of these students will need five years of mathematics – one catch-up course in grade nine plus four credits Algebra I and higher – to get them mathematically ready for college and a good job.

Data from the AISD Student Survey show that the district’s highest performing high schools based on TAKS pass rates and SAT scores are the schools with the greatest percentage of seniors reporting that they had completed the *HSTW*-recommended curriculum. Districtwide 22 percent of students completed all parts of the recommended curriculum. However, the five schools with the highest SAT scores and the highest percent taking the SAT in 2003 had the highest percentages of students who had completed all parts of the recommended curriculum. These schools were also among the top performers on the 11th grade TAKS tests in 2003 and 2004. Although other factors also contribute to the higher performance of students at these schools, it is clear that one compelling reason is that students at these schools are taking more rigorous courses. (*See Table 4.*)

	<i>HSTW</i> * All parts met	% Taking 2003 SAT**	2003 SAT Composite**	2003 11 th Grade TAKS All Tests*** Met Standards	2004 11 th Grade TAKS All Tests*** Met Standards
LBJ	68	73	1128	66	76
Austin	46	74	1108	63	83
Anderson	40	77	1137	57	92
McCallum	23	74	1091	58	84
Bowie	21	75	1068	57	87
Travis	19	26	819	22	56
Crockett	14	47	953	52	67
Lanier	11	36	895	42	47
Johnston	11	32	954	18	40
Reagan	10	33	801	22	34
Akins	6	36	954	24	65
District	22%	57%	1045	48%	72%

Sources: *2004 AISD Student Survey; **2003 SAT Composite Scores provided by AISD District Office (Percentages taking SAT derived from senior enrollment data). ***www.austinisd.org/about/accountability/taks/index.phtml.

Where are the gaps in achievement?

TAKS results speak to course rigor. All high schools had increases in passing rates except for a decline in reading for ninth-grade students at Johnston High School. Six of the 11 district high schools still had pass rates for one, two or all grade levels that were below 50 percent. (See Table 5.) Four high schools had a pass rate on TAKS in 2004 of 30 percent or less in grade nine – Travis, Reagan, Lanier and Johnston High Schools – while five high schools had between 37 and 65 percent – Akins, Austin, Crockett, LBJ and McCallum. The ninth grade is a problem for all high schools.

High School	9 th Grade		10 th Grade		11 th Grade	
	2004	2003	2004	2003	2004	2003
Anderson	82%	72%	74%	63%	92%	57%
Bowie	82	76	71	61	87	57
McCallum	65	58	55	55	84	58
Austin	63	63	61	57	83	63
LBJ	59	57	54	51	76	66
Akins	43	29	26	23	65	24
Crockett	37	35	36	31	67	52
Travis	30	25	24	19	56	22
Reagan	29	17	21	9	34	22
Lanier	28	23	22	22	47	42
Johnston	25	29	15	13	40	18
District	52	45	45	10	72	48

Source: www.austinisd.org/about/accountability/taks/index.phtml.
 *One standard error of measurement below the State Board Panel's Recommendation.
 (2003 scores re-calibrated to 1 SEM).

Despite the commendable progress the district made in student performance on the TAKS tests from 2003 to 2004, the gaps are wide between minority and white students. The district goal of getting more students through high school and prepared for college and career depends on successfully addressing certain achievement gaps. First, at grades nine and 10, the district has a major challenge to close the achievement gaps in mathematics for all groups of students. At grade nine, the percentage of students failing to meet standards was 46 percent for the district – 20 percent white; 67 percent African-American; 61 percent Hispanic and 65 percent for economically disadvantaged. At grade 10 a similar pattern exists. (See Table 6.)

Second, at grade nine and 10, the district has a challenge to close the achievement gap in reading and English, especially for African-American, Hispanic and socio-economically disadvantaged students with between one-third and 45 percent failing to meet state standards.

Third, at grade 10, the district has a challenge to close the achievement gap in science for all groups of students. The percent of students failing to meet state science standards in 2004 was 42

percent for the district – 14 percent white; 70 percent African-American; 60 percent Hispanic and 67 percent for economically disadvantaged students. (See Table 6.)

Achieving the twin goals of raising achievement and increasing graduation rates depends upon making significant progress in closing the achievement gaps.

Table 6 Students Meeting Standards on TAKS* District Performance by Ethnicity and Economic Disadvantage 2004 and 2003						
Grade/Test	State	District	White	African American	Hispanic	Econ. Disadvtg.
Grade 9						
Reading						
2004	84%	77%	94%	67%	67%	64%
2003	75	67	88	56	54	52
Mathematics						
2004	59	54	80	33	39	35
2003	53	49	76	25	33	27
Grade 10						
English						
2004	75	71	86	56	60	55
2003	70	64	81	53	51	46
Mathematics						
2004	63	59	84	34	42	36
2003	60	58	81	35	41	34
Science						
2004	64	58	86	30	40	33
2003	55	53	79	28	34	27
Social Studies						
2004	87	83	95	72	73	69
2003	79	76	92	63	63	59
Grade 11						
English						
2004	87	88	96	81	81	77
2003	69	60	69	50	49	49
Mathematics						
2004	85	81	93	62	72	67
2003	68	66	82	44	51	46
Science						
2004	97	83	95	68	72	67
2003	90	67	85	42	53	49
Social Studies						
2004	85	96	99	95	93	91
2003	67	89	95	82	83	80
Source: www.austinisd.org/about/accountability/taks/index.phtml . *One standard error of measurement below the State Board Panel's Recommendation. (2003 scores re-calibrated to 1 SEM)						

Do students complete an in-depth area of study?

A strong academic or career focus is essential to motivate students to work hard to connect high school to their futures. All students need to select a concentration of high interest for in-depth study that opens up vistas of opportunities for them. Students can select one of three concentrations:

- Mathematics and science concentration – four credits in each field, with at least one course at the Advanced Placement level
- Humanities concentration – four credits each in college-preparatory level language arts and social studies, with at least one course at the Advanced Placement level and four additional credits from areas such as foreign language, fine arts, journalism
- Career/technical concentration – four credits in a planned sequence of courses within a broad career field such as pre-engineering, health/medical science, culinary arts and arts/audio/visual technology

Almost two-thirds (62 percent) of Austin seniors participating in the student survey did not complete a concentration. Of those who did, 20 percent were completing a CATE concentration, 21 percent a humanities concentration and five percent a mathematics and science concentration. Seven percent of the students surveyed expected to complete two concentrations. **White students were almost twice as likely to complete a concentration as Hispanic students and almost three times as likely as African-American students.** Eight-five percent of students in the Distinguished Achievement Graduation Program had a concentration compared to only 24 percent of students in the Minimum Program. (See Table 7.)

Number of Concentrations	Total AISD	Race/Ethnicity				Graduation Program		
		African-American	Hispanic	White	*Other	Minimum	Recommended	Distinguished
None	62%	80%	72%	42%	43%	77%	64%	15%
One	31	16	25	44	43	23	30	60
Two	7	4	3	14	15	1	6	25
Three	0	0	0	1	0	0	0	0

*Other includes American Indian, Asian and Hawaiian Pacific Islander. Column percents may not sum to 100 percent due to rounding error.
Source: AISD 2004 Student Survey.

Two conclusions emerge from these findings. First, a very high percentage of students have not found a niche in high school that would motivate them to continue in further study. Second, the high percentage of minority students who have no concentration suggests that they will be locked out of high-paying jobs in high-demand fields such as health care, medicine, engineering and teaching where there are shortages.

Recommendations:

1. Expand academic core requirements to four credits in mathematics for both the Recommended and Distinguished Achievement Programs and continue to phase out the Minimum Program. This change in the mathematics requirement will have several positive results:

- It will increase the rigor of the senior year since students will be expected to take a mathematics course.
- More students will enroll in advanced level courses, including courses that provide college credit, thus improving their preparation for higher education.
- Students who are behind can enroll into double periods of mathematics in grade nine and if necessary in grade 10, to close the achievement gap on state TAKS mathematics tests.

2. Require an academic or career/technical concentration beyond the academic core. Set a goal to increase the percentage of students completing a mathematics and science, humanities or career/technical concentration each year until 85 percent of all graduates complete a concentration. Set a five-year goal to have at least 20 percent of high school graduates complete a mathematics and science concentration and another 20 to 30 percent complete a humanities concentration, with the remaining students completing some type of career/technical concentration.

3. Augment the language arts curriculum. An intellectually demanding curriculum aligned to standards places certain demands on students. Change requirements to expect all students to:

- **Read the equivalent of eight or more books a year** and demonstrate understanding of the content.
- **Write a short paper each week** that is evaluated against a common rubric developed by the district.
- **Complete a major research paper annually.**

These requirements are fundamental to making students independent learners and raising their achievement.

4. Phase out non-college preparatory courses and expect all courses to meet college-preparatory/honors course standards. The lack of rigor in many regular academic courses was observed in all the school visits. To achieve this recommendation, the district will need to develop a process to review student assignments, student work and classroom assessments to determine if they are sufficiently rigorous to be considered college-preparatory.

5. Enroll more poor and minority students in AP and other more rigorous academic classes as one way to close achievement gaps for college readiness and state TAKS standards. There is clear evidence, as previously illustrated, that these students are most likely to be in courses that lack rigor. This recommendation will be addressed when all courses meet the same high standards. In the interim, take these actions to increase enrollments and success:

- **Implement a campaign to reach parents of these students as they enter high school** with information about the importance of a rigorous curriculum. This will result in more encouragement from home and increase the percentage of minority students who select more demanding courses.

- **Ask parents' support in encouraging more students to enroll in pre-AP classes** that will put them on the path to success in AP classes.
- **Consider enrolling students who might need more time to meet AP standards in 90-minute block classes**, taught by trained teachers. The goal is to get the success rate of minority students on AP exams up to the same levels as those of white students.
- **Increase, during the next three years, the ratio of AP courses in each high school to the current district average of AP courses for every 50 junior and senior students enrolled and double the percent of minority students represented in AP courses.**

(We will discuss the middle grades to high school transition in Challenge 2 and the career/technical concentrations in more depth in Challenge 4.)

Challenge 2: Improve transitions from the middle grades to high school and from high school to college and career.

Middle Grades to High School

AISD has high percentages of students who are not ready for a challenging program of studies when they enter high school. Mathematics is the biggest challenge for students, based on eighth-grade TAKS scores. However, large percentages of students fail to meet standards on reading and language arts exams. They continue to struggle in ninth grade as evidenced by high failure rates and as noted earlier by the high percent of students failing to pass the ninth grade TAKS exam.

Ninth-grade failure rates are disturbingly high at all district high schools.

Across the district, the overall ninth-grade failure rates dropped slightly in 2002-2003 compared to 2001-2002 in every area except Physics/Chemistry. However, the failure rates are alarmingly high. The failure rates in 2003 were 34 percent in Algebra I, 62 percent in physics/chemistry, 29 percent in biology and 25 percent in English. The district has a middle grades to high school transition problem. As with other findings, failure rates are much higher for minority students than for white students. **Five of the district high schools in 2002-2003 had failure rates in Algebra that ranged from 45 to 65 percent** – Crockett, Akins, Lanier, Johnston and Travis High Schools. Four high schools had failure rates in English that exceed 30 percent – Johnston, Lanier, Reagan and Travis High Schools. Bowie has failure rates that are substantially lower than any of the other high schools in the district. (See Table 8.)

Table 8 Ninth Grade Failure Rates in Academic Core (2002-2003) by School				
School	% Fail Algebra	% Fail English	% Fail Biology	% Fail Physics/ Chemistry
Crockett	65%	23%	28%	44%
Johnston	54	47	48	82
Akins	48	23	28	67
Lanier	47	41	54	79
Travis	45	42	39	64
Reagan	36	35	31	73
Austin	25	18	20	72
LBJ	24	22	61	48
McCallum	23	21	21	66
Anderson	21	15	17	59
Bowie	8	7	9	65
District	34	25	29	62

Source: AISD District Office, Department of Program Evaluation.

High ninth-grade failure rates result in a big reduction in the percentage of students who are able to graduate on time. This is an issue that requires serious attention district-wide. A comparison of the number of freshmen at a school to the number of graduates four years later shows how successful schools are in keeping students on track. It also reveals problems with middle grades to high school transition.

Many students in this year’s freshman class were not prepared for high school.

TAKS results show that many students had not met eighth-grade standards when they entered high school. One-fourth or more of entering freshmen at four schools had not met the reading standards and at seven schools one-fourth or more fail to meet the mathematics standards. Even at high schools with the best results, there were a significant number of students who had not met standards. District wide minority students had lower performance than white students with more than 50 percent of African-American students failing to meet mathematics standards and 48 percent of Hispanic students compared to 13 percent of white students. (See Tables 9 and 10.)

Table 9 2003 Eighth-Grade TAKS Scores for 2003-2004 Freshmen Percentage of Students Who Met Standards by School		
School	% Met Mathematics Standard	% Met Reading Standard
Lanier	44%	67%
Johnston	46	68
Reagan	46	69
Travis	50	74
Crockett	58	83
Akins	60	82
LBJ	71	88
McCallum	75	89
Austin	78	90
Bowie	86	98
Anderson	87	94
District	65	83
Source: AISD District Office.		

Table 10 2003 Eighth-Grade TAKS Scores of 2003-2004 Freshmen Percentage of Students Who Met Standard By Ethnicity									
	State	District	African American	Hispanic	White	Native American	Asian	Male	Female
Reading	89%	83%	74%	74%	96%	87%	96%	81%	85%
Mathematics	73	65	45	52	87	73	83	65	65
Social Studies	93	93	85	85	97	100	98	89	92

Source: Texas Education Agency. Academic Excellence Indicator System, 2002-03 District Performance.

