



## **Breaking Barriers: A Case Study of Two High-Performing Schools**

### **Introduction**

Current education and workforce projections indicate that postsecondary education is necessary for the economic success of both individuals and society. However, despite the importance of postsecondary education, many high school students graduate underprepared for college-level courses. This is especially true for low-income students and for students from racial/ethnic minority groups, who are less likely to take the college-preparatory curriculum in high school and graduate prepared for college-level work than other students (ACT, Inc., 2006a). Compared to other students, African American, Hispanic American, and Native American graduates are less likely to enroll in college (Green & Forster, 2003) and more likely to take remedial courses when they enter college (ACT, Inc., 2004; Green & Forster, 2003). Students who take remedial courses in college are also more likely to drop out before earning a degree (McCabe, 2000; U.S. Department of Education, 2001).

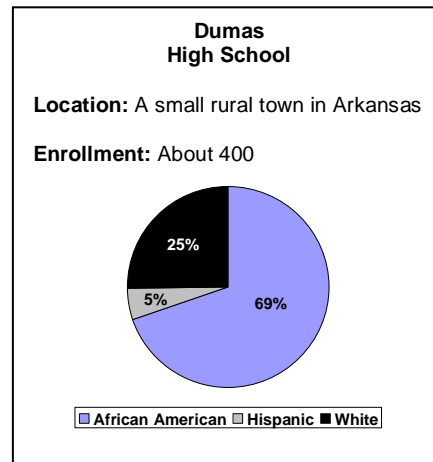
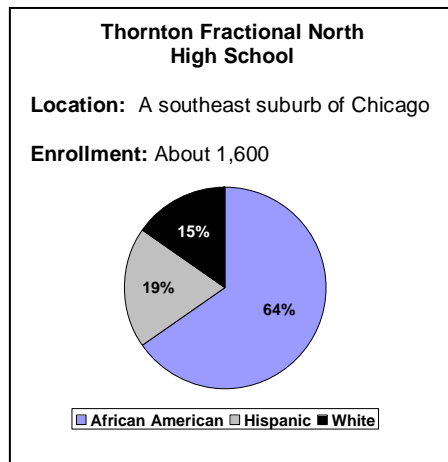
Fortunately, there are schools that have made a commitment to bring about a change in the academic preparation of their students. These high schools have committed to prepare all of their students for success, whether they elect to enter college, workforce training programs, or the workforce upon graduating from high school.

This study focused on two such schools. Both schools have substantial enrollments of low-income and racial/ethnic minority students and, despite the odds, are successfully preparing students for their post-high school goals. Our purpose was to identify the policies and practices that appear to be contributing to the schools' success. Such information can help teachers, administrators, and other stakeholders who are seeking to improve the academic preparation of their students, particularly those in high-poverty and high-minority schools.

This study profiles two high schools with high enrollments of low-income and racial/ethnic minority students: Thornton Fractional North High School (TF North) and Dumas High School (DHS).<sup>\*</sup> The charts on the following page describe some of the demographic characteristics of each school.

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<sup>\*</sup> For detailed profiles of each school, please see the appendices.



Both schools participate in the ACT Educational Planning and Assessment System (EPAS™)<sup>1</sup>. The following table summarizes use of the three EPAS programs in the two schools and (for eighth grade) their corresponding school districts.

### Participation in ACT’s Educational Planning and Assessment System (EPAS)

EPAS Program	Dumas High School (Dumas School District)	Thornton Fractional North (Thornton Fractional High School District 215)
EXPLORE	Administered to all eighth graders in the district since 1996.	Administered to all eighth graders in the district and administered to all ninth graders since 2000.
How Used	Results are used in developing students’ educational plans for high school and post-high school careers, and for placing students in AdVentures program (starts in ninth grade).	Results are used in developing four-year academic plans that reflect students’ desired post-high school goals.
PLAN	Administered to all tenth graders since 1996.	Administered to all tenth graders since 2000, and to all eleventh graders since 2003.
How Used	Results are used for reviewing students’ progress towards meeting their educational plans and career goals.	Results are used for reviewing students’ progress towards meeting their educational plans and career goals.
ACT	Taken by approximately 50% of DHS graduates.	Administered to all eleventh graders as part of the Prairie State Achievement Examination (PSAE) since 2001.
How Used	ACT College Readiness Standards™ are used to evaluate and improve curriculum.	ACT College Readiness Standards are used to evaluate and improve curriculum.

## Improvements in Academic Achievement and College Readiness

During the years of EPAS participation, both schools have seen remarkable improvements in the academic achievement and college readiness of their graduates, in particular students from racial/ethnic minority groups:

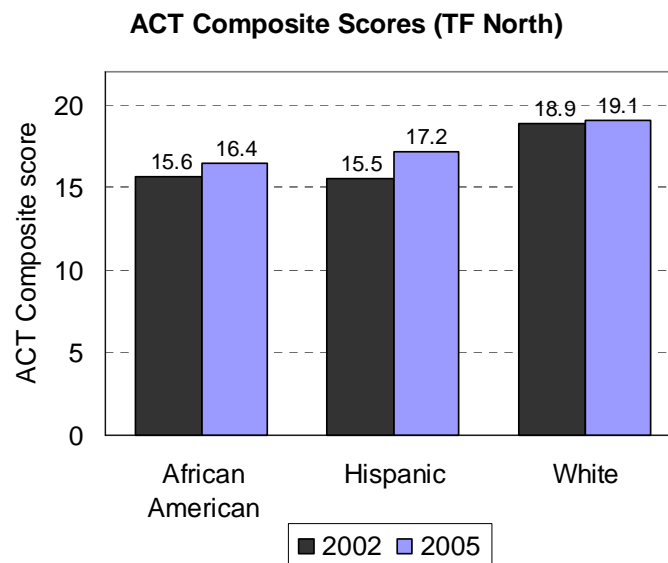
1. Average ACT<sup>®</sup> test scores increased across most subject areas.
2. Racial/ethnic achievement gaps decreased in most subject areas.
3. More students are taking the ACT-recommended college preparatory core curriculum.
4. More students are prepared for college-level coursework.
5. More graduates of these schools are choosing postsecondary education.
6. Fewer DHS graduates need to take remedial classes in college.

Detailed information for each category of improvement is presented below.

### 1. Average ACT scores increased across most subject areas.

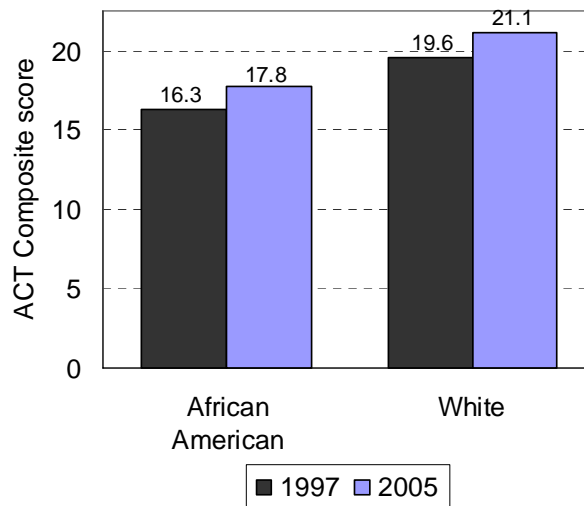
ACT research has shown consistently a strong, positive relationship between performance on the ACT and college readiness and success. Students who obtain higher ACT scores are more likely to be college ready, to earn higher first-year grade point averages in college, and to stay in college beyond the first year (Allen & Sconing, 2005; Ziomek & Harmston, 2004).

- At TF North, between 2002 and 2005 average ACT Composite scores increased by 0.8 point for African American students, 1.7 points for Hispanic students, and 0.2 point for White students.



- At DHS, between 1997 and 2005 average ACT Composite scores increased by 1.5 points for both African American and White students<sup>2</sup>.

