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AUTHOR Reyes, Pedro; Phillips, Joy C.
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ABSTRACT

Houston, Texas, was one of the cities awarded a grant via the Annenberg funds to implement school reforms. It developed the Houston Annenberg Challenge with local collaborators to initiate and nurture systemic change, thus improving education. A research and evaluation study investigated how funded schools implemented the reform initiative, what schools were doing as a result of the initiative; and what impact the initiative had on schools and on student achievement. Information came from student achievement data and case study school data. This report describes: "Houston Metropolitan Area Context"; "The Houston Annenberg Challenge Context"; "Student Achievement"; "Student Grade Retention"; "Student Dropout"; "Survey Analysis: A Research and Evaluation Study, Spring 2001" (Annenberg student, teacher, principal and parent data); "Effects on Teaching and Learning"; "Effects of Family and Community"; and "Effects on Systemic Change." The research indicates that about 90 percent of the Houston Annenberg funds are spent on professional development, which has dramatically impacted teachers' practice. Student learning is on the rise, with teachers, administrators, students, and families united to provide excellent education for all students. Surveys are appended. (Contains 47 references.) (SM)

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Authors

Pedro Reyes, Ph.D., Director and Principal Investigator
Joy C. Phillips, Ph.D., Associate Director

Houston Annenberg Challenge

Research and Evaluation Study
College of Education, SZB 310
The University of Texas at Austin
Austin, TX 78712-1291
Phone: 512-475-8577
www.utexas.edu/projects/annenberg/index.html

Researchers from:

The University of Texas at Austin, The University of Houston, and Rice University

Rima Alexander
Libby Barlow
Rebecca Brown
Nadia Castillo
Eileen Coppola, Ed.D.
Cheryl Craig, Ph.D.
Courtney Crim
Gary Dworkin, Ph.D.
Doug Foley, Ph.D.
Andrea Foster, Ph.D.
Kelly Goran Fulton
Jacqueline Hawkins, Ed.D.
Amy Langenkamp
Jon Lorence, Ph.D.

Jose' Martinez
Linda McNeil, Ph.D.
Ed Morris
Chandra Muller, Ph.D.
Amaury Nora, Ed.D.
Judy Radigan
Amy Sexton, Ph.D.
Ruth Silva, Ed.D.
Kris Sloan
Cazilda Steele
Laurence Toenjes, Ph.D.
Angela Valenzuela, Ph.D.
Lonnie Wagstaff, Ed.D.
Jo Worthy, Ph.D.

Additional copies of this report may be obtained from:

The Houston Annenberg Challenge
Wedge International Tower
1415 Louisiana, Box 9, Suite 3250
Houston, TX 77002-7332
Phone: 713-658-1881
Fax: 713-739-0166
www.houstonannenberg.org

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Transforming Public Schools

Year Two Evaluation Report / August 2001

INTRODUCTION

At the White House on December 17, 1993, President Clinton announced a private pledge to public education of a half-billion dollars. The benefactor was Walter H. Annenberg, a former United States ambassador to Great Britain, and the beneficiaries were American school children, particularly poor children living in big cities. At a time when confidence in public education was low, Ambassador Annenberg sent a signal that something should—and could—be done to improve American public schools, particularly those attended by low-income children (Schön & McDonald, 1998).

Walter Annenberg's vision was both idealistic and practical. He indicated that public schools would never improve unless the reforms they undertook arose from an unshakable belief in America's obligation to educate all children well. Moreover, Mr. Annenberg suggested that schools would improve only when communities realized that it was in their own best interests to take the tough political steps necessary to provide a good education for every child. He commented that schools would improve when private citizens and institutions became willing to invest substantial amounts of time, energy, and money in public education—not just for their own children, but for other people's children as well. Mr. Annenberg hoped his own monetary commitment would create this effort in localities around the country, with his dollars matching new ones raised by local planners (Schön & McDonald, 1998).

Less than a year later, Annenberg funds were allocated to cities responding to the challenge. The first grant, to support small schools in New York City, was awarded in the fall of 1994. Ultimately, 18 locally designed Annenberg Challenge projects were created, involving partnerships with almost 400 school districts in nearly 40 states. Nine of these, involving pledges of anywhere from 10 to 50 million Annenberg dollars, focused on some of the nation's largest urban school districts. One project spanned rural America. Three focus on the arts. Five grants, ranging in size from \$1 million to \$4 million, support innovative efforts in smaller urban districts. Overall in the Annenberg Challenge, approximately 2,400 schools have been funded,

with the potential in 1999 alone to affect nearly 1.5 million children. More than \$487 million in matching local funds was raised by the end of 1998, and more than 1,000 local partners—including businesses, independent reform groups, and not-for-profit agencies—are currently engaged in the implementation of the Challenge reforms (Cervone & McDonald, 1999).

The City of Houston was one of the grantees in the 1996 round of funding. Key individuals from local foundations, educational institutions, and corporations collaborated to create the Houston Annenberg Challenge. These key individuals, who expressed concern about the quality of public education in the greater Houston area, sought to develop an organization capable of initiating and nurturing systemic change. The founders of Houston Annenberg committed to conduct a "multi-district, city-wide campaign that focused the community's energies, political will, and financial resources on a strategic investment in networks of public schools that with their community partners would thoughtfully work toward whole school change" (Child-Centered Initiative, 1996).