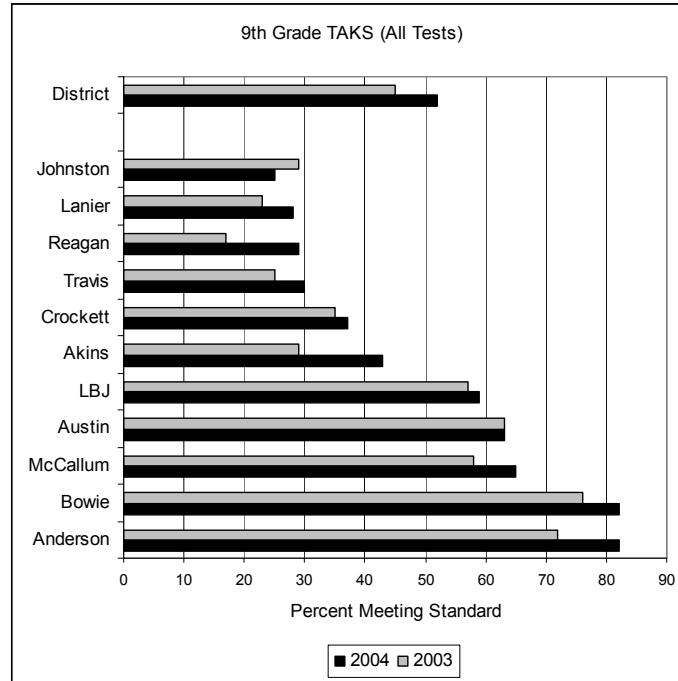
Performance on the ninth-grade TAKS tests in both reading and mathematics improved from 2003 to 2004 for all ethnic groups and for students classified as economically disadvantaged. However, the percentages of students meeting the mathematics standards is still extremely low – less than 40 percent – for all minority groups and for economically disadvantaged students. (See Table 11.)

Table 11 Texas Assessment of Knowledge and Skills (TAKS) 2003 - 2004 Percentage of Ninth-graders Meeting 2004 Standard*						
Grade/Test	State	District	White	African American	Hispanic	Econ. Disadvtg.
Grade 9						
Reading						
2004	84%	77%	94%	67%	67%	64%
2003	75	67	88	56	54	52
Mathematics						
2004	59	54	80	33	39	35
2003	53	49	76	25	33	27

*One standard error of measurement below the State Board Panel's Recommendation. (2003 scores re-calibrated to 1 SEM)
Source: AISD Web Site. www.austin.isd.tenet.edu

All but one district high school – Johnston – had increases in the percentages of ninth-grade students meeting TAKS standards in 2004. (The performance of students at Austin remained the same as in 2003.) Low performance on the tests still remains a problem, especially at nine district high schools where 80 percent or less of students failed to meet standards on one or both of the ninth-grade tests in 2004. (See Figure 3.)

Figure 3
9th Grade Students Meeting TAKS Standards
2003-2004



Source: www.austin.isd.tenet.edu

Many Austin seniors do not think they were prepared for high school.

The student survey revealed that many seniors did not think they were well prepared by their middle grades schools for high school studies as freshmen. They felt best-prepared in reading and least-prepared for science, writing and mathematics. Hispanic students were much less likely than white students to state that they were prepared. Students in either the Minimum or Recommended Programs also were less likely to feel they had been prepared for high school than students in the Distinguished Achievement Program. (See Table 12.)

Very Well Prepared for: High School:	Total AISD	Race/Ethnicity				Graduation Program		
		African-American	Hispanic	White	*Other	Minimum	Recommended	Distinguished
Reading	55%	62%	48%	65%	33%	44%	53%	78%
Writing	38	43	34	44	31	32	37	55
Mathematics	40	31	36	48	59	27	39	69
Science	35	29	30	44	40	32	33	55

*Other includes American Indian, Asian and Hawaiian Pacific Islander.
Column percents within each demographic group will sum to more than 100 percent due to the four categories of content.
Source: AISD 2004 Student Survey

Freshmen needs are not being addressed effectively.

The visits to schools revealed that there are not adequate programs to address the lack of readiness for high school of large numbers of freshmen. None of the schools have summer programs to address deficiencies in academic and study skills. Efforts to provide extra help during the freshman year were generally inadequate. Most of the schools do not have a planned curriculum that increases time in mathematics and English/reading to get at-risk students prepared for challenging high school work. A few schools have addressed the need for freshmen to develop study and time management skills and other habits of success that they will need throughout high school. Yet efforts are limited and not adequate to meet the needs of many freshmen.

Recommendations:

To close gaps in achievement and state standards by the end of grade 10, implementation of the following recommendations are imperative:

1. Offer a four- to six-week summer bridge program. A concerted effort is needed across the district to identify middle grades students most at risk of failing a challenging high school curriculum in grade nine. This includes students who fail to meet state standards on eighth-grade tests in reading and mathematics and those who are just above the standards threshold. **Require students who fail TAKS or had poor grades in the middle grades to participate in this program.** Schools could re-administer eighth-grade exams at the end of the program to determine the percentages of students who have attained levels sufficient enough to enroll them immediately into challenging courses.

The programs are typically offered for four to six hours each weekday for six weeks. Instruction is provided by outstanding ninth-grade language arts and mathematics teachers and involves a great deal of active student participation. Students use computers to complete assignments and take field trips to area businesses to learn how their school work can prepare them for careers.

2. Provide freshmen catch-up courses for students who are not ready for high school work. Design an 18-week 90-minute per day catch-up course for students who are not ready for college-preparatory Algebra I or college-preparatory English. Consider using SREB's high school readiness indicators for college-preparatory language arts and Algebra I to guide the design of these catch-up courses. Select the best teachers to teach the courses and provide them at least a week-long summer institute to plan a series of standards-based lessons. Allow these courses to count as elective credits, but not toward language arts and mathematics credits needed for high school graduation. Once these courses have been developed, a similar catch-up course can be developed for science. For the second 18-week period students meeting standards through these catch-up courses would be enrolled in a college-preparatory English and/or Algebra I course.

3. Establish ninth-grade small learning communities at all schools. Four high schools have ninth-grade teacher teams that meet regularly for joint planning to discuss student progress. Three

other schools reported plans to start ninth-grade small learning communities if they received the necessary support.

Advantages of ninth-grade SLCs include:

- Teams share common students and have common planning time for cross-curricular activities.
- A team of teachers gets to know each student.
- Teacher advisers in the SLC provide additional support to students during this crucial year.
- Students' problems are identified more quickly and the appropriate help provided sooner.

Allow teacher teams flexibility to adjust the schedule to meet student needs for larger blocks of instructional time in some areas.

4. Develop a support class for students at risk of failing. Many students who enter high school lack essential habits they need for success. (*See Appendix 4.*) for a listing of some essential Habits of Success that these courses would be designed to develop.) Use this class to help students understand and apply these habits for success in their courses. Help students to learn how to study in teams to complete assignments given by their language arts, mathematics and science teachers. The class will teach students to apply study skills and to support each other in meeting course standards.

5. Expect middle grades and high school leaders and teachers to work together to identify readiness skills for high school work. During the team visits, leaders at almost all schools reported that some work had been done on vertical curriculum alignment with middle grades schools. However, efforts were fragmented and sporadic. The district must lead an effort to identify those essential readiness indicators of what students need to know and be able to do to complete Algebra I, college-preparatory English and a rigorous science course in ninth grade. The district may want to use the indicators that have been developed by SREB as a beginning guide.

Once the district reaches agreement on the indicators, extensive effort will be required to assist middle grades' faculty to realign mathematics, language arts and science curriculums in grades six through eight to assure that students can master these indicators. **The district will need to launch a series of summer institutes to bring middle grades teacher teams together for the purpose of rethinking what they are teaching, at what level they are teaching it, how they are teaching it, and the rigor of their assignments and assessments.** The goal will be to ensure that students can meet standards on the eighth-grade TAKS tests and leave middle grades ready to succeed in challenging high school work.

6. Consider an audit of middle grades schools similar to the one conducted for the high schools. An in-depth look at the curriculum, instructional methods and other practices at these schools may reveal many significant findings to explain why so many students are not prepared for high school.

7. Ensure that the district goal that all students will leave grade eight either having completed Algebra I or being ready to take it in the ninth-grade is met. This will require substantial training of teachers in mathematics content and methods. Using Web-based instruction and other approaches with incentives can upgrade middle grades mathematics instruction.

High School to College/Careers

The senior year is being underutilized to get students ready for college and careers.

Instead of functioning as a rest stop, the senior year should become a launching pad for what lies ahead. In Austin, for many students this is not the case.

SAT scores reveal that many students are not ready for college.

Mean composite scores of AISD students on the SAT remained above state and national averages in 2004. However, the mean composite score dropped by 11 points between 2001-2004 while the percentages of students taking the tests have increased from 53 percent in 2001 to 59 percent in 2004. Composite scores for each high school in 2004 were not available at the time this report was prepared. Mean SAT scores for six AISD high schools in 2003 were below district, state and national averages – Travis, Crockett, Lanier, Johnston, Reagan and Akins. As a general rule, students who score below 900 on the SAT would need to take remedial courses at a community college before beginning postsecondary work which represents about 13 percent of the Austin students taking the SAT. However, it is expected that most of the 41 percent of students who did not take the SAT would also have to take remedial courses. Students with scores below 1000 on the SAT may not be ready for college work at a senior level college or university which would mean that 35 percent or more might have to take remedial or development courses at a senior college. (See Table 13.)

Year	% Taking SAT	SAT Composite Score	Texas	Nation
2004	59%	1032	992	1026
2003	57%	1045	993	1026
2002	55%	1041	986	1020
2001	53%	1043	987	1020

Sources: AEIS Indicators Reports for 2001-2003. 2004 senior enrollment data provided by the AISD district office. 2004 College Board. College Bound Seniors, A Profile of SAT Program Test-Taking

College-going rates are extremely low at some district high schools.

AISD was not able to provide information on the number of graduates entering postsecondary education or on the percentages of students enrolled in remedial studies. Information on the number or percentages of AISD graduates enrolled in remedial courses at ACC was not available from ACC. Information provided to team leaders during campus visits showed that the college-going rates at the lowest-performing high schools are extremely low. For example, at Johnston the Project ADVANCE counselor reported that 27 percent of the 2003 graduating class went on to some kind of postsecondary education.

Three-fourths of the seniors across the district expressed the intent to go straight from high school to some type of postsecondary education. (*See Table 14.*) Yet when students' expectations are compared to their high school's SAT composite score, many students from six of the 11 Austin high schools are not ready for college.

Table 14 Percentage of Students Planning College Compared to College Readiness		
School	Percentage Going to College*	2003 SAT Composite**
Austin	91	1108
Anderson	89	1137
Bowie	85	1068
LBJ	85	1128
McCallum	79	1091
Lanier	71	895
Akins	70	954
Crockett	68	953
Reagan	67	801
Travis	65	819
Johnston	57	954
District	75%	1045
Sources: *AISD Student Survey; **AISD district office provided SAT data by high school.		

Less than half of seniors report earning college credit in high school.

Offering students the opportunity to earn college credit in high school is one way to increase the rigor of the senior year and to start students on a journey of postsecondary study. Austin students who take college courses in high school pay no tuition – a benefit unknown to most Austin seniors. The result is low participation in courses for college credit.

Data from the student survey show that less than half of the participating seniors were enrolled in any type of course for college credit. White students and students pursuing the Distinguished Achievement Program were more likely than minority students to be enrolled in these courses. Also, students from low socio-economic backgrounds were less likely to be enrolled in courses for college credit. (See Table 15.)

Number of Credits Earned	Total AISD	Race/Ethnicity				Graduation Program			
		African-American	Hispanic	White	*Other	Low SES	Minimum	Recommended	Distinguished
None	54%	71%	59%	42%	36%	61%	69%	57%	11%
One to Three	21	17	21	21	18	22	17	21	27
Four to Nine	13	6	9	21	23	9	4	12	36
10 to 15	6	2	5	9	13	3	4	5	18
16 or more	6	3	5	7	10	5	6	5	8

*Other includes American Indian, Asian and Hawaiian Pacific Islander.
Source: AISD 2004 Student Survey

Of those who were earning college credits, 43 percent earned the credits by taking AP courses. Less than 20 percent of students earned credit either by attending classes at a community or technical college or through a joint enrollment course. Earning credit through a Web-based course or by attending classes at a four-year college was extremely rare. (See Table 16.)

Students Earned College Credit by:	District
Taking Advanced Placement courses.	43%
Attending classes at a community or technical college.	17
Taking a joint-enrollment class at the high school for college credit.	16
Taking a Web-based course.	9
Attending classes at a local four-year college.	7

Source: AISD 2004 Student Survey.