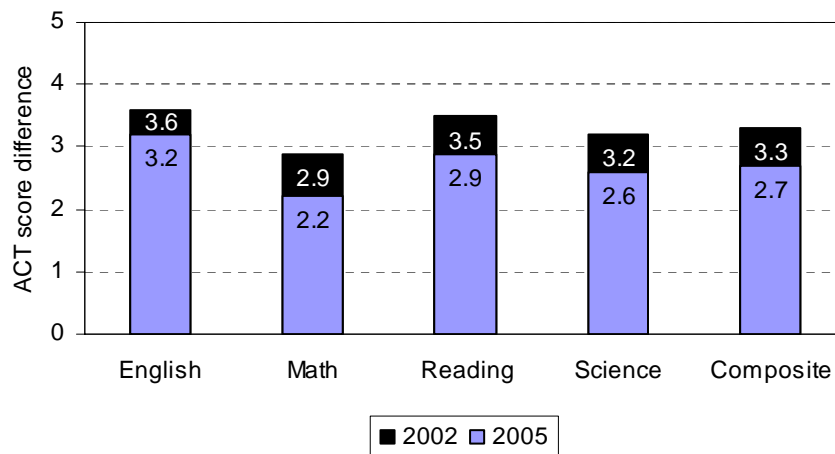
**ACT Composite Scores (DHS)**



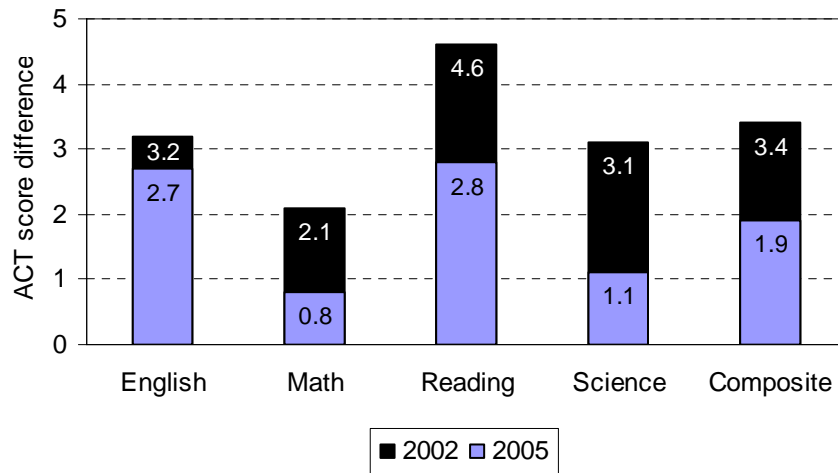
**2. Racial/ethnic achievement gaps decreased in most subject areas.**

- At TF North, the difference between average ACT scores of White and African American students decreased in all subject areas, as did the difference between average ACT scores of White and Hispanic students. For example, the difference between average ACT Science scores of White and African American students decreased by 19 percent, from 3.2 to 2.6 score points. The corresponding difference in average scores between White and Hispanic students decreased by 65 percent, from 3.1 to 1.1 score points.

**ACT Score Differences Between White and African American Students (TF North)**

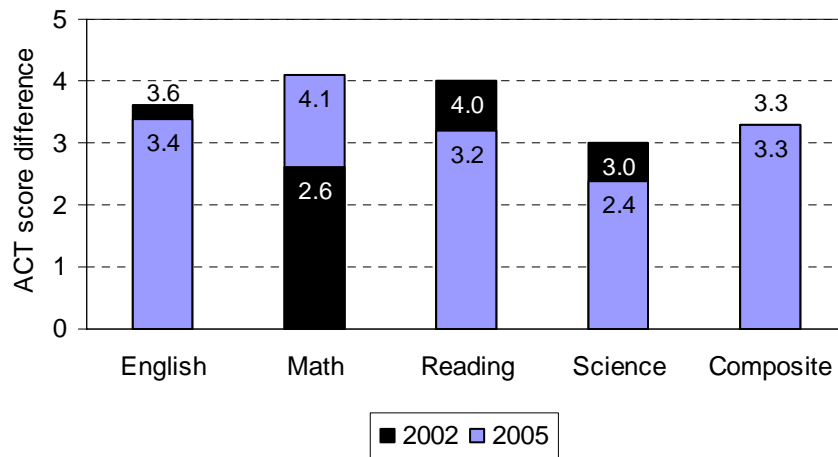


**ACT Score Differences Between White and Hispanic Students (TF North)**



- At DHS, the difference between average ACT scores of White and African American students decreased in English, reading, and science. However, at DHS, the achievement gap in mathematics increased: the average ACT Mathematics score of White students increased at a faster rate (from 18.9 to 21.0) than that of African American students (from 16.3 to 16.9).

**ACT Score Differences Between White and African American Students (DHS)**

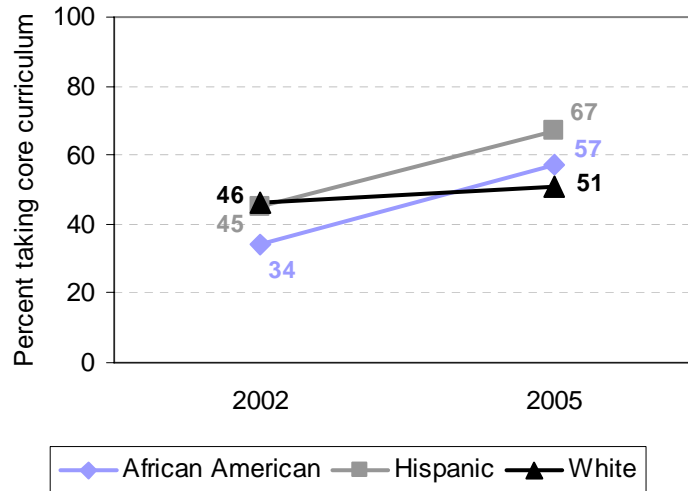


**3. More students are taking the ACT-recommended college preparatory core curriculum.**

ACT research has shown that students who take the ACT-recommended college preparatory core curriculum (four years of English and three years each of mathematics, science, and social studies) score consistently higher on the ACT (ACT, 2006a), and are more likely to be successful in first-year credit-bearing college courses.

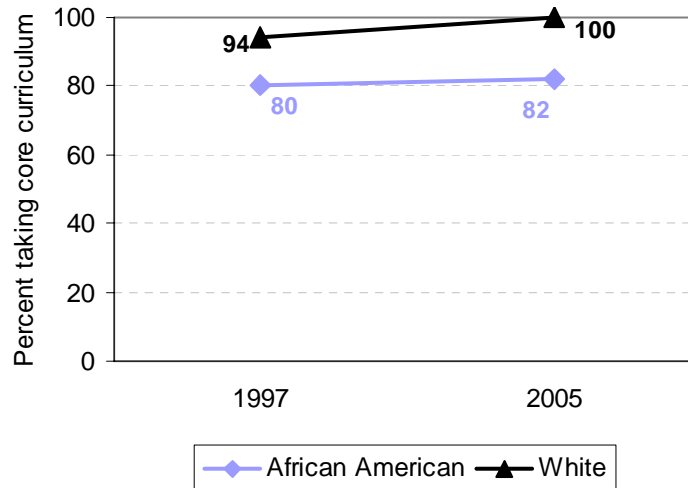
- Between 2002 and 2005, the percentages of TF North students taking the core curriculum increased for African American students, Hispanic, and White students.

**Percentages of Students Taking Core Curriculum (TF North)**



- Between 1997 and 2005, the percentages of DHS students taking the core curriculum increased for African American and White students.