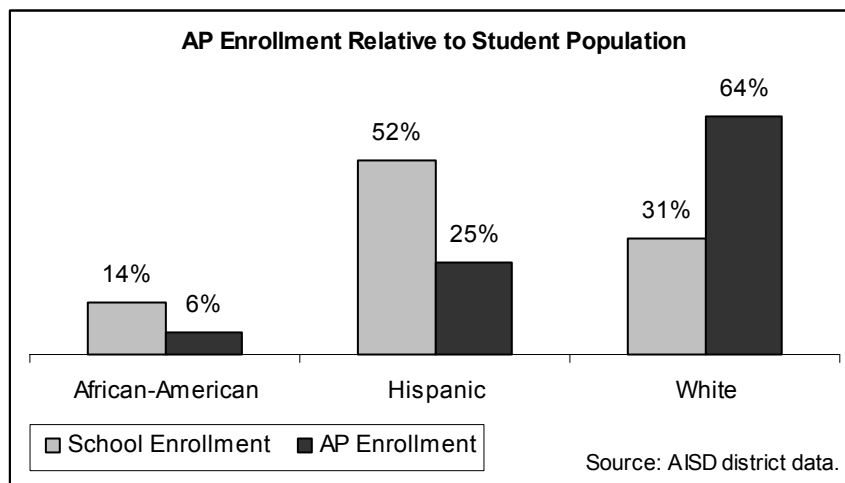
In the fall of 2003, there were 6,569 enrolled in 164 AP courses across the district. Schools with the highest achievement on the SAT and TAKS exams were also the schools with the highest enrollments in AP courses. The number of junior and senior students for every AP course ranged from 34 at LBJ to 83 at Lanier not taking into account the number of sections offered for each course. (See Table 17.)

School	Ratio of Jrs./Srs. to AP Courses**	Number of AP Courses*	Total AP Enrollment*	% African-American*	% Hispanic*	% White*
Lanier	83	8	149	9%	69%	19%
Travis	81	9	292	2	76	20
Crockett	59	15	652	7	35	55
Bowie	57	20	659	2	12	78
Johnston	53	6	145	10	87	3
Akins	51	15	516	9	53	34
Reagan	51	9	168	50	45	3
Austin	43	21	826	2	11	85
Anderson	41	21	728	3	10	80
McCallum	38	19	1,288	4	12	83
LBJ	34	21	1,146	7	17	64
District	50	164	6,569	6	25	64

Sources: *AISD district data. **Ratio derived from Fall 2003 junior/senior total enrollment and number of AP courses.

AP enrollment across the district does not mirror the student population. **The percentage of white students taking AP courses is twice their population rate in the district, and the percentage of Hispanic students in AP courses is one-half their population rate.** (See Figure 4.) The percentage of African-American and Hispanic students enrolled in AP courses was less than their population rate at each school, with the exception of Hispanic students at Johnston and Lanier and African-American students at Reagan.

Figure 4
District AP Course Enrollment by Race/Ethnicity of Student Population



In 2003, Austin students took a total of 4,795 AP exams, and the pass rate was 54 percent districtwide. This number of exams includes duplicate counts for students who earned credit in more than one AP course; data were not available to the team that determine how many individual students earned AP credit. (See Table 18.)

Only two high schools, LBJ with its magnet school and McCallum, had pass rates equaling two-thirds or more of the exams administered. Anderson and Lanier had pass rates of 63 percent. Five schools had pass rates below 50 percent. In addition, at least three of the schools (Johnston, Reagan and Travis) had very low numbers taking the exams compared to the size of the school.

School/District	Pass Rate	Total Exams
LBJ	72%	797
McCallum	67	488
Anderson	63	718
Lanier	63	235
Austin	53	754
Bowie	52	737
Johnston	33	40
Reagan	32	75
Crockett	31	413
Alkins	27	335
Travis	11	176
District	54	4,795
Source: AISD District Data		

Recommendations:

1. Use the senior year to get students ready for college and careers and provide a jump start on college. Several actions are part of this recommendation:

- **Require all seniors to take a mathematics course.** Students who have completed other mathematics requirements might take pre-calculus or statistics as seniors.
- **Give the ACC placement exam to all juniors.** Use the results to determine which students are and are not ready for college-level work.
- **Enroll seniors who pass the placement exam into joint enrollment courses.** Most students who pass the exam can earn three to nine college credits during the senior year and be better prepared for postsecondary education.
- **Enroll seniors who fail the placement exam in readiness classes.** Work with ACC instructors in language arts and mathematics to design special courses to get students ready for postsecondary studies. Arrange a one-week institute in the summer of 2005 to help language arts and mathematics teachers prepare to teach the courses. Contact SREB for examples of such courses that are being field-tested at selected high schools this year. Re-administer the placement exam at the end of the year to see how the courses worked.
- **Enroll students planning to go to work in programs that will prepare them for high-skill, high-demand jobs and lead to industry certifications.** This action will require a partnership with ACC in order to provide students access to high-quality CATE studies the senior year. Assist each student, with parent involvement, to determine his/her interests and aptitudes and to

choose a field of study. Get parents' commitments that students will remain in their chosen programs even beyond graduation until they can earn some type of recognized credential such as industry certification, or a certificate from a community college or an apprenticeship program. This action will require the district to form partnerships with area colleges or private vocational schools and use Web-based courses. The program needs are discussed in more detail in Challenge 4.

2. Expand dual credit course offerings. Taking the following actions is a way to increase course options and enrollments:

- Designate someone as a **dual credit coordinator in each school.**
- **Identify postsecondary academic and CATE courses to offer that** address student needs and complement career clusters and academic concentrations available at each school.
- **At the district level, work with ACC and other area colleges to develop curriculum and assessments.** Reach agreement that students who pass the final exam will earn college credit.
- **Identify more teachers to teach dual credit courses.** Either use high school teachers who can meet college certification or arrange for community college teachers to teach courses on campus.
- **Use distance learning** to offer courses that cannot be made available on every campus. Address technical difficulties that have prevented their use for instructional purposes.

3. Expand AP course offerings, especially in mathematics and science and improve AP pass rates.

- **Designate a district coordinator for AP.** This person would work with high schools to build their capacity to offer AP and pre-AP courses.
- **Conduct a district audit of all AP courses** to identify gaps and to make sure that they are being taught to AP standards. Look at the wide disparity in the number of courses and types of courses available at each school. A number of schools have limited AP mathematics and science courses and/or low enrollments.
- **Make adjustments to courses that do not meet AP standards.**
- **Provide AP training to all teachers** on intellectually challenging and engaging teaching strategies.

Challenge 3: Improve the quality of instruction and raise classroom standards and expectations.

The most rigorous, standard-based curriculum will fail if it is not implemented through classroom learning activities, teacher assignments, student work and exams. A number of outstanding teachers used standard-based instruction and research-based instructional methods at each of the 11 schools. However, many teachers did not use a standards-based approach to teaching. Instructional activities were not engaging and challenging and the level and quality of instruction was uneven from class to class in every school. The district has high standards and has provided planning guides to help teachers move the standards into the curriculum. Yet much work and much planning remains to be done before all teachers know how to move standards into the curriculum and do it with assignments, instructional activities and assessments that are geared to getting all students at least to the basic levels and increasing percentages at the proficient and advanced levels.

Efforts to review teacher assignments, student work and assessments against standards are limited.

Some efforts are underway to review instructional activities, teacher assignments, student work and assessments against district standards but more is needed. Based on school visits and discussions with teachers and school leaders, certain actions that would improve instruction were not evident.

- Teachers with expertise in research-based teaching practices are not being utilized to help other teachers in their schools acquire these skills.
- Too little joint curriculum and instructional planning time among teachers who teach the same course is being used to look at teacher assignments, student work and assessment items to see if they are aligned to the standards and are at the levels that result in all students performing at the basic level with increasing percentages at the proficient and advanced levels.
- Few interdisciplinary learning teams exist where teachers who have common students are working together on thematic units and projects that will help students see connections among their classes.

Many students do not have experiences that would improve their literacy skills.

Through its assessment activities, *HSTW* has identified literacy indicators that are linked to higher achievement. Teachers who know how to engage students in reading, writing and talking about the language of their disciplines not only enhance students' reading and writing skills, but they also deepen students' understanding of the subject matter. Students who experience across all classes an intensive emphasis on using literacy strategies for learning have higher achievement than students who have moderate or little emphasis on literacy. Austin seniors participating in the survey were asked whether they had these experiences. **It is apparent that many teachers in Austin high schools are not engaging students in reading and writing for learning in their subject matter area.** (*See Table 19.*)

Indicators of Literacy	District	High-Implementation Schools
Students...		
Complete short writings for English class monthly .	77%	77%
Often use word processors to complete assignments.	61	61
Sometimes or often write in-depth explanations.	53	66
Sometimes or often discuss topics with other students.	53	63
Read a book outside of class monthly .	47	40
Complete short writings for social studies class monthly .	43	48
Often revise written work for quality.	37	48
Complete short writings for science class monthly .	25	39
Read technical materials in class monthly .	23	64
Read for two hours or more outside of school weekly .	15	24

Source: AISD 2004 Student Survey; 2002 HSTW Assessment.

Forty percent of AISD students experienced a low emphasis on literacy in their classes. (See Table 20.) Students in the Distinguished Achievement Program are most likely to be in classes with a high degree of emphasis on reading and writing for learning. **Many high school academic and career/technical classes are not taught in ways that involve students deeply in learning the language of the various disciplines.** Yet once students begin working, they will be expected to use reading and writing skills frequently to carry out their responsibilities, in virtually all careers.

Emphasis on Literacy	Total AISD	Race/Ethnicity				Graduation Program		
		African-American	Hispanic	White	*Other	Minimum	Recommended	Distinguished
Intensive (7 to 10 indicators)	18%	16%	17%	22%	13%	7%	18%	39%
Moderate (4 to 6 indicators)	42	47	38	45	63	35	44	44
Low (0 to 3 indicators)	40	37	46	34	25	58	39	16

*Other includes American Indian, Asian and Hawaiian Pacific Islander.
Column percents within each demographic group may not sum to 100 percent due to rounding error.
Source: AISD Student Survey

Mathematics – Austin students say “it’s not for me!”

Mathematics in too many Austin classrooms is taught as a “deadly” subject, unrelated to science, career/technical studies and other subjects. **Only five percent of AISD students surveyed this past spring had completed a mathematics and science concentration** – four credits in each subject with

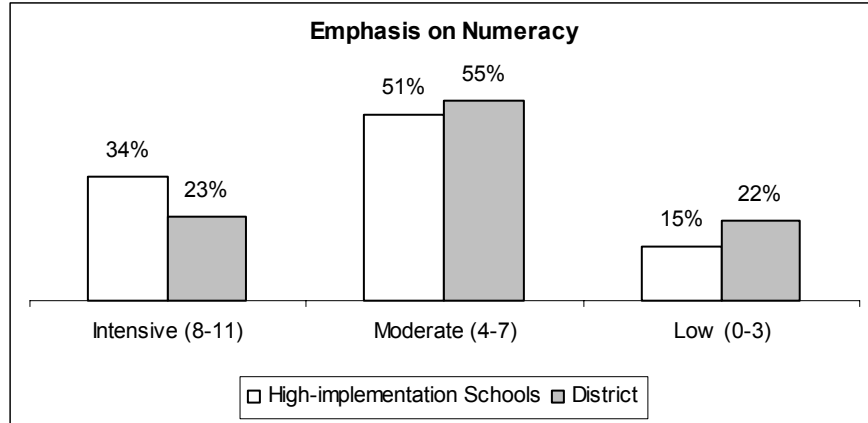
one course at the Advanced Placement level. Forty-two percent of Austin students took four or more mathematics courses – a sharp contrast to the 71 percent who do so at high-implementation schools. Mathematics is the area in which students experience the most difficulty and perform at the lowest levels on TAKS exams. Yet mathematics achievement at the end of grade 12 is one of the best predictors of students’ earnings at age 25. It is evident that too many students are taking too little mathematics and that it is taught in ways that are not engaging and that fail to give students a reason for learning these skills and concepts. Most career/technical teachers teach in ways that fail to engage students in demonstrating understanding of mathematics concepts and reasoning skills so essential in completing workplace projects and tasks.

HSTW research has revealed that the following numeracy experiences make the most difference in improving students’ mathematics achievement. Less than half of the students surveyed reported working at least monthly with other students to solve mathematics problems. Yet holding a group of students accountable for assisting each other to master mathematics procedures and concepts, and understanding and developing reasoning skills improves performance and interest in mathematics. A third or less of the students had the type of real-life experiences that are necessary to deepen understanding and help students see the relevance of mathematics to careers. These experiences included solving work-related problems, explaining processes used to solve problems and using mathematics to complete career/technical assignments. (See Table 21.)

Indicators of Numeracy	District	<i>HSTW</i> High-implementation Schools
Students...		
Use a graphing calculator at least once a month.	87%	78%
Take mathematics the senior year.	68	73
Have mathematics teachers sometimes or often show them how mathematics is used in real-life.	63	74
Solve problems with more than one possible answer at least once a month.	62	71
Solve problems outside the textbook at least once a month.	61	71
Work in groups to brainstorm how to solve problems at least once a month.	52	60
Work with others on assignments at least once a month.	45	51
Take four or more mathematics courses.	42	71
Solve work-related mathematics problems at least once a month.	34	35
Orally explain mathematical processes used to solve problems at least once a month.	26	34
Use mathematics in their CT assignments at least once a month.	16	56
Sources: AISD 2004 Student Survey; 2002 <i>HSTW</i> Assessment.		

Twenty-three percent of students surveyed reported having a combination of experiences that indicates an intensive emphasis on numeracy while 22 percent experienced a low emphasis on numeracy. (See Figure 5.)

Figure 5
Level of Emphasis on Numeracy



Sources: AISD 2004 Student Survey; 2002 *HSTW Assessment*.

Student survey findings and observations during team visits showed that in far too many instances students' science instruction is about memorizing facts and definitions. Only 25 percent of Austin students completed three of the following science courses that *HSTW* has found advance student achievement – college-preparatory physical science, Biology I and II, anatomy/ physiology, chemistry and physics. Not only are Austin students not getting the right science content, the classes they do have are not engaging students in doing science. Only about 25 percent of students reported doing science labs weekly with assignments where they conduct a study and write up their findings, and only one-third of the students reported have science concepts and essential questions related to real-life situations. (See Table 22.)