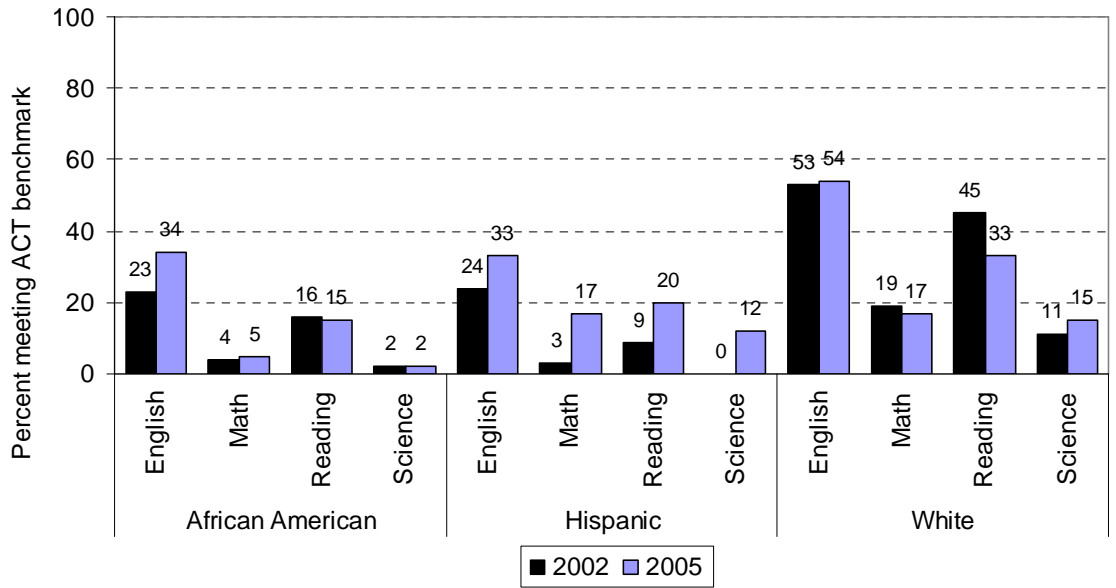
**Percentages of Students Taking Core Curriculum (DHS)**



**4. More students are prepared for college-level coursework.**

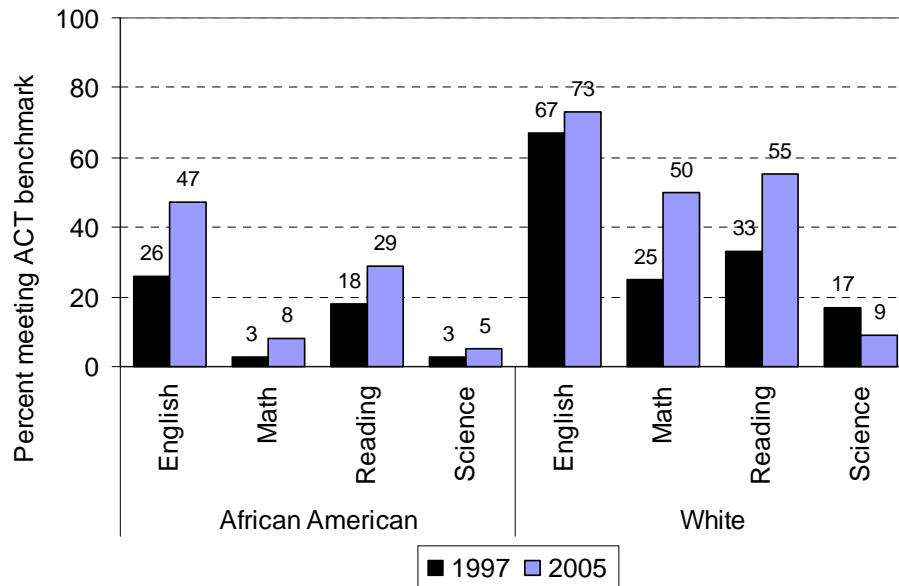
- Between 2002 and 2005, the percentages of TF North students meeting or exceeding the ACT College Readiness Benchmarks generally increased: for Hispanic students in all four subject areas, for African American students in English and Mathematics, and for White students in English and Science.

**Percentages of Students Meeting ACT College Readiness Benchmarks (TF North)**



- Between 1997 and 2005, the percentages of DHS African American students meeting or exceeding the ACT College Readiness Benchmarks increased by 2 to 21 percentage points, depending on the subject area.

**Percentages of Students Meeting ACT College Readiness Benchmarks (DHS)**

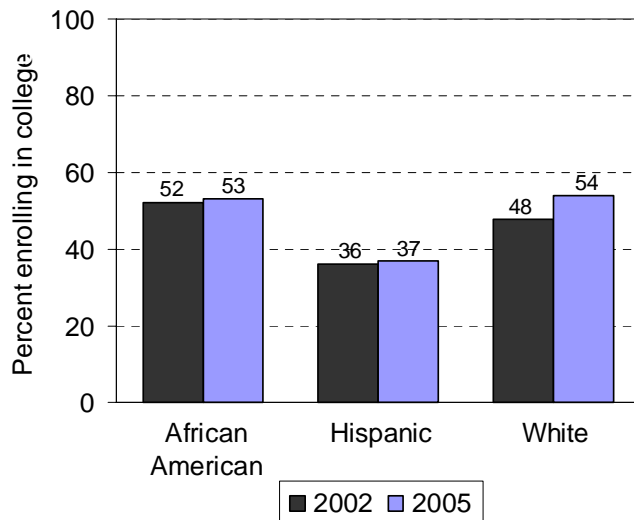


- The percentages of students meeting at least one benchmark also increased for both schools (from 39 percent to 42 percent for TF North, and from 54 percent to 61 percent at DHS).

**5. More graduates of these schools are choosing postsecondary education.**

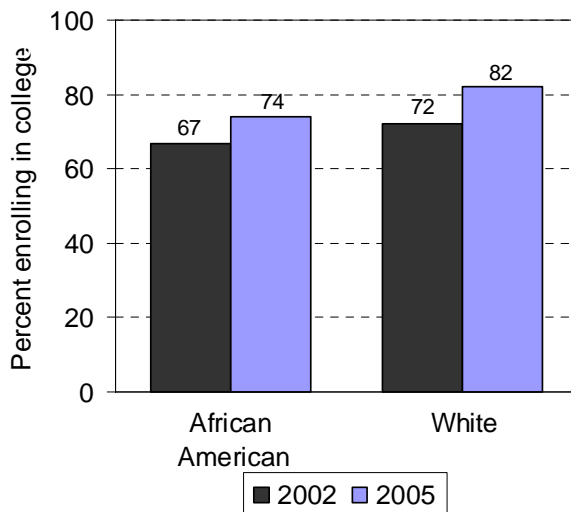
- Between 2002 and 2005, the percentage of TF North graduates enrolling in college the fall following high school graduation increased 1 to 6 percent for African American, Hispanic, and White students.<sup>3</sup>

**Percentages of Students Enrolling in College (TF North)**



- Between 2002 and 2005, the percentage of DHS ACT-tested graduates enrolling in college the fall following high school graduation increased 7 to 10 percent for African American and White students.

**Percentages of Students Enrolling in College (DHS)**

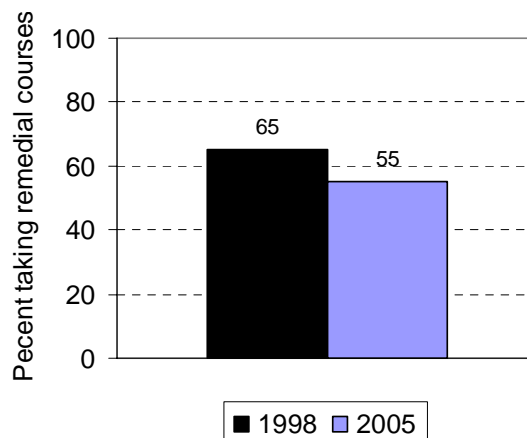


**6. Fewer DHS graduates need to take remedial classes in college.<sup>4</sup>**

- Between 1998 and 2005, the percentage of DHS graduates who took remedial courses in Arkansas postsecondary institutions decreased 10 percent, from 65 percent to 55 percent.



### Percentages of Students Taking Remedial Courses (DHS)



### College Readiness for All

Researchers from ACT visited the two schools and surveyed and interviewed teachers, administrators, counselors, students, and parents to identify those policies and practices that appeared to result in the improvements detailed in the previous section. These policies and practices lend insight into how these schools are using data to improve student readiness.

### What the Schools Do: Policies and Practices at TF North and DHS

In recent years, both schools have been involved in many activities and introduced a number of new programs. Which of these programs or activities could bring about such considerable changes? Although it is almost impossible to know with certainty what has produced the successes of these schools, several policies and practices, or a combination of them, appear likely:

- Emphasis on college readiness for all
- Strong, aligned curriculum
- Experienced and committed faculty
- Academic support, career exploration, and career training programs
- Continuous monitoring of each student's progress
- Focus on positive results
- Parental and community involvement
- Continuous search for new approaches to improvement

#### *Emphasis on College Readiness for All*

First of all, both schools place a very strong emphasis on the college readiness of all students. It is an every-day and every-student emphasis and a message that is persistent and persuasive. As an example, at TF North, names of students who have been accepted to a college or awarded a scholarship are announced on the school public announcement system and put on the school's college-recognition bulletin board.

The majority of students at TF North take the college preparatory core curriculum recommended by ACT. The percentages of core takers are even higher at DHS, where 82 percent and 100 percent of African American and

White students, respectively, take the core curriculum. At present, graduation requirements at DHS are more demanding than those at TF North: while minimum graduation requirements for English (four years) and social studies (three years) are comparable for the two schools, DHS requires three years each of mathematics and science to graduate, and TF North currently requires two years of mathematics (three years for 2009 graduates) and one year of science (two years for 2008 graduates). However, TF North counselors automatically enroll students in subsequent mathematics and science courses, unless the student's parents request in writing that the counselor not do so.

At both schools, students are strongly encouraged to consider postsecondary education. College planning nights and financial aid nights are organized regularly. Admission test preparation programs are offered to all students. TF North twelfth graders participate in ACT's ASSET<sup>®</sup> Student Success System administered at South Suburban Community College, a testing and advising program for placing students into courses at postsecondary institutions. Both schools have teamed with nearby postsecondary institutions to offer students opportunities to earn college credit while in school. Mr. Mike Fies, one of TF North's administrators, said that their goal is to have all seniors apply to a college or university:

Our staff, our institution as a whole is saying [to students], "This is what we think, you need to do this, and we need to help you do this"; so it's not just the administration, it's the teachers, it's the guidance office, it's everybody. It's systematic, saying [to students], "What are you doing? Where are you going?" . . . For a long time there has been a belief in the district that everybody is going to college. . . . I think we are trying to say, at least, "You've got to have choices and opportunities. . . . We'll help you get to the point where you want to be."

### *Strong, Aligned Curriculum*

The college readiness campaign is strongly reflected in each school's curriculum. The schools offer a wide range of courses and, in particular, the upper-level courses that serve as a foundation for success in college. At both schools, the curriculum is a result of collaboration between the faculty and the administration, both school and district. The curriculum is aligned across grades and departments and with state standards.

In both schools, a very strong emphasis is placed on literacy. Teaching of reading and writing skills is incorporated throughout the curriculum. At DHS, "literacy blocks," specified portions of a class period that are focused on reading and/or writing activities, are taught in most subject areas. At TF North, one interdisciplinary committee developed a rubric for a school-wide writing prompt, while another developed strategies for reading across subject areas, an activity that ACT recommends strongly as a means of improving preparation for college-level reading (ACT, Inc., 2006b).

The importance of early mathematics coursework is also stressed, especially at Dumas, where Pre-algebra is a required course in seventh grade, followed by Algebra I in grade 8. In this way, students at DHS are able to take upper-level mathematics courses before they take the ACT, and have an opportunity to take five years of high school mathematics coursework before they graduate.

The mathematics curriculum at each school is aligned with the ACT College Readiness Standards<sup>5</sup>. Plans are underway at both schools to align the English, science, and social studies curricula with the ACT College Readiness Standards.

Many teachers commented that using EPAS in their school has affected the way they teach. Some teachers use PLAN and ACT results to help students understand the skills they need to improve. Looking at the ACT College Readiness Standards has also helped teachers to identify content areas in their curricula that need to be given more emphasis in the classroom. Many teachers have modified the content of their courses to include more advanced skills. One social studies teacher at DHS noted that she has “placed a greater emphasis on skills that require higher-order thinking . . . instead of memorization.”

### *Experienced and Committed Faculty*

Both schools employ experienced and extraordinarily dedicated teachers. DHS teachers have been with the school, on average, for twelve years. Because of a large number of recent retirements, TF North faculty members are relatively young, but they are highly qualified and enthusiastic. All teachers at the two schools are certified to teach in their subject areas and are involved in numerous professional development activities, including courses in technology, conferencing, curriculum standards workshops, student-centered instruction, differential instruction and racial/ethnic sensitivity, as well as graduate-level courses. Teachers at DHS are required to complete 60 hours of training each year in order to maintain their teaching licenses.

At both schools, teachers take on the role of advisors, helping students develop their coursework plans and encouraging their postsecondary-education aspirations. The Career Action Plans (CAPs) program at DHS deserves special mention. Each teacher who becomes a CAPs advisor follows the progress of about 30 students throughout their high school careers. CAPs advisors meet regularly with their students to help them plan schoolwork and choose a career. At both schools, teachers have high expectations and individualized goals for all students. One DHS teacher summed up her philosophy: “I want them to be all they can be.”

At both schools, teachers work together to develop aligned curricula. Cooperation and interaction across departments is especially impressive at TF North. For example, teachers actively participate in Professional Learning Communities (PLC), interdisciplinary networking groups that provide an opportunity for teachers to discuss curricula and develop common strategies across subject areas. Also at TF North, Effective Teacher Collaboration (ETC) groups provide the means for teachers within a department to develop common tests, distribute tasks, and share activities and strategies.

Teachers at both schools also praise the support provided by their administrators. For example, at TF North, teachers are paid for their time when they participate in PLCs or ETCs.

### *Academic Support, Career Exploration, and Career Training Programs*

Both schools offer several academic support programs to their students. These creative programs reach diverse student populations. One of them is the College

Preparation Enrichment Program (CPEP), for DHS students whose ACT Composite scores are below 19. In addition to summer school, these students receive individualized academic and career counseling throughout their senior year. At TF North, the Grade Assistance Program (GAP), a peer tutoring program supervised by certified teachers, was designed to help students meet the academic demands of their schoolwork.

Each school also offers career exploration and training programs. For example, both schools offer classes that introduce students to medical professions. DHS participates in Jobs for Arkansas Graduates (JAG), a program that focuses on career development. Students gain work experience while in school, and the teacher acts as liaison between the students and local businesses. TF North participates in a similar program, Interrelated Cooperative Education (ICE). Moreover, TF North has started implementation of PATHWAYS, a program designed to guide students into academic and career courses that will give them the skills and knowledge they need to meet their education and career goals.

#### *Continuous Monitoring of Each Student's Progress*

At both schools, student progress is closely monitored throughout high school using EPAS, state assessment results, and other information. Four-year coursework plans are developed for each student in the spring of eighth grade using students' EXPLORE results, results from state testing, and teacher recommendations. Students' and parents' wishes are also considered. Educational plans are revised as often as necessary based on students' PLAN scores, coursework performance, and teacher recommendations. At TF North, a Pupil Personal Services team (consisting of counselors, social workers, a special-education specialist, and a representative from school administration) meets biweekly to identify at-risk students and plan interventions for them. At DHS, CAPs advisors monitor the progress of their students and help them develop and revise coursework plans. (The input of students and their parents is taken into account in each of these programs.) State accountability systems are also playing an increasing role in monitoring student progress. For example, TF North students who meet or exceed state standards in any content area of the PSAE (Mathematics, Sciences, Social Studies, Writing, or Reading) are given the option of not taking their senior final examination in that content area.