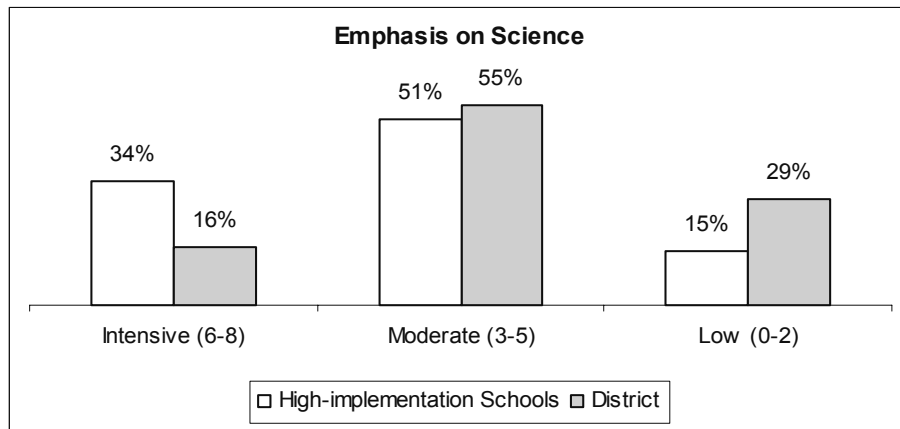
Table 22
Science Experiences
Austin Seniors Compared to Seniors at *HSTW* High-Implementation Schools

Indicators of Science	District	<i>HSTW</i> High-implementation Schools
Students...		
Used science equipment to do science activity in the classroom at least monthly .	68%	77%
Worked with one or more students in classroom on challenging science work at least monthly .	64	74
Took science senior year.	60	67
Prepared a written report on science project at least monthly .	52	53
Had science teachers who often showed how scientific concepts are used in real-life situations.	33	39
Read an assigned book (other than text book) or article dealing with science at least monthly .	33	44
Used science equipment to do science activities in a lab with table and sinks weekly .	26	41
Completed at least three of the following: science courses (CP physical science, CP biology, Biology II, anatomy, CP chemistry, Physics).	25	35

Sources: AISD 2004 Student Survey; 2002 *HSTW Assessment*.

Sixteen percent of students reported having an intensive emphasis on science compared to 34 percent at *HSTW* high-implementation schools while 29 percent experienced a low emphasis compared to only 15 percent at *HSTW* high-implementation schools. (See *Figure 6*.) The most important differences in the science experiences of Austin students compared to students at *HSTW* high-implementation schools were experiencing science labs, taking the right science courses, reading science related articles and linking science to real-life situations all of which provides a context for retaining science skills and content.

Figure 6
Level of Emphasis on Science

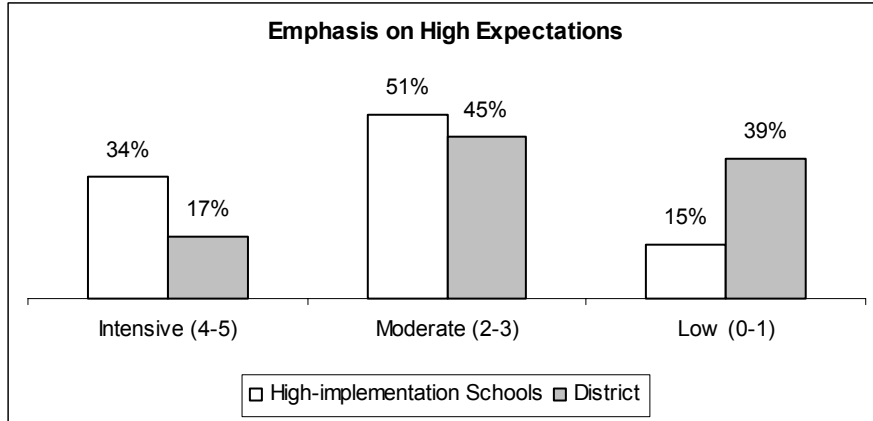


Sources: AISD 2004 Student Survey; 2002 *HSTW* Assessment.

Effort leads to ability – it’s a guiding philosophy that many teachers have yet to adopt.

The district believes that effort leads to ability. Yet, the schools have not communicated this belief to students through classroom and school practices of high expectations and a supportive environment. For example, only 17 percent of the students said yes to four or five of the indicators regarding the school’s emphasis on high expectations while more than a third were in classrooms where they experienced no more than one of the high expectation indicators. (See *Figure 7*.) More than one-half of the students are in classrooms where expectations are not clearly defined for earning an A or a B. Only a fourth of the students reported completing one or more hours of homework daily, yet effort is a primary basic for improving achievement. Just slightly more than a third said they often had to work hard to meet high standards or revise written work. The only indicator where AISD students’ responses closely matched those of students at *HSTW* high-implementation schools was that teachers are frequently available for extra help. (See Table 22.)

Figure 7
Level of Emphasis on High Expectations



Sources: AISD 2004 Student Survey; 2002 *HSTW* Assessment.

Table 23
Indicators of Emphasis on High Expectations

Indicators of High Expectations	District	* <i>HSTW</i> High-implementation Schools
Teachers frequently are available for extra help.	65%	66%
Teachers often indicate the amount and quality of work required for an "A" or a "B".	44	56
Students often revise their written work.	37	48
Students often work hard to meet high standards.	35	55
Students do one or more hours of homework daily.	25	32

Sources: AISD 2004 Student Survey. 2002 *HSTW* Assessment.

Recommendations:

1. **Move standards into classroom instruction.** While the district has clear, comprehensive standards, in many classrooms observed instruction is textbook-driven not standards-driven. To move standards into the classroom, the following actions should be taken:

- **Train school and teacher leaders on how to move standards into instruction.** Provide intensive support to build their capacity to design standards-based lessons and instructional units, create teacher assignments aligned to standards, look at student work against standards and design assessments to determine students' mastery of the standards. Develop a common protocol to be used for these purposes.
- **Develop common rubrics for evaluating the quality of assignments, student work and assessments against proficiency standards.** Consider adopting the NAEP framework of basic, proficient and advanced levels of work as the basis for developing the rubrics. (*See Appendix 5 for an example.*)

- **Teach school and teacher leaders how to use the rubrics.**
- **Conduct a district-level audit of lesson plans, assignments, student work and assessments.** Have leadership teams from each school collect examples of these materials and use them to conduct this audit. Train leadership teams from each school to do the audit and in each case have them review materials from other schools without identification. As a result of the audit, determine if collected instructional units and lessons, assignments, student work and assessments are linked to standards. Also determine what percentages of assignments and exam items are at the below basic, basic, proficient or advanced levels. Prepare a report for each school based on the review.
- **Ask school leadership teams to conduct their own audit.** Once the district has completed its audit review, ask school teams to complete the same type of audit during the next grading period and to report the results at a district meeting. The goal is to raise awareness about how to align instructional units, assignments, student work and assessments to proficient level standards that will ensure that students meet the standards at levels necessary to pursue further study and get good jobs.

2. Require professional development on research-based teaching strategies, aligned to school plans. Give schools the flexibility to identify strategies they will focus on after pinpointing areas where students are performing below standards. Needs vary from school to school and from one subject area to another, but all schools must move aggressively to provide needed professional development. It may be necessary for the district to allocate additional resources to support this effort. Several actions will improve teachers' use of these strategies including:

- **Create teacher study teams at each school to work together on improving instruction.** The teams will determine what they can do to improve the knowledge and the use of research-based instructional practices such as project-based learning, questioning techniques, independent research and cooperative learning. Also ask teams to review teacher assignments, student work and assessments to better align instruction and assessment to standards.
- **Encourage schools to use job-embedded opportunities for professional development** such as model classrooms where experienced, innovative teachers demonstrate instructional strategies for observation by others.
- **Develop mentorship arrangements** where skilled experienced teachers provide one-on-one assistance to new and struggling teachers.
- **Hold districtwide workshops** aligned to instructional improvement goals. Seek input from schools about areas of need before deciding on topics for these events.

3. Adopt literacy goals. To complement the district's literacy goals related to TAKS test performance, the following additional five goals will expand on them:

- Students read the equivalent of 25 books per year across the curriculum.
- Students write weekly in all classes.
- Students write research papers in all classes.
- Teachers use reading/writing strategies to enhance learning in all classes.
- All students to complete a rigorous language arts curriculum taught to college-preparatory honors standards with at least three student requirements that include: 1) complete short writing assignments weekly; 2) read eight or more books annually and demonstrate understanding; and 3) complete a major research paper annually.

4. Train all teachers on using reading and writing strategies to deepen students learning in their subject area. When the amount of reading and writing that students are expected to complete in all classes increases, achievement in these areas will rise accordingly. In the 12th-grade language arts IPG, there is a statement that students should be expected to read at least a half-hour a day outside of class. Yet only 15 percent of seniors surveyed said they read as much as two hours or more outside of school weekly **in all classes**. During school visits, teams found very few teachers using literacy strategies to engage students in reading and writing about the language of the discipline studying as a way to improve achievement. Taking the following actions to address this recommendation:

- **Ask each school to name a literacy coach.** The individual can be a former English teacher or someone who is skilled in the use of reading and writing to advance learning.
- **Use a trainer to prepare all literacy coaches for their roles.**
- **Expect literacy coaches to train faculty.** Another way to provide the necessary training is by using the Web-based course on reading and writing across the curriculum developed by SREB. (*See Appendix 6 for a description.*)

5. Ask mathematics, science and career/technical teachers to work together to align instruction. Take the following actions to address this recommendation:

- **Ask science and career/technical teachers to do a week-by-week mapping** of the standards they will be teaching and the major mathematics concepts and skills students will need to know and be able to apply to carry out the assignments.
- **Share the results with mathematics teachers** to make sure that instruction is planned so that concepts have been covered in mathematics class before students are expected to apply them in their science and career/technical classes. This process will deepen students' understanding by giving them opportunities to apply them shortly after they have learned them.
- **Use Perkins funds to plan summer institutes** for teams of mathematics, science and career/technical teachers from the same school to plan integrated units, lessons and projects as a way to enhance mathematics, science and technical achievement.

The SREB guide, *Teaching for Understanding*, can be helpful in implementing this process.

6. Study ways to use time more effectively to improve the quality of instruction, student achievement, teachers' instructional planning and student/teacher relationships. The seven-period day used by Austin high schools restricts teachers as they try to incorporate more teamwork, projects and independent study into the curriculum. It forces teachers to rely on lecture and drill sheets as the most efficient way to deliver instruction.

The district should consider a schedule providing larger blocks of instructional time. There are a number of benefits to a block schedule in addition to the greater amount of instructional time it provides such as it:

- **Expands the number of credits students can take** to 32 and makes it possible to implement a four-year mathematics and science requirement.
- **Decreases the number of daily teacher preparations** to no more than three thus curbing teacher burnout and improving the quality of their planning.
- **Makes it possible for teachers to get to know students better and build relationships with them** because the number of students they interact with daily is reduced.

- **Makes it easier to provide common daily planning time for teachers** within and across discipline areas that allows them to connect what is going on in their classrooms.
- **Makes it possible to organize the high school into small learning communities** where students take a challenging academic core and choose a focused area of study in mathematics, science, career/ technical or humanities.
- **Facilitates the creation of adviser/advisee time.** Larger blocks give more flexibility to add additional activities into the schedule.
- **Allows schools to double dose freshmen who are not ready for challenging high school work** in mathematics and language arts. This enables these students to stay on track to graduate from high school in four years.
- **Provides time for a freshmen career exploratory course and a support class course to help students set goals and acquire essential study skills and other habits needed to complete challenging high school studies.** Students can complete these additional courses and still meet all other freshman requirements.
- **Provides time to shift science from textbook-centered courses to lab-based inquiry courses.**
- **Shifts instruction from teacher-centered to one that engages students in learning.** There is more time for implementation of independent study, project-based learning, integrated projects and interdisciplinary units.

Consulting with Dr. Lynn Canady of the University of Virginia, a nationally recognized expert on block scheduling, will help the district determine the best schedule for Austin. Canady can be reached at (804)924-0861.

7. Develop district policies that establish district standards in areas that demonstrate a commitment to high expectations. Students will take school more seriously when they realize that they are not going to be allowed to get by without doing their best. Strong policies that are adhered to motivate rather than discourage students and establish clear expectations. The following policies are geared to motivating rather than discouraging students and establish clear expectations:

- Set standards for the quality of work necessary to earn grades from A to failing in all classes.
- Require students to “re-do” work to meet standards. Use an A, B or “not yet” grading system.
- Establish a “no tolerance” policy for students who are late for class.
- Establish a homework policy requiring one or more hours a day and make it count toward students’ course grades.
- Require students who are absent to stay after school to make up all work.
- Establish a standard-based system of credit recovery as a way to keep students on course to graduate from high school with their peers.

Establishing policies is only half the job. All school leaders must commit to implement the policies. They in turn must explain the reason for the policies to teachers, students and parents. Everyone needs to understand that these policies are a sign of the district’s and the school’s commitment to high expectations for all students and to their plan to help all students meet the standards.

8. Create student study teams to help ninth- and 10-graders see that learning is important and is a team effort. Provide teacher training on student study teams and expect each school to use student teams to teach students the importance of studying together and learning how to learn from each other to meet course standards. Use the power of the peer group to advance student achievement.

Challenge 4: Expand career/technical education offerings aligned to postsecondary programs, industry standards and labor market demands and enroll more students in these programs.