#### *Focus on Positive Results*

The two schools have various student incentive programs. For example, each month one DHS student is identified as Student of the Month. During this month, the student's name is displayed on the school's marquee, and he or she is invited to an off-campus lunch with the principal. The Meteor Motivational Program at TF North recognizes students for being respectful, responsible, hard working, and caring. Students are nominated by their teachers, and students' names are put on a recognition board. The school holds a Quarterly Achievement Breakfast to honor outstanding students, and a PSAE Incentive Celebration for seniors who meet or exceed state standards on the PSAE. As noted earlier, TF North also has a college-recognition bulletin board for students who have been admitted to postsecondary institutions.

### **Academic Support and Career Training Programs for Students at TF North**

#### **Pupil Personal Services (PPS)**

The PPS team includes counselors, social workers, a special education specialist, and a representative from the school administration. PPS meets biweekly to identify at-risk students and plan interventions for them.

#### **The Cooperative Learning Environment**

Freshmen are grouped into teams so that students in each team attend the same courses in the four major academic areas (English, Mathematics, Science, and Social Studies). Teachers who teach these four courses work together to align their curricula and discuss individual students' needs.

#### **Freshman Seminar**

This is a 25-minute study skills class during lunch hour for lower-achieving students.

#### **Grade Assistance Program (GAP)**

Instead of a study hall during lunch hour, students may choose to join GAP in either English (also includes social studies) or Mathematics (also includes science and business). GAP is a peer tutoring program supervised by a certified teacher.

#### **Homework Center**

A tutoring program in which students meet for one hour 2 days a week to do homework after school hours. Several teachers are involved in the program, so that each teacher supervises no more than 10 students. Teachers monitor academic progress of students in their respective groups.

#### **Summer School**

A three-and-a-half week, two-semester morning program of studies in subjects varying from remedial reading to World History. Students can earn high school credit if they complete the course. Students in this program are assessed a small fee (\$70.00 per course for the 2006 summer).

#### **Interrelated Cooperative Education (ICE)**

ICE is a school/community program of career education and instruction. It offers an opportunity for seniors to work outside the school. Students' classroom instruction is coordinated with their job experiences.

#### **Business Cooperative Program**

This program is for senior students who have completed business courses to use and apply their skills and gain work experience in a part-time job.

#### **The Career Development System (CDS)**

CDS is a consortium consisting of South Suburban College and three high school districts (including TF North) working cooperatively to help youth plan and prepare for their future.

Students can take dual-credit courses at nearby colleges.

### *Parental and Community Involvement*

Both schools make every effort to involve parents in the education process. Parents are encouraged to attend parent-teacher conferences, and at DHS parents are even required to participate in course registration. A Parent Advisory Board meets monthly at TF North to discuss school matters. The Dumas School District employs a full-time parent-school coordinator and maintains the Parent Center, where families can participate in activities and receive information and enrichment materials.

Each of the two schools is an important part of its community. Both schools actively participate in community events and encourage their students to perform

## **Academic Support and Career Training Programs for Students at DHS**

### **Career Action Plans (CAPs) Program**

Teachers take on the role of advisor to a group of students and follow them from 10th through 12th grade (usually about 30 students per teacher). CAPs advisors accumulate test results, coursework completion information, and other data for their students. CAPs advisors meet with their students regularly to help them plan schoolwork and choose careers.

### **College Preparation Enrichment Program (CPEP)**

CPEP is a college preparation program for 11th and 12th graders whose ACT Composite scores are below 19. It is funded by the state of Arkansas. The program includes a five-week summer session. Students receive individualized academic and career counseling.

### **Jobs for Arkansas Graduates (JAG)**

JAG is a school-to-work program focused on career development, job attainment, and job survival. Students work in various businesses while in school; graduates are followed for 12 months. The teacher acts as a liaison between the students and local businesses.

### **Target P.R.E.P. School (Productive/Responsible/Educated/Prepared)**

Target P.R.E.P. is a nontraditional learning center for at-risk students. In addition to the four core areas, the curriculum includes specialized training and preparation to return to the traditional educational settings.

### **Building Bridges to a Brighter Future**

Building Bridges is a set of programs developed by the Dumas 21st Century Community Learning Center. The programs provide integrated educational, occupational, health, safety, cultural, and social services to the district's students and other community members.

### **Environmental and Spatial Technology (EAST)**

A project-based, service-learning class that provides students with the most current, high-end technologies available.

### **Early College High School**

Students can take dual-credit college-level courses. This project is organized by the Southeast Arkansas Educational Cooperative in cooperation with nearby postsecondary institutions.

### **Compressed Interactive Video (CIV)**

CIV instruction is a distance education program that brings college courses from nearby postsecondary institutions to DHS students.

community service. For example, TF North art students regularly participate in local art shows and conferences. The TF North Art Department was invited to do an art show at a local police department. Students at both schools take part in community clean-up activities.

Both schools enjoy support from the local community. With voter approval, the schools recently completed the construction of new gymnasiums, and TF North is in the final stages of a major renovation and expansion of its facilities.

The schools have developed numerous connections with local businesses through their cooperative work-study programs, like JAG at DHS and ICE at TF North. Dumas businesses give money directly to the schools for supplies and equipment, and offer many scholarship opportunities to graduates who plan to go to college. Mr. Kelvin Cragg, the principal of DHS, when trying to explain why his school is doing so well, said about the community and the teachers that “they care for the kids, and it’s not a Black, White, majority, minority issue. . . . I don’t think it’s just one thing, I think it’s caring.”

### *Continuous Search for New Approaches to Improvement*

Both schools realize that much still needs to be done to ensure that all of their students are ready for college. New ideas are constantly introduced and new programs are implemented regularly. The PATHWAYS program and the Homework Center at TF North are in the early stages. In cooperation with nearby postsecondary institutions, DHS has just started implementing Compressed Interactive Video instruction. Faculty members across departments in both schools continue working to improve alignment of their curricula across years and subject areas and with state learning and college readiness standards. Teachers at TF North and DHS are learning to use test results more efficiently to monitor individual student achievement across years.

### **Recommendations and Action Steps**

Based on our observations at the two schools, we have developed a number of recommendations for schools to consider, particularly schools with high enrollments of racial/ethnic minorities. These recommendations are intended primarily for teachers and administrators at the school and district level. However, they may also inform parents, students, business and community leaders, and policymakers concerned with secondary and postsecondary education:

- 1. Emphasize the importance of postsecondary education for all students.**
- 2. Ensure that the school curriculum provides the foundational skills and knowledge needed for college and work.**
- 3. Cultivate an experienced and committed faculty.**
- 4. Provide students with a variety of academic support, career exploration, and career training programs.**
- 5. Monitor student progress throughout high school.**
- 6. Encourage parental involvement and community support.**

Before implementing one or more of these recommendations, a school that seeks to improve the college and workforce training readiness of its students should first make a comprehensive self-assessment of current policies and practices.

### Questions for School Self-Assessment

- Do we believe that all of our students should be able to obtain some type of postsecondary training? If so, does our school emphasize college readiness for all students?
- Do we believe that students who are preparing for work after high school deserve the same quality and rigor in their education as those who are preparing for postsecondary education? If so, does our curriculum provide all students with adequate preparation for college-level coursework? Is it aligned across subjects and years of study? Is it aligned with state subject matter standards and college readiness standards?
- Are our faculty members encouraged to interact and cooperate across and within subject areas?
- Do we offer students a variety of academic support and career exploration and training programs? Do we have programs that reach diverse student populations?
- Are students assisted in developing individual coursework plans according to their career interests and academic potential?
- How do we monitor student progress?
- Do we offer incentive programs to reward hard-working students and identify role models for all students?
- Do we make every effort to increase parent and community involvement?

#### **1. Emphasize the importance of postsecondary education for all students.**

- Create an environment in which all students will have an opportunity to graduate prepared for college.
- Raise students' educational aspirations.
- Require students to take college-preparatory core coursework in order to graduate (four years of English and at least three years of each mathematics, science, and social studies).
- Ensure that all students have access to upper-level courses.
- Raise academic expectations for all students.
- Coordinate with nearby postsecondary institutions to offer students opportunities to earn college credit while in school.
- Encourage students to take college admission tests; offer admission test preparation programs.
- Establish incentive programs to recognize students who work hard, succeed academically, and enroll in college or postsecondary training programs.

#### **2. Ensure that the school curriculum provides the foundational skills and knowledge needed for college and work.**

- Evaluate the K-8 curriculum to ensure that students are given the foundational skills needed for college preparatory coursework before they enter high school; Pre-algebra and Algebra I should be offered in grades 7 and 8 to allow high school students the opportunity to take more upper-level mathematics courses before they graduate.
- Modify college preparatory core courses where necessary to include rigorous content or higher-order thinking skills or to teach the skills needed for college and workforce training readiness.
- Compare school and state standards to the ACT College Readiness Standards; identify ACT College Readiness Standards that are missing from school and state standards and incorporate them into the school's curriculum.
- Offer a wide range of courses, in particular upper-level courses that increase students' likely success in college courses (e.g., Physics, mathematics courses beyond Algebra II, etc.).



- Improve curricular alignment across grades and subject areas.
  - Use EPAS results to identify skill areas in need of improvement.
  - Incorporate the teaching of reading and writing skills throughout the curriculum.
  - Commit funding to curriculum improvement initiatives.
- 3. Cultivate an experienced and committed faculty.**
- Ensure that all teachers are qualified to teach in their assigned subject areas and are prepared to teach rigorous courses.
  - Require—and provide—opportunities for teachers to be involved in continuous professional development activities to update their subject-matter knowledge and teaching skills, especially with diverse student populations.
  - Encourage and provide opportunities for teacher interaction and cooperation within and across departments.
  - Empower teachers to make important decisions about the content they teach and their teaching methods.
  - Provide resources for teachers that offer model lessons, sample assignments, and other support.
- 4. Provide students with a variety of academic support, career exploration, and career training programs.**
- Offer academic support and career exploration and training programs that reach diverse student populations.
  - Offer after-school programs, summer school, distance learning, and other college preparation enrichment programs.
  - Involve student peers, teachers, and adults from the community in tutoring programs for students who need extra support.
  - Organize programs of study by occupational area to guide students into academic and career courses that will give them the foundational skills and knowledge they need to meet their goals.
  - Offer a school-to-work program that focuses on career development; coordinate classroom instruction with students' job experience.
  - Create opportunities for discussion of students' post-high school plans and options.
  - Organize meetings between students and representatives from local businesses.
  - Use students' results from the EXPLORE and PLAN Interest Inventories to help them identify career options.
- 5. Monitor student progress throughout high school.**
- Develop four-year coursework plans for each student before the start of ninth grade.
  - Measure student progress using longitudinal assessments such as ACT's Educational Planning and Assessment System (EPAS).
  - Revise student coursework plans as necessary.
  - In developing and adjusting student coursework plans, use all available information: EPAS and other test results, teacher recommendations, and students' career interests.
  - Identify at-risk students; plan and make interventions for them as early as possible.

- Implement a teacher advisory program in which a teacher provides academic and career advising to a group of 20 to 30 students and follows them throughout their high school careers.

**6. Encourage parental involvement and community support.**

- Make every effort to increase parent participation in coursework planning.
- Arrange frequent parent-teacher conferences.
- Conduct family-oriented activities regularly.
- Involve parents in students' post-high school planning.
- Participate in community events and activities; encourage students to perform community services.
- Develop connections with local businesses and other organizations; invite their representatives to school.
- Raise awareness within the business community and the community at large about the importance of all high school graduates being ready for college and workforce training.
- Seek community financial support for school programs and initiatives.

The goal of these action steps is to enable more high school students to graduate prepared for college-level coursework or targeted workforce training programs. All high school students, but particularly those from low-income backgrounds or racial/ethnic minority groups, must have the preparation necessary to succeed in whatever post-high school opportunities they choose to explore. Such preparation is crucial not only to the future success of the students themselves but also to the economic well-being of society at large.

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## APPENDIX 1

### **Thornton Fractional North High School Profile**

#### General Information

Thornton Fractional North High School (TF North) is a senior high school (grades 9 to 12) located in a southeast suburb of Chicago.

#### **Mission Statement**

To help every student become an independent, confident, and continuous learner.

#### **Community** (Calumet City, 2000 census)

Population: 39,071

Households: 15,139

Median age: 34

Percent under 18: 29%

Income per person: \$18,123

Median household income: \$38,902

Median home value: \$90,300

Percent households with incomes below \$15,000: 16%

Percent adults with a high school diploma: 81%

Percent adults with a Bachelor's Degree: 14%

#### **Students**

Of the total enrollment of approximately 1,600 students:

64% are African American, 19% are Hispanic, 15% are White

62% are eligible for free and reduced lunch

Graduation rate: 94%

Attendance rate: 90%

Dropout rate: 6%

Chronic truancy rate: 13%

Mobility rate: 18%

Average class size: 18

Student/teacher ratio: 15

District expenditure per student: \$6,366 (instructional) and \$11,492 (operational)

According to the ACT survey of 411 sophomores and juniors:

82% intend to enroll in a 2- or 4-year college after graduation.

69% believe that their parents and other relatives helped them the most in making their post-high school plans.

57% believe that their career goals were the most important factor in making their post–high school plans.

20% participated in advanced/honors classes, 10% in summer school programs, and 28% in after-school programs.

## Teachers

The school has 110 teachers.

All teachers are certified to teach. Approximately 77% of core subject teachers are certified to teach upper-level courses.

To maintain teaching certification in Illinois, the teachers must complete a certain number of training programs as specified in the state professional development requirements.

Percent with Bachelor’s Degree: 100%

Percent with Master’s Degree: 59% (district-level)

Percent of classes taught by teachers certified in the particular subject: 100%

Teachers are 50% male, 91% White, 6% African American, and 2% Hispanic (district-level).

Teachers are relatively young: about half are recent hires. On average, teachers have been with the school approximately 7 years.

District average teacher’s salary: \$69,422

## Participation in EPAS

- Before 2000, approximately 20% of 10th-grade students took PLAN on a voluntary basis.
- Since 2000, all students in grade 9 take EXPLORE, and all students in grade 10 take PLAN. Since 2004, all 11th graders also take PLAN.
- Starting with 2001, all juniors take the ACT as part of state-mandated testing (PSAE).

## State Testing

- The Prairie State Achievement Examination (PSAE) measures student achievement relative to the Illinois Learning Standards. The PSAE is administered in grade 11 and includes:
  - The ACT
  - ACT’s Reading for Information and Applied Mathematics WorkKeys tests
  - Science test developed by Illinois teachers and curriculum experts
- Students at TF North who “meet or exceed” state standards in any tested content area are given the option of not taking their senior final examination in the content area in which they met or exceeded standards.

## Placement

- In the spring of 8th grade, each student, in collaboration with parents and counselors, develops a Four Year Academic Plan that reflects a desired post–high school outcome (four-year college, two-year community college, or technical preparation program).
- Students’ 8th-grade EXPLORE test scores and teacher recommendations are used for initial course placement.

Students' and parents' wishes are also considered. Primary indicator for placement in English, social studies, and science is reading achievement, as measured by the EXPLORE Reading Test. Secondary indicators in these areas include scores on the EXPLORE English and Science Tests. The primary indicator for placement in mathematics is the EXPLORE Mathematics Test.

- The progressive four-year plan is designed to be flexible and can be revised should the student's changing interests, test results (grade 9 EXPLORE scores and grades 10 and 11 PLAN scores), course grades, or teacher recommendations indicate a need for modifications to the initial plan.
- Educational plans for most of the students fall into one of two basic academic tracks: regular and honors.
- Programs of studies are organized by PATHWAYS that are designed to guide students into academic and career courses that will give them the skills and knowledge needed to meet their education and career goals. The following PATHWAYS are suggested: Arts and Communications; Business, Management and Technology; Environmental and Natural Resources; Health and Human Services; Industrial; Scientific and Engineering Technology. With the help of their parents, teachers, and counselors, students select the course of study for which they have the interest and prerequisite skills and knowledge.
- Counselors automatically enroll students in subsequent mathematics and science courses, unless they get a note from a parent saying that the student has met the mathematics and/or science requirements and does not need additional courses.