Most of the career and technical education (CATE) programs in Austin are extremely limited and out of step with the workforce demands of the 21st century. For the most part, they do not focus on preparing students for high-demand, high-skill jobs and they are not aligned to industry or postsecondary standards. With some notable exceptions, they are extremely poor in quality. Why would a student want to enroll in a program that is “dumbed down” and does not lead to a good job, to an employer-recognized credential or to postsecondary credit?

The district recognizes that its programs are below par. Last year it contracted with (ACC) to manage these programs. Under new leadership, there is a vision to make high school career/technical programs part of a coherent sequence that will align high school and postsecondary studies. There are enormous challenges to be met if the district is to have a career preparation program that can benefit every student no matter what his or her ultimate career goal may be. Several problems must be addressed to make the district’s vision a reality.

CATE programs available to students are limited and not well connected to future job projections.

Sixty-one percent of CATE enrollment is in just two broad career fields. (See Table 24.) The first is business and the other art, audiovisual technology and communications. Eighty-five percent of the district’s business careers enrollment is in computer applications, and almost all of the students enrolled in the art, audiovisual, technology and communication cluster are enrolled in audiovisual technology or graphics.

Cluster	Akins	Anderson	Austin	Bowie	Crockett	Johnston	Lanier	LBJ	McCallum	Reagan	Travis	Totals
Agriculture	75	0	0	92	37	0	137	0	0	0	0	341
Business	234	368	583	228	359	285	449	0	374	345	108	3,333
Finance	20	24	0	29	26	0	20	0	0	21	0	140
Hospitality	2	2	3	59	6	40	6	1	4	2	67	192
Marketing	46	96	25	41	34	0	63	0	39	0	37	381
Info. Tech.	25	23	0	0	80	0	82	15	0	1	31	257
Family & Consumer	138	164	75	102	42	67	2	0	106	79	22	797
Manufacturing	0	0	0	25	39	0	69	0	0	0	0	133
Transportation	1	2	17	0	83	70	0	2	3	79	7	264
Health	62	0	0	0	78	0	90	0	0	0	0	230
Arts, A/V Techn. & Graphics	458	117	224	456	254	45	11	115	125	54	572	2,431
Electronics	0	2	0	0	0	0	0	0	0	0	0	2
Cosmetology	0	2	1	0	73	57	64	9	0	0	0	206
Protect, Pub. Serv	0	0	0	0	0	0	149	0	0	0	0	149
Drafting	47	23	34	24	0	0	21	0	21	5	0	175
Technology	49	1	58	0	0	0	106	134	0	0	24	372
Education	22	0	0	0	41	0	0	0	0	0	0	63
Totals	1,179	824	1,020	1,056	1,152	564	1,269	276	672	586	868	9,466

*The clusters shown above correspond to areas in which AISD reported enrollments in fall 2003. Source: AISD district office.

An analysis of labor market demands for the Austin area and the state of Texas revealed major gaps in program offerings when compared to employment needs. The long-term labor projections from 2000-2010 in Table 25 show the top 35 occupations requiring postsecondary education and training that are expected to create the most jobs during the decade. Six areas stand out in this list as offering employment potential that are not being addressed adequately in the district's CATE programs and are prime candidates for expansion:

- **Health and medical science programs** are one of the fastest-growing job areas both in the region and nationally, with nine of the jobs on the top 35 listing for Austin in health services and 12 jobs for the state. CATE health offerings are limited to allied health and Certified Nurse Assistant programs at Akins, Crockett and Lanier. The institute at Lanier offers the potential to expand this program, but that effort will not be adequate to address the range of career possibilities this area offers students.
- **Information technology** is another growth area. Six of the top 35 jobs for Austin and five for the state are in this area. Jobs for computer support specialists are the top high-demand jobs for Austin. The only AISD programs offered in this area are computer networking and computer repair courses at six schools. There are no computer programming or Web design programs and only a handful of students are enrolled in programs offered by companies such as Cisco or Oracle.
- **Manufacturing programs** account for four of the fastest growing new job areas in Austin and for one in the state. Manufacturing programs are almost non-existent in Austin high schools with the exception of a few welding programs. There are no electrical or electronics programs and no pre-engineering programs.
- **Transportation** represents two of the fastest-growing occupations in Austin and four in the state are transportation related. Currently transportation related programs are limited to three automotive programs at Crockett, Johnston and Reagan and an automotive collision repair program at the Texas School for the Deaf.
- **Construction programs** are completely absent from Austin high schools. Since Austin is a growing area with a great deal of new construction, this is an obvious gap.
- **Education and Training** expects to add more than 78,000 jobs statewide for teachers and teachers' assistants. Currently only Akins and Crockett offer CATE courses for education.

Other occupations represented in the top 35 projected new jobs that suggest other areas for possible expansion are paralegal and legal secretaries (part of an expanded emphasis in the area of Legal and Protective Services).

Table 25
Top 35 Jobs Requiring Postsecondary Education or Training
Adding the Most Jobs in Austin and Texas (Projections from 2000-2010)

Job Rank	Austin Jobs	10-year Projection	Texas Jobs	10-year Projection	USDOE Cluster (Austin/Texas)
1	Computer Support Spec./Comp. Sp.(NEC)	3,580	Registered Nurse	35,360	Info. Tech./Health
2	Computer Software Engineers, Syst. Soft.	3,250	Computer Support Spec.	33,490	Info. Tech./Info.Tech.
3	Correctional Officers & Jailers	2,820	General & Operations Managers	29,190	Legal & Protect./Business
4	Computer Software Engineers, Appl.	2,610	Elementary School Teachers	28,490	Info. Tech./Education
5	General & Operations Managers	1,710	Teachers Assistants	25,580	Business/Education
6	Registered Nurses	1,470	Secondary School Teachers	24,230	Health/Education
7	Computer Systems Analysts	1,330	Truck Drivers, Heavy/Tractor-Trailer	23,710	Info. Tech./Transport.
8	Police & Sheriff's Patrol Officers	1,280	Computer Software Engineers, Appl.	23,520	Legal & Protect./Info. Tech.
9	First-Line Supervisors/Mgrs-Retail Sales	1,000	Computer Software Engineers, Syst. Soft.	18,160	Business/Info. Tech.
10	Semiconductor Processor	990	Computer Systems Analysts	17,520	Info. Tech./Info. Tech.
11	Executive Secretaries & Admin. Asst	970	Police & Sheriff's Patrol Officers	16,340	Business/Legal & Protect.
12	Network & Computer Syst. Admin.	960	Correctional Officers & Jailers	15,970	Info. Tech./Legal & Protect.
13	Elementary School Teachers	930	Automotive Service Techn. & Mechanics	11,480	Education/Transportation
14	Teacher Assistants	930	Licensed Practical & Vocational Nurses	10,630	Education/Health
15	Automotive Service Techn. & Mechanics	650	Welders, Cutters, Solderers & Brazers	8,070	Transport./Manufacturing
16	First-Line Suprvs/Mgrs-Construct. Trades	650	Medical Records & Health Info. Techn.	6,120	Construction/Health
17	Truck Drivers, Heavy/Tractor-Trailer	630	Real Estate Sales Agents	4,110	Transportation/Business
18	First-Line Suprvs/Mgrs-Office Support	610	Radiologic Technologists & Techns.	3,330	Business/Health
19	Licensed Practical & Vocational Nurses	460	Hairdressers, Hairstylists & Cosmetol.	3,170	Health/Human Services
20	Medical Records & Health Info. Techn.	350	Emergency Med. Techn. & Paramedics	2,770	Health/Health
21	Real Estate Sales Agents	330	Paralegal & Legal Assistants	2,650	Business/Legal & Protect.
22	Electrical & Electronic Engr. Techn/Rpr.	290	Respiratory Therapists	2,580	Manufacturing/Health
23	Hairdressers, Hairstylists & Cosmetol.	260	Fitness Trainers & Aerobics Instructors	2,560	Human Services/Health
24	Emergency Med. Techns. & Paramedics	200	Semiconductor Processor	2,520	Health/Info. Tech.
25	Radiologic Technologists & Techns.	190	Bus/Truck Mechanics/Diesel Engine Sp.	2,310	Health/Transportation
26	Computer, Auto.Teller-Office Mach. Rpr.	180	Aircraft Mechanics & Service Techns.	2,210	Manufacturing/Transport.
27	Welders, Cutters, Solderers & Brazers	180	Medical Secretaries	2,070	Manufacturing/Health
28	Fitness Trainers & Aerobics Instructors	150	Mobile Heavy Equipment Mechanics	2,070	Health/Transportation
29	Medical & Clinical Lab Techns.	140	Surgical Technologists	2,050	Health/Health
30	Medical Secretaries	140	Medical & Clinical Laboratory Techns.	2,040	Health/Health
31	Architectural & Civil Drafters	130	Dental Hygienists	1,960	Construction/Health
32	Desktop Publishers	130	Legal Secretaries	1,800	Arts, AV/Legal & Protect.
33	Bus & Truck Mechanics/Diesel Eng.Spec.	120	Architectural & Civil Drafters	1,650	Transport./Construction
34	Dental Hygienists	120	Chefs & Head Cooks	1,570	Health/Hospitality
35	Paralegal & Legal Assistants	110	Medical Transcriptionists	1,540	Legal & Protect./Health

Source: Labor Market Information Department, Texas Workforce Commission. *Texas Workforce Long-Term Projections, Occupational Highlights.* (Capital Area and Texas)

Only a few programs offer the coherent sequence of courses needed to complete a concentration.

Students in Austin are taking career/technical courses at random without a career or educational goal in mind. Often they do not see current courses as being linked to good jobs or postsecondary studies. Rather, they may see them as an easy credit and a place to mark time.

CATE programs that will prepare students for high-demand, high-skill jobs require a coherent sequence of at least three courses in the field. Teams found that such sequences were extremely limited in AISD high schools. The student survey findings revealed that 23 percent of the students surveyed had taken at least three CATE courses. These students will be identified as CATE students. **However, only about two-thirds of CATE students had finished three credits in a planned sequence in a broad career field that could be linked to industry standards and postsecondary studies.** One out of three CATE students had no area of concentration, indicating that although they had taken three CATE courses, the classes were not part of a coherent sequence of courses in the same field. (*See Table 26.*)

One out of five CATE students who completed a concentration did so in A/V Technology and Communications and one out of 10 had a concentration in Marketing, Sales and Service. Smaller percentages of students completed a concentration in one of 13 areas. In five areas, only one percent of students had completed a concentration – hospitality; electricity and electronics; community protection; drafting and design; and technology and pre-engineering – and no students completed a concentration in five others – finance; manufacturing; home and commercial repair; construction trades; and education and training.

CATE Program	District
Art, A/V Technology, and Communications	21%
Marketing, Sales, and Services	10
Information Technology	7
Family and Consumer Science	7
General Business Studies	5
Health-Science Occupations	4
Transportation-Related Occupations	3
Cosmetology, Barbering, and Personal Services	3
Agriculture	2
Hospitality, Travel, and Tourism	1
Electricity and Electronics	1
Community Protection and Public Service	1
Drafting and Design	1
Technology and Engineering	1
Finance	0
Industrial and Manufacturing-Related Occupations	0
Home and Commercial Repair-Related Occupations	0
Construction Trades and Related Occupations	0
Education and Training	0
Other Career/Technical Concentration	5
No area of concentration	30
<small>Based on 23 percent of senior students surveyed who had taken at least three CATE courses. Column percentages may not sum to 100 percent due to rounding error. Areas of concentration with zero (0) percent may either be truly zero or rounded down to zero if less than ½ percent. Source: AISD 2004 Student Survey.</small>	

Courses do not integrate reading, writing and mathematics into the curriculum.

Presently, CATE courses are not places where students use academic skills to do authentic projects. School visits and student survey findings reveal that CATE course requirements are not very rigorous. It is clear from the responses that CATE students do not have to do much reading, writing or mathematics in their courses, and only five percent reported that they had to spend much time on homework. (See Table 27.)

Technical literacy – the ability to use academic skills in the context of an occupational field -- is what employers expect today and should be one of the driving purposes of career/technical education courses in high school. About a third or fewer of CATE students reported that they had to complete senior projects, use computer skills to complete assignments, meet standards on a written exam to pass CATE courses or read career-related articles at least monthly. Only 23 percent of students reported that they had challenging assignments at least monthly. In all cases, a much smaller percentage of students had experienced these practices than at the *HSTW* high-implementation schools. (See Table 27.)

Indicators of Technical Literacy	District	HSTW High-Implementation Schools
All CATE Students...		
Completed three* or more credits in CT studies.	64%	92%*
Spoke with someone in a career to which students aspired.	62	75
Planned a project and conducted research to complete it.	39	86
Used computer skills in CT classes at least monthly .	35	68
Had to meet standards on a written exam to pass.	33	77
Read one or more hours of outside reading weekly .	31	44
Required to do a senior project.	30	67
Had challenging CT assignments at least monthly .	23	62
Read career-related articles at least monthly .	22	59
Read technical materials at least weekly .	10	32
Use mathematics at least weekly .	8	27
Spent two or more hours on CT homework daily .	5	n/a
Sources: 2002 HSTW Assessment; AISD 2004 Student Survey.		
*The base for AISD differs—CT students in high-implementation schools have four or more CT credit.		