#### Graduation Requirements

- Completion of a minimum of 41 credits during at least 8 semesters is required for graduation. One credit is given for completion of a one-semester course that meets for 60 hours.

#### Minimum Requirements

4 years of English  
3 years of Social Studies  
2 years of Mathematics (3 years for 2009 graduates)  
1 year of Science (2 years for 2008 graduates)  
Health  
Physical Education  
Electives

#### College Preparatory

4 years of English  
3–4 years of Mathematics  
3–4 years of Science  
3–4 years of Social Studies  
2–4 years of Foreign Language

Physical Education

Electives

### Curriculum

- Teachers, departmental heads, and administrators at the school are working together with the district office to develop and modify the curriculum.
- External organizations that play a role in determining the curriculum:
  - National subject organizations
  - Illinois Learning Standards
  - Educational policy organizations
  - Nearby postsecondary institutions
- 5-year Curriculum Revision cycle
- As part of the NCA accreditation process started 6 years ago, the staff identified three major goals for the School Improvement Plan: improving students' reading comprehension, writing skills, and their ability to access technology.
- Teachers in most subject areas, not just core teachers, teach basic skills: writing, reading, mathematics, and history. In particular, reading and writing are incorporated across the curriculum. Approximately 69% of all core teachers who completed the ACT teacher survey specified that they emphasized reading skills "a lot"; 49% specified that they emphasized writing skills "a lot." An additional 28% gave at least "some" emphasis to reading skills in their classes; 46% gave at least "some" emphasis to writing skills.
- Interdisciplinary committees developed a rubric for a school-wide writing prompt and strategies for reading across subject areas.
- The faculty work to align their curricula across departments and years of study.
- ACT College Readiness Standards (formerly called ACT Standards for Transition) and Illinois Learning Standards have been used for curriculum mapping in mathematics and English.
- Professional Learning Communities (PLC) are networking groups at TF North. PLCs provide an opportunity for teachers across subjects to discuss curricula and develop common strategies.
- Effective Teacher Collaboration (ETC) groups provide a means for teachers within a department to develop common exams, distribute tasks, and share activities and strategies. The Art Department pioneered an ETC group about 10 years ago, followed by the Mathematics and Social Studies departments.
- Science and English curricula are strategy-driven.
- The Social Studies curriculum emphasizes comparative and cause-and-effect analyses.
- Test preparation is integrated in the curriculum across all subject areas.

### Academic Support and Career Training Programs for Students

- **Pupil Personal Services (PPS)**

The PPS team includes counselors, social workers, a special education specialist, and a representative from the school administration. PPS meets biweekly to identify at-risk students and plan interventions for them.

- **The Cooperative Learning Environment**

Freshmen are grouped into teams so that students in each team attend the same courses in the four major academic areas (English, Mathematics, Science, and Social Studies). Teachers who teach these four courses work together to align their curricula and discuss individual students' needs.

- **Freshman Seminar**

This is a 25-minute study skills class during lunch hour for lower-achieving students.

- **Grade Assistance Program (GAP)**

GAP is a peer tutoring program supervised by a certified teacher. Instead of a study hall during lunch hour, students may choose to join GAP in either English (also includes social studies) or Mathematics (also includes science and business).

- **Homework Center**

A tutoring program in which students meet for one hour 2 days a week to do homework after school hours. Several teachers are involved in the program, so that each teacher supervises no more than 10 students. Teachers monitor academic progress of students in their respective groups.

- **Summer School**

A three-and-a-half week, two-semester morning program of studies in subjects varying from remedial reading to World History. Students can earn high school credit if they complete the course. Students in this program are assessed a small fee (\$70.00 per course for the 2006 summer).

- **Interrelated Cooperative Education (ICE)**

ICE is a school/community program of career education and instruction. It offers an opportunity for seniors to work outside the school. Students' classroom instruction is coordinated with their job experiences.

- **Business Cooperative Program**

This program is for senior students who have completed business courses to use and apply their skills and gain work experience in a part-time job.

- **The Career Development System (CDS)**

CDS is a consortium consisting of South Suburban College and three high school districts (including TF North) working cooperatively to help youth plan and prepare for their future.

- Students can take dual-credit courses at nearby colleges.

### Post-High School Planning

- Counselors meet with students individually and in group settings to discuss their post-high school plans.
- College-planning nights, financial aid nights, college application nights, career fairs, and apprenticeship program nights are organized regularly at the school.
- Admission test preparation programs are offered to students.
- Students participate in the ASSET Student Success System administered at the South Suburban Community College, a testing and advising program for placing students into courses at postsecondary institutions.
- Students meet with representatives from local businesses and participate in work-study programs.

- Students have career folders in which they identify their goals and the activities that they have completed toward these goals. Students' EXPLORE Interest Inventory information is included in these folders.
- Seniors can participate in the cooperative education program.
- Career PATHWAYS guide students into academic and career courses that will give them the skills and knowledge to be prepared for their education and career goals.

#### Student Incentive Programs

- Meteor Motivational Program recognizes students for being respectful, responsible, hard-working, and caring. Students are nominated by their teachers. Students' names are put on a recognition board.
- Six-week incentive program: students with excellent grades and no attendance or discipline problems receive prizes ranging from gift certificates to school paraphernalia.
- Quarterly Achievement Breakfast honors outstanding students.
- PSAE Incentive Celebration is a luncheon for seniors who met or exceeded state standards. All participating students receive a T-shirt and have an opportunity to win other prizes.
- Announcements are made on the radio when a student is accepted to college or awarded a scholarship. These students' names are put on the college recognition wall.

#### Parental and Community Participation

- The Parent Advisory Board and Parent Teacher Association participate actively in school matters.
- Parents are encouraged to attend parent-teacher conferences.
- Local business and colleges participate in career fairs and other activities at the school.
- The community's financial support resulted in a substantial addition to the school, including a new gymnasium.



## APPENDIX 2

### **Dumas High School Profile**

#### General Information

Dumas High School (DHS) is a senior high school (grades 10 to 12) located in a small town in Arkansas.

#### **Mission Statement**

The Dumas School District will provide a caring educational environment in which each student will develop into the best individual possible.

#### **Community** (Dumas, 2000 census)

Population: 5,238

Households: 1,977

Median age: 33

Percent under 18: 30%

Income per person: \$12,727

Median household income: \$25,754

Median home value: \$49,000

Percent households with incomes below \$15,000: 33%

Percent adults with a high school diploma: 61%

Percent adults with a Bachelor's Degree: 11%

#### **Students**

Of the total enrollment of approximately 400 students:

69% are African American, 5% are Hispanic, 25% are White

61% are eligible for free and reduced lunch

66% are low income

Graduation rate: 82%

Attendance rate: 93%

Dropout rate: 8%

College remediation rate: 55%

Average class size: 21

Student/teacher ratio: 12

District expenditure per student: \$8,237

According to the ACT survey of 210 sophomores and juniors:

76% intend to enroll in a 2- or 4-year college after graduation.

67% believe that their parents and other relatives helped them the most in making their post-high

school plans.

54% believe that their career goals were the most important factor in making their post-high school plans.

30% participated in advanced/honors classes, 20% in summer school programs, and 17% in after-school programs.

### **Teachers**

The school has 37 teachers.

All teachers are certified to teach. Approximately 50% of core subject teachers are certified to teach upper-level courses.

Teachers are required to complete 60 hours of training each year to satisfy their professional development requirement.

Percent with Bachelor's Degree: 66%

Percent with Master's Degree or above: 31%

Teachers are 40% male, 51% White, 48% African American, and 1% Hispanic.

On average, teachers have been with the school approximately 12 years.

District average teacher salary: \$38,918

### Participation in EPAS

- Since 1996, all Dumas Junior High students in grade 8 take EXPLORE, and all DHS students in grade 10 take PLAN.
- Approximately 50% of graduates take the ACT.