Providing students with career exploration experiences in high school

One of the goals established in the Board of Trustees' Results Policy #3 calls for giving every student the opportunity to explore and experience a wide range of career options in relation to their interests and experiences. In 2004, 78 percent of Austin seniors had taken one or more CATE courses, and 45 percent had taken two or more CATE courses. One of the goals of CATE courses is to provide students with opportunities to explore broad career fields by using technology in the field to do real-world projects and tasks. **However, since current courses are so poorly aligned to existing workplace opportunities, they provide students a limited view of the world.**

To determine the depth of career exploratory experiences provided to students through CATE and other classes and other related experiences, seniors were asked several questions about how they might learn about career options. (See Table 28.) Few students experienced intensive career exploration opportunities. For example:

- Only 11 percent of seniors had 10-14 of the experiences, indicating an intensive emphasis on career exploration.
- Forty-eight percent had a moderate emphasis on career exploration, by having reported five to nine experiences.
- Forty-one percent of seniors had a low emphasis on career exploration, by having reported zero to four of the experiences.

On-job-site experiences were the most infrequent ways students explored career options. Just slightly more than one-third had ever toured a local business with a group from school, and one-fourth or less reported having a job-shadowing or internship experiences in a local business. The

most common career exploration opportunities were talking with someone in a field of interest, attending a career fair, touring a college department in a field of interest, and completing a career-interest project. The district reports that there are work-based learning programs at eight district high schools but was unable to provide information on enrollments in these programs.

Table 28 Exploration of Career Options	
Types of Exposure to Career Options	District
Students...	
Spoke with or visited someone in a career that student aspires to.	62%
Attended a career fair.	62
Toured a college or university department in a career area in which student is interested.	53
Completed a project in which student did research and prepared a report about a career of interest.	50
Learned how to complete a job application at school.	47
Someone from a local business talked to the class about working at their company.	44
Completed a career awareness inventory at school.	44
Student and parents attended school meeting to talk about plans for after high school.	41
Toured a local business with a group from school.	37
Participated in a career exploration course or other activity where student visited CT departments in the school.	31
Did job shadowing at a local business or industry.	25
Held an internship that helped student explore a career option.	22
Took part in a school contest related to student's CT area.	21
Participated in an apprenticeship program.	15
Source: AISD 2004 Student Survey.	

Limited opportunities currently exist for students to earn postsecondary career/technical credit.

At present, AISD does not have a purposeful system that benchmarks career/technical courses to college standards. There are no agreements on a set of conditions to be met by students that will allow them to earn college credit in high school. The only career/technical course listed by any district high school for college credit in fall 2003 was Business and Computer Information Systems. The district has articulation agreements with some area colleges for tech-prep students. However, students do not accrue credit until they enter the college and pass courses in the first quarter. The district reported that there were 980 senior tech-prep students in fall 2003. The district does not have information on the number of tech-prep students who successfully continue the program in postsecondary education. (See Challenge 2 for information on seniors reporting earning college credit.)

Laboratory facilities are inadequate in many schools to offer the necessary CATE courses.

Quality career/technical programs often require costly equipment and modern facilities. The district does not have adequate laboratory facilities to offer many of the high-demand technology-based programs that are needed. There is limited use for students of the laboratories on ACC campuses.

Programs and students should be industry-certified.

The majority of current CATE programs are not industry certified and only a very small number of students take and pass industry certification exams. Only seven CATE programs have been certified as having a curriculum, facilities and equipment and assigned teachers that meet industry standards. (See Table 29.) The automotive technology programs have offered Automotive Youth Education System (AYES) certification for students for three years. The district CATE director reports that the programs have yet to provide students with summer internship opportunities that would allow them to complete certification requirements. Only cosmetology and health science programs have records of students attempting and earning industry credentials.

Career/Tech. Program	School	Industry Certifying Organization for Credentials	Number of Students who Qualified to Attempt Industry Credential	Number of Students Who Attempted Industry Credential	Number of Students Who Earned Industry Credential
Auto Technology**	Reagan Johnston Crockett	Automotive YES (Youth Education System)	0	0	0
Cosmetology	Lanier Johnston Crockett	Texas State Board of Cosmetology	19	19	13
Auto Collision Repair **	TSD	NATEF	0	0	0
Computer Networking	Lanier Anderson	Cisco 3 A+	2 5	2 5	0 2
Culinary Arts	Travis Johnston Bowie	ProStart National Restaurant Association Credential	0	0	0
Health Science Technology	Lanier Crockett Akins	Certified Nursing Assistant	4	4	4
Public Safety Academy	Lanier	Emergency Medical Technician Texas Peace Officers Training Commission	0 0	0 0	0 0

Source: AISD district office. *Data are the most recent available as of September, 2004.
**Auto Technology, Auto Body and Diesel meet ASE (Automotive Service Excellence) Standards

Recommendations:

1. Make technical literacy the primary purpose of CATE courses. The intent of high school CATE courses is to prepare students for continued learning in both postsecondary and work settings. Technical literacy must become the focus of high school career/technical courses and develop students' ability to:

- Read, interpret, comprehend and analyze information in the field of study.
- Use mathematics to solve the kinds of problems found in the workplace, both at the entry and advanced levels.
- Understand those science concepts and skills that are most important in the career field.
- Understand fundamental technical concepts that are essential for continued learning in the field.
- Use technology to complete work-related projects and tasks.

All CATE teachers must make regular reading and writing assignments, have students solve mathematics problems related to the career field and introduce students to science concepts that underlie the career field of study.

2. Develop a master plan for career clusters and career concentrations for AISD. A career cluster is defined as a broad career field such as scientific research, engineering and technical services. Within that career cluster, a school may have three or four career concentrations such as mathematics and science, pre-engineering and electronics. There will be some common courses that meet the requirements for each of the concentrations and some that are unique to the concentration. Apply the following criteria to determine the best mix of career clusters and concentrations for AISD:

- Focus on career concentrations in high-pay and high-demand fields. Start by looking at job-outlook data.
- Design each cluster to attract a mainstream group of students. Do not create clusters or concentrations that begin to sort students by perceived ability levels.
- Concentrate on programs of study that lead to degrees, whether associate or bachelor, or to a nationally recognized employer certification or state license.
- Include certain career programs because of their generic value in building skills and knowledge that is useful in a variety of occupations.
- Develop career concentrations that will allow students to graduate from any AISD high school with at least six semester hours of college credit.
- Use the U.S. Department of Education's (DOE) 16 career clusters as an organizing framework. These clusters have become the design used by the U.S. Department of Education for small learning communities' grants provided to high schools, community/technical colleges and states. In Table 30 five of the DOE career clusters have been combined into closely related ones for 11 clusters for AISD consideration.

In a separate paper to be provided to the district, job market possibilities will be explored in more depth using projections of workforce needs developed by the Labor Market Information Department, Texas Workforce Commission. Table 30 shows **11 potential career clusters** for AISD.

It will not be possible to offer all clusters at every high school. In the campus visit reports, clusters that seem appropriate for each school were recommended. However, district and school leaders will need to determine which clusters are best offered at each school. Every cluster should offer students the **option of three or four career concentrations**. For example, students intending to pursue postsecondary education and careers in health services would be able to focus their studies in one of four concentrations: 1) general medicine, 2) pre-nursing, 3) medical services and technology, or 4) mathematics and science. A student completing the medical services and technology concentration would take a coherent sequence of courses that would include courses such as Medical Terminology, AP Psychology, Introduction to Clinical Laboratory Science, and Anatomy and Physiology.

(See Appendix 7 for examples of career concentrations that are designed around the DOE career clusters and projected labor demand and linked to postsecondary education or licensure.)

3. Align at least three courses within each career cluster to an associate degree or certificate program offered by ACC or other postsecondary institutions. Select a sequence of courses that would give students an edge in obtaining an employer-recognized credential, passing a state license or employer certification exam or a certificate or associate degree program if they elect to continue postsecondary study. Students who complete a concentration can potentially leave high school with up to nine college credits.

District leaders will need to work with ACC personnel to determine introductory postsecondary courses that can be part of concentrations. The following actions are proposed:

- **Review where current courses fit within a career cluster.** Ask employers and personnel from ACC to look at current offerings to determine what enhancements would need to be made to those courses to meet college standards and be recognized for college credit.
- **Create employer committees for each career cluster.** In addition to employers, the committees should include high school personnel and community college representatives. Use the committees to identify existing associate degree or certificate program courses that could become part of the high school sequence.
- **Develop common course syllabi that identify key standards all students must meet to earn credit.**
- **Have joint committees of high school and community college faculty develop common end-of-course exams.** Give the exam to both high school and community college students taking the course and establish performance standards all students must meet to earn college credit.
- **Determine other conditions that students would have to meet to earn college credit.** These might include having to pass exams for admission to the college prior to enrolling in the course or to receive credit.
- **Decide on qualifications that high school teachers need to have to teach courses for college credit.** Develop a plan to help teachers meet the criteria. One requirement might be to expect teachers who are teaching the courses to pass the exams that students must pass to earn credit for the course.
- **Examine the availability of Web-based courses to expand the range of course options.** Look at criteria students must meet to pass the courses.
- **Develop a flexible schedule that will enable high school students to take approved courses offered by postsecondary institutions after school and on Saturday.**

(See Appendix 8 for examples of career concentrations that are made up of college-level courses. Course descriptions come from the ACC catalog.)

Table 30 describes the proposed possible career clusters based on the DOE framework and areas of concentrations for Austin high schools aligned with ACC degree programs. Although the table shows options only with ACC, programs could be aligned with course offerings at other area colleges, especially in fields where ACC does not offer an alignment option.

The proposed clusters and concentrations include programs in several career fields with high demand where the district currently has no programs or limited options as follows:

- **Manufacturing and Construction Cluster;**
- **Medical Science and Health Services Cluster;**
- **Visual and Performing Arts concentrations;**
- **Engineering, Technical Services and Transportation Cluster;**
- **Legal and Protective Services Cluster;**
- **Human Services Cluster.**

**Table 30
Proposed Career Clusters and Concentrations for Austin High Schools**

USDOE Clusters	Proposed Career Cluster	Concentrations	ACC Degree Programs*
Agriculture & Natural Resources	Agriculture & Natural Resources	<ul style="list-style-type: none"> < Environmental Sciences < Pre-veterinary < Landscaping & Design < Mathematics & Science 	Environmental Science & Technology; General Studies in Science; Pre-Veterinary
Arts, Audio, Video Technology & Communications Services	Arts, A/V Technology & Communications	<ul style="list-style-type: none"> < Communications; Visual & Graphic Arts < Performing Arts (could include specializations in dance, music or theatre) < A/V Technology; Humanities 	Art; Digital Publishing; Drama; Journalism; Music; Radio-Television-Film; Technical Communications; Visual Communication Design
Business & Administrative Services COMBINED WITH: Financial Services Wholesale/Retail Sales & Services	Business, Finance & Marketing	<ul style="list-style-type: none"> < Management < International Business & Marketing; Marketing, Sales & Merchandising < Financial Management & Banking < Accounting < Office Administration; Humanities < Mathematics & Science 	Business Administration; Management; Office Administration; Accounting; Economics; Financial Management; Fashion Merchandising; Marketing
Education & Training Services	Education & Training	<ul style="list-style-type: none"> < Teacher Cadet < Early Childhood Development 	Child Development; General Studies Early Childhood Education
Health Services	Medical Science & Health Services	<ul style="list-style-type: none"> < General Medicine < Pre-Nursing < Medical Services & Technology < Emergency Services < Sports Medicine 	Biotechnology; Dental Hygiene; Emergency Medical Services; Medical Laboratory Technology; Nursing; Occupational Therapy; Pre-Dental; Pre-Medical; Pre-Pharmacy
Hospitality & Tourism	Hospitality & Tourism	<ul style="list-style-type: none"> < Travel & Tourism < Hospitality Management < Culinary Arts; 	Hospitality Management; Culinary Arts; Meeting & Events Planning; Travel & Tourism
Human Services	Human Services	<ul style="list-style-type: none"> < Family & Community Services < Cosmetology < Protective Services 	Addiction Counseling; General Human Services; Social Work; Fire Protection
Information Technology Services	Information Technology	<ul style="list-style-type: none"> < Network Systems < Information Support & Services < Computer Programming & Software Development < Computer Repair 	Computer Information Technology; Computer Science; Electronics
Manufacturing COMBINED WITH: Construction	Manufacturing & Construction	<ul style="list-style-type: none"> < Architectural Drafting & Design < Building Construction & Technology < Heating, Air Conditioning & Refrigeration Technology < Welding; Quality Assurance; Electronics 	Building Construction Technology; Heating, Air Conditioning & Refrigeration Technology; Welding Technology; Quality Assurance; Electronics;
Public Administration & Government Services COMBINED WITH: Legal & Protective Services	Legal & Protective Services	<ul style="list-style-type: none"> < Public Management and Administration < Governance < Pre-Law < Criminal Justice 	Criminal Justice; Legal Assistant; Government
Scientific Research, Engineering & Technical Services COMBINED WITH: Transportation, Distribution & Logistic Services	Engineering, Technical Services and Transportation	<ul style="list-style-type: none"> < Pre-Engineering < Drafting & Design < Automotive Repair < Transportation Operations & Systems < Aeronautics 	Engineering Design Graphics; Mathematics; Chemistry; Engineering; Physics & Astronomy

* Examples only

This is a far-reaching plan that goes beyond current district programs. Working with ACC, the system can create a successful high school to college and career transition program in a number of broad career fields. The plan will take a number of years to develop and implement.

4. Establish a high-quality career institute at each district high school and at other locations including ACC. An institute represents a career cluster or combination of clusters. Each institute will provide concentrations in three or four sequences of career courses. The institutes would enroll at least 250 students in grades 10 to 12 and seek to attract a mainstream group of students with a strong interest in the career field. The following are suggestions for institutes:

- **Mathematics, science and pre-engineering.** Concentrations could include mathematics and science, pre-engineering, electronics and Project Lead The Way (PLTW). The curriculum for PLTW is a four-year, flexible sequence of pre-engineering courses that, when combined with college preparatory mathematics and science courses in high school, introduces students to the scope, rigor and discipline of engineering and engineering technology prior to entering college.
- **Business.** The concentration areas could include business management, banking and finance and information technology.
- **Urban agriculture.** Areas of concentration could include environmental science, pre-veterinarian, and landscaping and design.
- **Health and Medical Science.** Areas of concentration would include pre-nursing, medical services and technology, emergency service, sports medicine, general medicine and mathematics and science.
- **Education and Human Services.** Areas of concentration would be early childhood development, elementary education, social services, protective services, humanities, and mathematics and science.
- **Transportation.** Areas of concentration would be automotive repair including heavy equipment and diesel engines, transportation operations and systems, and mathematics and science.

The institutes should be designed to allow teams of teachers to plan integrated lessons based on the institute's broad theme and to determine how to teach an accelerated curriculum to students who have chosen the institute.

AISD has established two institutes – one in health sciences at Lanier and one related to hospitality at Travis. Both need additional career concentration options within the broad career field and related academic courses. District leaders should visit schools that have developed model institutes around a coherent sequence of rigorous academic courses within a broad career field.

5. Seek external certification for all career cluster programs. Certification guarantees that both the program content and the instructors have attained high standards of excellence. For concentrations for which there are national certification standards, require the programs to meet the standards and teachers to pass external exams given by industry-recognized groups. For programs offered by AISD which have no national certification exams, establish a local certification process. Assemble external review groups composed of employers from the field and faculty teaching in those areas at postsecondary institutions to review the curriculum, standards, exams, labs and teacher qualifications.

6. Expect students to take and pass certification exams in their areas of concentration. This may require the district to provide financial assistance to students who cannot afford the cost of the exams. If there is no national exam, develop common end-of-program exams and require their use throughout the district. Common exams can be a valuable tool for determining the quality of the curriculum and instruction from school to school.

7. Strengthen work site learning. Few CATE students who participated in the student survey were involved in apprenticeships, internships or job-shadowing experiences. Every senior who completes a CATE concentration should participate in a quality work-site experience that relates to his or her class work. Only 17 percent of students participating in the survey who had held jobs in the past 12 months said they had received school credit for their work experience. Just 16 percent said that their employer had met with their CATE teachers to discuss work and school issues. Students with quality work-site learning experiences have

- A written training plan, developed jointly between the employer and school.
- Someone teach them how to do the work.
- Been evaluated on the job according to clear standards.
- Observed veteran workers.
- Rotated through several departments or jobs.
- Received school credit for work experience.

8. Rethink how high schools assist students and parents in exploring career and educational opportunities and formulating career and educational goals. Some schools in the district no longer offer the Career Connections class. Others have revised the curriculum to include extra support for students in mathematics. Many students interviewed referred to the classes as “a joke” or “a waste of time.” There are a number of options the district might consider including:

- **Use the teacher advisement system**, discussed in the next challenge, to achieve some of the career and educational exploration and goal setting goals.
- **Revise the Career Connections class** into a broader ninth grade support class, especially for at-risk students to help them explore career options and acquire habits of success needed for challenging high school work.
- **Establish opportunities in grades nine and 10 for students to rotate through career clusters** both at the high school and college levels.

(The next challenge offers additional ideas for improving students’ career and educational exploration opportunities.)

Challenge 5: Create a strengthened education and career advisement program through a teacher advisement system.

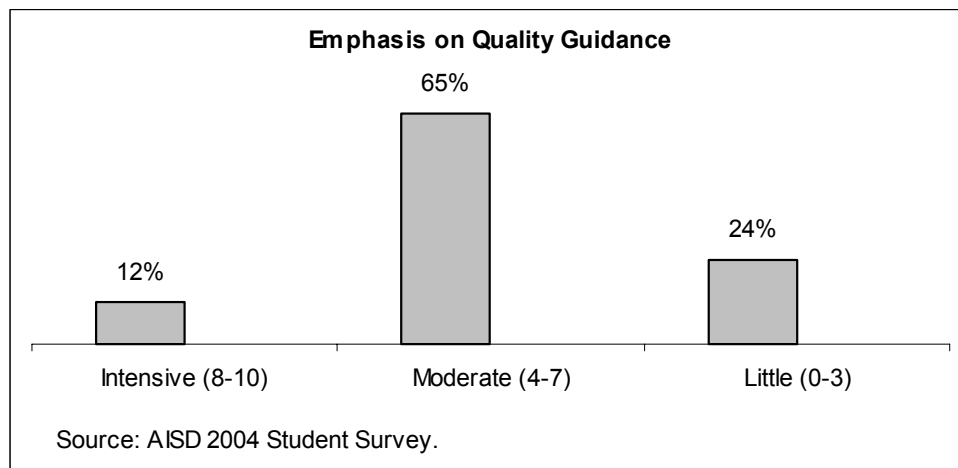
The guidance and advisement system must help students and their parents make the right decisions to get students through high school and to be prepared to succeed in college and careers. At present, the guidance and advisement system is working for some students, but not for others. The intent is to help students by connecting them to adults who can help them understand the importance of their high school experiences to their future.

Students don't receive enough support from counselors.

At all high schools visited, students said they could use more help from counselors. Students who had worked with the Project ADVANCE Counselor or were in the AVID or Gear Up programs reported that they had received individualized help, but they were only a small segment of the student population at each of the schools. AISD students said that they knew who their counselors were, but that they had very little interaction with them.

Only 12 percent of Austin seniors surveyed experienced intensive guidance and advisement assistance. Twenty-four percent reported little guidance and advisement assistance, responding affirmatively to zero to three of the questions. (See Table 31). The majority of students reported that they had received moderate assistance in career and educational planning. (See Figure 8.)

Figure 8
Level of School Emphasis on Quality Guidance and Advisement



Getting information and advice about college were the experiences students reported that they most often received. Almost two-thirds said they had been helped to review their programs of study annually. (See Table 31.) However, students interviewed during team visits said that this type of help

was usually limited to completing the forms for their annual course selections. Most stated they had not been offered real help in selecting a programs of study based on long-term goals. Some students mentioned that there was little attention given to selecting electives. Electives were often made at random without thought about how the courses would fit into a plan that addresses career and educational goals.

Alarminglly, only a third of CATE seniors said they had received encouragement to take a combination of academic and career/technical courses. Seventy-nine percent of career/technical students at *HSTW* high-implementation schools had received such assistance.

Indicators of Quality Guidance and Advisement	District	<i>HSTW</i> High-implementation Schools
Students say...		
A teacher or counselor talked with them individually about their plans for a post-high school career or further learning.	84%	90%
Someone from a college talked to them about going to college.	83	87
They and their parents received information or assistance from someone at the school in selecting or applying to college.	69	73
A teacher or guidance counselor helped them review their program of study annually .	63	72
They spoke with or visited someone in a career to which they aspired.	61	75
They received information and counseling about continuing their education. (CATE students only)	40	84
They participated in a group tour of a local business.	37	57
They received encouragement to take a combination of academic and career/technical courses.	33	79
<i>(If students had mentor):</i> That mentor helped the student develop course choices for high school and to review those courses annually.	27	42
They had an adult mentor for all four years of high school.	26	45
Sources: AISD 2004 Student Survey; 2002 <i>HSTW</i> Assessment.		

High schools are too big and impersonal for many students.

About a fourth of the seniors surveyed said they had adult mentors for all four years of high school, meaning that three-fourths of them did not have this type of support. Although there is a wide range in the size of individual high schools, the majority of Austin high schools are large and getting larger. It is easy for students to become disconnected from the school without a well-developed plan to provide each student with an adult mentor who meets frequently with them. **Providing this type of support is one of the most important steps the district can take to help students connect their high school experiences to future goals.**

Many students are not ready for the next step.

Three-fourths of the seniors said they are planning some type of postsecondary education, but a review of course-taking patterns, pass rates on state exams and SAT composite scores suggests that many who plan to go to college are not prepared. The guidance system is ineffective in helping students understand what it takes for postsecondary education and the level of effort required to prepare and to make a successful transition to college and careers. The guidance system must put into practice the district's belief that effort creates ability.

Parents want more involvement.

Parents interviewed during the team visits said they wanted to be more involved with the schools in helping plan their students' high school program of study aligned to post-high school goals. More than half of the students reported in the student survey that they had talked with their parents several times a semester about their four-year high school plans of study. However, only 41 percent indicated that they and their parents had attended a school meeting to talk about plans after high school.

Students need a push to beef up their academic core.

As indicated earlier, about half or more of the students are not ready for postsecondary studies without having to take remedial courses. Too few students are taking mathematics the senior year or the kind of mathematics courses that would prepare them for postsecondary studies. At most high schools, there is a disconnect between the way English/language arts is taught and what students need to know and be able to do to avoid having to take remedial English/language arts and writing courses in college. Too few seniors are prepared to earn or are earning college-level credit their senior year. And too few are completing high school on time.

In the fall of 2001, 3,993 seniors were enrolled in Austin high schools, but in the spring of 2002, only 3,705 graduated. This represents a seven percent loss during the senior year. Data that the district provided for the class of 2003 indicate an even greater loss in this class.

Texas law requires that students must pass all parts of the Exit Level TAKS to receive a high school diploma from a Texas public school. Students who fail any or all Exit Level TAKS tests, which are given to students for the first time in spring of the 11th grade, have multiple opportunities to retake the tests. According to district officials, approximately 300 seniors had to retake the Exit Level tests in 2004 to meet graduation requirements.

Recommendations:

1. Implement a teacher adviser system for every high school in the district. Each teacher and administrator in the school is assigned to serve as adviser to a group of 10 to 15 students. Advisers stay with their groups of students for all four years of high school. Time is provided in the school schedule for advisers to meet regularly with advisees during a scheduled class period at least once,

and if possible twice, a month to check on advisees' progress and to serve as an intermediary when students need help. Advisers can direct students to sources of extra help, motivate and inspire them to do their best and act as the student's advocate. Advisers are also the primary contact between parents and the school.

Guidance counselors are responsible for organizing the system and for training and providing ongoing support to the teacher advisers. The system can be phased in, starting with ninth-graders and extended one grade level each year until all teachers and students are involved.

2. Develop a grade-level advisory curriculum and offer lessons at least once or twice monthly.

One component of the teacher adviser system should be to provide students with a guidance curriculum at each grade level. Take these actions to implement an advisory curriculum:

- **The district could take the lead in developing the curriculum**, bringing together a team of teachers and counselors for each grade level to design individual lessons. A number of schools have developed advisory lessons and willingly share materials with others. One school that has developed an exemplary program is Poland High School in Poland, Maine or Springdale High School in Springdale, Arkansas. (*See Sidebar for an overview of their Roundtables at Poland High School.*) There should be nine to 18 lessons for each grade level including lesson plans.
- Schools will need to provide **one or two class periods each month for the advisory lessons**. The period can be rotated so not to take away a disproportionate amount of instructional time from any one class.
- Expect the counseling staff to **train teachers** to present the monthly lessons. Conduct a training session for each lesson, about a week before it is to be presented.

Sidebar

A Model Teacher Advisement System Roundtables

Enroll every student in a Roundtable – a small group of students and an adviser who remains with them for their entire school career. Roundtables meet for at least two full class periods each month. The purpose of the roundtables is to:

- Create a cohesive, ongoing community of learners;
- Ensure that there is at least one teacher who knows the student well personally and academically, is continuously engaged with the student and parent(s) about his/her learning and guides and advocates for the student throughout high school;
- Provide a means for addressing grade level and school wide issues;
- Help students lead a more conscious, examined life.

Personal Learning Plan

Each student develops this document in conjunction with parents, a Roundtable adviser and other relevant faculty. The plan outlines students' goals, needs and plans. It will be reviewed and updated at least annually throughout high school.

Roundtable Curriculum

Freshman: Who am I?

The Freshman Roundtable will focus on helping freshmen successfully integrate into the high school. Self-exploration will lead to the formation of short- and long-term goals and an exploratory "Who am I?" culminating project. Students learn about school systems and policies and how they can contribute. They engage in team building and participate in implementation of a group school improvement project – an annual expectation throughout high school.

Sophomore: The Core Portfolio/Problem Solving

The Sophomore Roundtable focuses on the development and presentation of a cross-curricular Core Portfolio. Students learn about all aspects of portfolio development and answer three questions: "Who am I?" "How am I doing (as a learner)?" and "Where am I going?".

Junior: The Future

The Junior Roundtable begins to get students ready for life after high school. Every student researches post-graduation options, does a job shadow and participates in community service projects. The ultimate goal is to develop a Career Portfolio including a resume, samples of best work and a reflection on community service. Other life skills are taught, including interview training and basic personal finance. Students are coached on effective standardized test-taking strategies.

Seniors: The Future/The Senior Celebration

The Senior Roundtable provides coaching assistance as students plan for and prepare a Senior Project. Other elements of past roundtables also continue.

Continuing Activities

- Trust and community building exercises;
- Education about schoolwide programs, policies and assessments;
- Discussion of school issues, student concerns and current events;
- Adviser/advisee conferences;
- Class meetings, guest speakers and assemblies;
- Activities promoting career exploration and future planning.

Adapted from Roundtable Curriculum, Poland High School, Maine. Phone: (207)998-5400.