### State Testing

- Arkansas Comprehensive Testing, Assessment and Accountability Program (ACTAAP) includes:
  - Benchmark Exams in grades 3 through 8
  - End-of-Course Exams in Algebra I and Geometry
  - Literacy exam in grade 11
  - Iowa Test of Educational Development (ITED) in grades K through 9

### Placement

- A four-year coursework plan is developed for each student in the spring of 8th grade.
- EXPLORE results are used in combination with results from state-mandated tests to develop students' educational plans for high school. Teacher recommendations, as well as students' and their parents' wishes, are also considered.
- Educational plans are revised as needed using students' PLAN results and teacher recommendations.
- Students are identified for placement in AdVentures program (starts in 9th grade) almost entirely on the basis of their EXPLORE scores.

- All students, not only AdVentures students, have access to upper-level courses.
- EXPLORE and PLAN results are also used for career planning.

### Graduation Requirements

- Beginning with the 1996–1997 school year, students must successfully complete a minimum of 26 units in order to graduate. A course that meets for 120 hours is considered 1 unit.

#### **Minimum Core Curriculum**

- 4 years of English
- ½ year of Oral Communication
- 3 years of Social Studies
- 3 years of Mathematics
- 3 years of Science
- ½ year of Fine Arts
- Physical Education
- Electives

#### **AdVentures**

- 4 years of English
- ½ year of Oral Communications
- 4 years of Science
- 4 years of Mathematics
- 4 years of Social Studies
- 2 years of Foreign Language
- 1 year of App. Govt. or Psychology/Sociology
- ½ year of Fine Arts
- Physical Education
- Electives

- Beginning with the 2004–05 school year, seventh-grade students in Arkansas must choose between the Smart Core and Core curricula. All graduates must meet the Smart Core curriculum requirements unless their parents chose the Core curriculum on the Informed Consent Form provided by the Arkansas Department of Education. Although both curricula require completion of 22 units, the Smart Core curriculum requires more upper-level courses in mathematics and science than does the Core curriculum.

### Curriculum

- Teachers, departmental heads, and administrators across the district are working together to develop and modify the curriculum.
- External organizations that play a role in shaping the curriculum:
  - National subject area organizations
  - Nearby postsecondary institutions

Southeast Arkansas Educational Cooperative  
State Curriculum Frameworks

- Curriculum is aligned across district and by subject in grades 7 through 12. EPAS results and, in particular, the ACT College Readiness Standards (formerly called ACT Standards for Transition) have been used to improve the curriculum in mathematics, science, and social studies, but especially in mathematics.
- Mathematics curriculum:
  - Pre-Algebra is a required course in 7th grade.
  - Algebra I and Algebra II are offered to higher-achieving students in mathematics.
  - Algebra A, Algebra B, and Algebra II are offered to lower-achieving students in mathematics.
  - Students must pass the Algebra I end-of-course exam to get high school credit for this course.
- “I CAN Learn” is an interactive computer education system for teaching mathematics courses. It is used at DHS with its Algebra I and Algebra II classes.
- “Literacy blocks” are incorporated throughout most subject areas. Approximately 82% of all core teachers who completed the ACT teacher survey specified that they emphasized reading skills “a lot”; 71% specified that they emphasized writing skills “a lot.” An additional 12% gave at least “some” emphasis to reading skills in their classes; 24% gave at least “some” emphasis to writing skills.
- Approximately one-quarter of students participate in AdVentures, a program funded by a state grant. The program offers one-week summer school and core courses in grades 9 and 10 that are more difficult than core courses for other students.
- Students need to take 3 courses in a certain area (computer, business, medical, home economics, etc.) to be considered a “completer” in the vocational department.
- For a small school, this school offers a wide range of courses.

#### Academic Support and Career Training Programs for Students

- **Career Action Plans (CAPs) Program**

Teachers take on the role of advisor to a group of students and follow them from 10th through 12th grade (usually about 30 students per teacher). CAPs advisors accumulate test results, coursework completion information, and other data for their students. CAPs advisors meet with their students regularly to help them plan schoolwork and choose careers.

- **College Preparation Enrichment Program (CPEP)**

CPEP is a college-preparation program for 11th and 12th graders whose ACT Composite scores are below 19. It is funded by the state of Arkansas. The program includes a five-week summer session. Students receive individualized academic and career counseling.

- **Jobs for Arkansas Graduates (JAG)**

JAG is a school-to-work program focused on career development, job attainment, and job survival. Students work in various businesses while in school; graduates are followed for 12 months. The teacher acts as a liaison

between the students and local businesses.

- **Target P.R.E.P. School** (Productive/Responsible/Educated/Prepared)

Target P.R.E.P. is a nontraditional learning center for at-risk students. In addition to the four core areas, the curriculum includes specialized training and preparation to return to the traditional educational settings.

- **Building Bridges to a Brighter Future**

Building Bridges is a set of programs developed by the Dumas 21st Century Community Learning Center. The programs provide integrated educational, occupational, health, safety, cultural, and social services to the district's students and other community members.

- **Environmental and Spatial Technology (EAST)** lab is a project-based, service-learning class that provides students with the most current, high-end technologies available.

- **Early College High School**

Students can take dual-credit college-level courses. This project is organized by the Southeast Arkansas Educational Cooperative in cooperation with nearby postsecondary institutions.

- **Compressed Interactive Video (CIV)**

CIV instruction is a distance education program that brings college courses from nearby postsecondary institutions to DHS students.

#### Post-High School Planning

- The counselor meets with students individually and in group settings to discuss their post-high school plans.
- Career Action Plans advisors monitor their students' CAPs folders and regularly discuss with students their post-high school options.
- College-planning nights, financial aid nights, career fairs, and apprenticeship program nights are organized regularly at the school.
- Students are encouraged to take college admission tests.
- Admission test preparation programs are offered to students.
- Students meet with representatives from local business.
- Seniors can participate in the Jobs for Arkansas Graduates program.

#### Student Incentive Programs

- Each month one student is identified as Student of the Month. During this month, the student's name is displayed on the school's marquee, and he or she is invited to an off-campus lunch with the principal. The student receives a certificate.
- The school publishes three honor rolls in local newspapers: a merit honor roll for students with a 3.00 or higher GPA, an honor roll for students who earn only A or B grades, and an honor roll for students who earn only A grades.

## Parental and Community Participation

- **The Parent Center**

The district employs a full-time parent-school coordinator and maintains the Parent Center where families of pre-K through 12th grade students can attend activities and receive informational and enrichment materials.

- Parents are required to attend course registration with their children and are encouraged to attend parent-teacher conferences.
- The school has developed exceptional rapport with the community and enjoys its support, including financial support. Numerous connections with local businesses have been established through the JAG program and participation in the Workforce Alliance for Growth in the Economy (WAGE) committee. Community support comes from many organizations, ranging from local banks to the Chamber of Commerce. Students who plan to go to college have many local scholarship opportunities.
- A new gymnasium has been recently constructed with taxpayer money.

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## Notes

<sup>1</sup> ACT's Educational Planning and Assessment System (EPAS) is designed to guide and support schools, districts, and states in their efforts to improve students' readiness for life after high school. The EPAS system provides a longitudinal approach to educational and career planning, assessment, instructional support, and evaluation. EPAS consists of EXPLORE<sup>®</sup> (for eighth and ninth graders), PLAN<sup>®</sup> (for tenth graders), and the ACT<sup>®</sup> test (for eleventh and twelfth graders).

<sup>2</sup> Although students who took PLAN in 1996 graduated in 1998, we compared 2005 average ACT scores to those for 1997 instead of 1998 because relatively fewer DHS students took the ACT in 1998 (36 percent of all graduates compared to at least 50 percent of all graduates for other years). The percentage of ACT-tested students in 1997 was 55 percent.

<sup>3</sup> From 2002 to 2005, the total numbers of African American students and Hispanic students at TF North increased by 60 percent and 82 percent, respectively.

<sup>4</sup> Remediation data were not available for TF North.

<sup>5</sup> The ACT College Readiness Standards were formerly known as the ACT Standards for Transition.