End Sidebar

3. Make parents full partners in planning and monitoring their students' programs of study. Teachers become the link to parents. Advisers contact parents of their advisees at least once every grading period to discuss students' progress and challenges they may face. These calls are important even when there are no problems. **Once the teacher adviser system is in place, expect all schools to set aside a special day in the school schedule for each student, parents and the adviser to come together to discuss the student's goals, the appropriate program of study to meet the goals and the student's progress.** Schedule the meetings to occur at the time when students need to make course selections for the following year.

4. Save the seniors. Hold every school accountable for saving their seniors and reporting on the status of every student who enrolls in grade 12 at the end of the school year. Provide multiple opportunities for those who have failed state exams to retake them.

- Start in the spring before the senior year working with students and their parents to identify what the student must do to graduate from high school.
- Reaffirm with each student what their post-high school plans will be – enter college, the workplace, the military, etc.
- Develop a system of tracking seniors in terms of staying on course to graduate.
- Provide opportunities for credit recovery – retaking of courses after school and/or online – in order to earn the necessary credits for graduation.
- Track students in terms of following through with postsecondary plans – making applications to college, seeking scholarships and taking the appropriate exams.
- Help students who are planning to go directly to work complete the interest and aptitude tests and work with the students and their parents to decide on appropriate fields of study.
- Help students enroll in courses at the high school level and/or at the community college level, in an apprenticeship or an online course that begins to prepare them for that career.
- Help students who are planning to go into the military to take the military aptitude exam.

The intent is to put on a full court press to assist each student in making the transition from high school to their next step. For students who are ready to earn college-level credit their senior year, make sure they are enrolled in courses that carry college credit. For those students who are planning postsecondary studies but are not ready, make sure they are enrolled in courses designed to get them ready without having to take remedial courses.

Challenge 6: Strengthen the support system to help struggling students.

The aim of the extra help system is to get all students to remain in school and to graduate. The system is working for some students but is failing others.

Extra-help programs are available for some, but do not reach all who need them.

High schools in the district provide extra help to students outside of class. About two-thirds of the Austin seniors surveyed reported that teachers at their schools were available frequently to provide help before, during or after school. (See Table 32.) Yet only 40 percent said they were often able to get help when needed without much difficulty. AISD students need the most help in mathematics and the least help in reading. (See Table 33.)

Table 32 Indicators of School Emphasis on Extra Help		
Indicators of Emphasis on Extra Help	District	HSTW High-implementation Schools
Teachers are frequently available before, during or after school to help students with their studies.	65%	66%
Students often are able to get extra help from teachers when they need it without much difficulty.	40	51
Source: AISD 2004 Student Survey.		

Table 33 Frequency of Extra Help – AISD High Schools				
Extra Help At School	Needed Help But Didn't Get It	Received Help at Least Weekly	Received Help Several Times Throughout Year	Did not need Help
Students...				
Needed teacher's help in reading.	7%	16%	34%	42%
Needed teacher's help in mathematics.	9	36	43	12
Needed teacher's help in English	8	24	44	25
Needed teacher's help in science	9	28	44	19
Source: AISD 2004 Student Survey. Row percents may not sum to 100 percent due to rounding error.				

There are several problems with the extra help students receive at Austin high schools. First, most extra help is voluntary so that the students who are most in need of extra help often do not request it. Second, the high failure rate in ninth grade courses shows that the system of extra help is broken. Third, because only three high schools have senior enrollments that are at 60 percent or more of those who began in the ninth-grade, an intensive effort is needed for credit recovery so that more students can remain in school and graduate with their age group. Fourth, raising standards as advocated in this report will require more, not less, extra help.

Recommendations:

1. Expand and strengthen a system of extra help aimed at assisting students to meet course standards. Actions would include

- Seeking parent support to require their students to participate in extra help if they are failing a course.
- Building time into the daily schedule for students to receive extra help from their teachers.
- Expanding the number of tutors available to help students at each school. Retired professionals, graduate students and senior honors students are resources that could be explored.
- Arranging after-school transportation for students who stay for extra help.

2. Starting in grade nine, create student study teams in mathematics and science. Teach students how to study together and to support each other. Actions would include

- Providing training for ninth- and 10th-grade teachers on how to establish student study teams and how to hold students accountable for completing assignments, passing exams and mastering materials.
- Developing a culture where students help each other to meet course standards.

3. Establish a district policy for a standards-based system of grade and credit recovery that involves after-school, summer, evening and Saturday classes; distance learning; independent study; Web-based instruction; etc. The focus would be on having students demonstrate proficiency on course standards. When students meet standards, they should earn a passing grade and earn credit for graduation. Actions would include

- Designating a grade- and credit-recovery coordinator at each school.
- Making all grade- and credit-recovery programs performance-based rather than time-based. This will require the school to be clear about which course standards a given student failed to master and what would be accepted as evidence that each standard had been met.
- Developing an approved set of grade and credit options ranging from independent study to Web-based approved courses.
- Developing a fee structure that enables students and their parents to cover the cost if the system cannot pay for grade and credit recovery.
- Concentrating on grade nine to give students a successful start in high school if resources are limited.

4. **Require each high school to develop a full court press to assist students to pass state graduation exams.** Actions would include

- Developing special after-school short courses for most frequently failed portions of the exams.
- Working with the state of Texas to arrange conditions under which students can retake the failed portions of the exams online in order to get immediate feedback.

5. **Evaluate the effectiveness of all extra-help programs currently in place. Determine the impact on students' grades and pass rates.** Eliminate programs that are not effective in improving student achievement.

Challenge 7: Develop strong building-level leadership teams involving principals, assistant principals and teacher leaders.

Most schools have not developed a cadre of teacher leaders.

In most instances, teachers were quite complimentary of the school's leadership. Yet no matter how effective the top school leaders are, they need a team of teachers who support their efforts and help build consensus and support for new initiatives. The old leadership model of the principal as the Lone Ranger responsible for accomplishing goals given to each school will not work. The challenges contained in this report cannot be accomplished without a team effort.

This report challenges the district and schools to work toward:

- Building rigor in the curriculum, teacher assignments, student work and exams. Many students are not being taught to standards that are high enough to prepare them for further study and good jobs.
- Helping students see the relevance of their studies by teaching in ways that engage students in learning, blend academic and career/technical studies and develop students as independent learners. School leaders must know how to teach challenging academic content using authentic real-world, research-based practices.
- Engaging students in taking more responsibility for their own learning and as part of a team.
- Improving transitions from middle grades to high school, reducing ninth-grade failure rates and getting more students to meet standards.
- Increasing the rigor of the senior year to improve students' transition from high school to college and careers.
- Creating a system of relationships to provide students extra help.
- Organizing schools into small learning communities.
- Developing a schedule that gives teachers fewer classes and common planning time.

None of these challenges can be accomplished by just one person in a school. The question is how to tap the expertise and know-how of a leadership team to arrive at solutions.

AISD has developed a Teacher Leadership Development Program that helps build teacher leaders and involve them in projects to meet the needs in their schools. During the eight years of existence, about 150 educators have participated.

Data need to be more readily available and used to guide curriculum and instructional changes.

One of the most challenging tasks of conducting this study was obtaining necessary data to arrive at profiles of the current status of schools in meeting the study's goals. Data appear to be stored for record-keeping purposes rather than used as a tool to guide school improvement. Even data available at the school-level are not regularly shared with faculty and used for the purpose of guiding school and classroom practices.

Recommendations:

1. Adopt a set of performance goals and track their progress at least annually districtwide and at the school level. The district needs to track progress on long-term goals such as:

- Increasing the percentages of students leaving grade eight who meet state standards in reading, mathematics and social studies and who have successfully completed pre-algebra.
- Decreasing the percentages of students who fail ninth grade English, Algebra I, Biology and Physics and Chemistry.
- Increasing the percentages of students at all grade levels who pass state assessment, end-of-course and graduation exams.
- Increasing the percentages of students entering grade nine who successfully graduate from high school four years later.
- Increasing the percentages of students who leave high school with at least nine semester hours of college credit.
- Decreasing the percentages of students who leave high school who have to take remedial courses at their postsecondary institutions.
- Increasing the percentages of students planning to go to work upon leaving high school and who have earned employer-recognized credentials or certification from a community or technical college.

To track progress made on the performance goals, the district must develop standard processes and definitions for measurement so that everyone knows how the score is being kept.

2. Create grade-level teams for each high school with teacher leaders. In grade nine, assign assistant principals for instruction to work with the teams. Establish two or three ninth grade teams, each with a teacher leader. Grades 10 through 12 could be organized around major themes with an assigned assistant principal as discussed in recommendation 4 and with grade-level interdisciplinary teams with common planning time and teacher leaders.

3. Develop an academy to provide leadership training to school leadership teams. The district could either re-design the Teacher Leadership Development Program using a team approach, or create a separate District Leadership Academy. Each school's team should consist of the principal, assistant principals, at least five teacher leaders and a district person. Expect teams to focus on one or two major initiatives a year. Possible initiatives might include

- Using data to lead change;
- Moving standards into the curriculum;
- Getting an understanding of proficient-level assignments, student work and exams;
- Middle grades to high school transition;
- Senior year to postsecondary and career transition;
- Understanding effective research-based teaching strategies and literacy strategies across the curriculum;
- Creating and organizing small learning communities; and
- Developing school schedules that provide common planning time.

Teams from each school should meet at least four hours a month for instruction. The teams would then go back to their schools and work on the problems they have selected. The next month they would come back and share what they have done and receive further instruction. This will build a team effort and learning across the district. It gives schools choices about the issues they will address and builds better understanding between schools and the district about expectations. Training for teacher teams will be a three- to five-year effort to address all the challenges outlined in this report and to support schools as they make changes.

The key to success is to find good trainers who understand what the district is trying to accomplish. SREB can provide the district, upon request, more detailed information on how to create a district leadership academy and information on 14 leadership modules that have been developed and are being used by states and urban districts. (*See Appendix 9.*)

4. Make one of the initial leadership initiatives to help teams decide how they are going to organize their schools into small learning communities (SLC's). There could be a ninth-grade SLC and another for grades 10-12, or students could stay in the same SLC for all four years of high school. Several guidelines apply for establishing these communities:

- Each community should be made up of at least 250 students.
- Design each SLC to attract a mainstream group of students. Avoid using SLCs as a way to regroup students by ability.
- Expect teams within each SLC to assume responsibility for achieving policies the district has set.
- Give SLCs some autonomy to set different schedules to meet instructional goals and students' needs.
- Provide teachers common planning time.
- Each community should work toward having all students complete the recommended academic core.
- Offer three or four possible concentrations within each SLC, following suggestions provided in Challenge 4.

The challenge for school leaders is to determine how to select SLC facilitators and how to give each SLC some autonomy in setting its schedule and work plans. For most high schools, the best approach is to organize the school around broad career themes that prepare for success in college and careers. The Austin high schools are diverse in their student populations, and one size may not fit all. The district can work with each high school to determine the organizing framework that will best meet the needs of its student population.

5. Make the principal's primary responsibility as the leader for curriculum, instruction and student achievement. Schools may choose to assign particular administrative responsibilities to others so that the principal spends the majority of time on curriculum, instruction and student achievement. There are 13 critical success factors that SREB has found that principals performed who turned their schools around. (The list of the success factors appear on the following page.)

Sidebar

The SREB Research-based Curriculum Framework Critical Success Factors

SREB has defined 13 Critical Success Factors that were identified through research on the practices of exemplary principals whose leadership has had a positive impact on student achievement in their schools. The Critical Success Factors and the process for their identification are reported in the 2001 SREB publication *Preparing a New Breed of School Principals: It's Time for Action*. The Critical Success Factors form the basis for a curriculum framework that academies, districts and universities can use to develop their leadership training around curriculum, instruction and student achievement.

- Create a focused mission to improve student achievement and a vision of the school, curriculum and instructional practices that make higher achievement possible.
- Set high expectations for all students to learn high-level content.
- Recognize and encourage implementation of good instructional practices that motivate and increase student achievement.
- Create a school organization where faculty and staff understand that every student counts and where every student has the support of a caring adult.
- Use data to initiate and continue improvement in school and classroom practices and student achievement.
- Keep everyone informed and focused on student achievement.
- Make parents partners in their student's education and create a structure for parent and educator collaboration.
- Understand the change process and have the leadership and facilitation skills to manage it effectively.
- Understand how adults learn and know how to advance meaningful change through quality sustained professional development that leads to increased student achievement.
- Organize and use time in innovative ways to meet the goals and objectives of school improvement.
- Acquire and use resources wisely.
- Obtain support from the central office, the community and parent leaders for the school improvement agenda.
- Continuously learn from and seek out colleagues who are abreast of new research and proven practices.

End Sidebar

6. Teach school leadership teams how to use data to make decisions about individual students and about what is working and not working with current school and classroom practices. There is little evidence that schools are using data effectively. It is difficult for school leadership teams to connect student experiences in school and classrooms to student performance. To change student outcomes, their experiences must be changed. It is the process that matters. To improve the use of data for better decision making about students and for improving school, curriculum and classroom practices, the following actions are recommended.

- Develop a protocol that assures that all school-level data about student performance on TAKS, SAT, AP and other tests are made available to schools immediately upon receipt by the district and where possible, such data are linked to school experiences.
- Expect school leadership teams to engage the faculty in looking at course failure rates, grade retention rates, drop-outs and performance on standardized tests and school and classroom practices that enhance or deter these outcome factors.
- Expect all schools to have teachers organized into learning communities where they can use data to guide their daily curriculum and instructional planning.
- Continue to administer a student survey annually to a sample of senior students and develop ways to produce a report that links students' reported high school experiences to their performance on TAKS, SAT and AP.