The broad-based community group, led by representatives from the Brown Foundation and Houston Endowment, Incorporated, created a vision for the public school reform initiative. This vision culminated in March 1996 with the formation of a nonprofit organization formally named "The Child-Centered School Initiative of the Greater Houston Area." The mission of this newly formed organization was "to promote an academically rich and purposeful education for more of our children and to demonstrate how such an education could become possible for all children" (Child-Centered Initiative, 1996). This broad-based community group thought that Annenberg's vision was compatible with their vision; thus the Houston Annenberg Challenge was established. This group of individuals, all from the Houston metropolitan area, provided the impetus for this school reform program. What are the characteristics of the Houston metropolitan area? We turn to that description next.

HOUSTON METROPOLITAN AREA CONTEXT

GENERAL

The city of Houston, founded in 1836 by J.K. and A.C. Allen and named after Sam Houston, has a rich history that includes serving as the capital of the Texas Republic from 1837 to 1839. Houston ranks as the fourth largest city in the United States. The city is situated primarily in Harris County, although it occupies land in both Fort Bend and Montgomery Counties. Harris County remains the third largest county in the United States, covering approximately 1,788 square miles and hosting 3.4 million people (U.S. Census Bureau, 2001). With a population of approximately 1.9 million people, Houston averages just over 3,000 people per square mile. Since the mid-1980s, Houston has undergone profound changes both demographically and economically. These changes contribute to Houston's current political, economical, and social transformation.

DEMOGRAPHIC CONTEXT

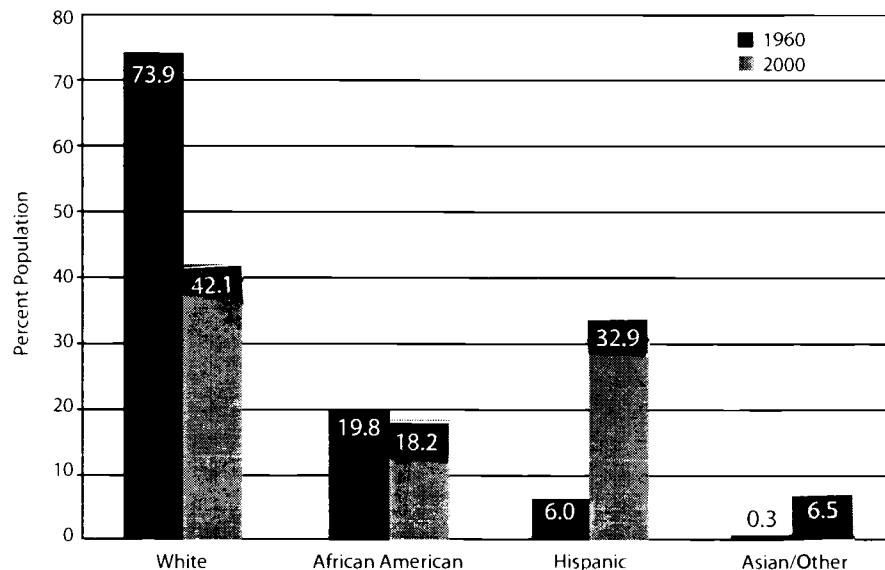
Houston, Texas, has long been known as a multi-ethnic city. However, 2000 census data reveal that the city's ethnic diversity is increasing. Demographic shifts show a steady decline in the White population, a substantial increase in the Hispanic population, and increased representation of multiple ethnic and racial categories (U.S. Census Bureau, 2001). Demographers project Hispanics to be the majority of the Texas population by 2004 (Yardley, 2001).

In 1960, Whites accounted for nearly three-quarters (73.9%) of the population of Harris County. The next largest ethnic group in 1960 was the African American population (19.8%), while the remaining population was recorded as Hispanic (6%) and Asian/Other (0.3%). Tracing the demographic shifts over the ensuing decades shows a steady decline of the White population. The 2000 census reports a White population of 42.1%, a decrease of 31.8%. In an inverse trend, the Hispanic proportion of the population has increased since 1960 more than five times (32.9%). Whereas the African American population has remained fairly steady at around 20%, the Asian population has grown slowly but steadily to 6.5% (see Figure 1).

Traditionally, teachers are mainly White females from working- and middle-class economic backgrounds (Kennedy, 1992). The 2000 census data show that an increasing proportion of the Houston school-age population is from ethnic groups other than White. Clearly, these demographic shifts have critical implications for public education in the greater Houston area.

The impact of ethnic diversity on schools becomes especially significant when ethnicity of teachers and students is taken into account. White teachers are still the majority in four of the six school districts participating in the Houston Annenberg Challenge. Although two of the six districts have a majority of teachers who are African American, none of the six have more than 20% Hispanic teachers; three districts have less than 10% Hispanic

Figure 1: Percentages of four major demographic groups in the greater Houston area in 1960 vs 2000, as percentages of total population (U.S. Census Bureau, 2000).



teachers (Texas Education Agency, 2001). Only one of the six districts has a majority White student population.

Additionally, five of the six school districts participating in the Houston Annenberg Challenge report that more than 50% of their students are economically disadvantaged; three of the six report that more than 70% of the students are economically disadvantaged. The Texas Education Agency (TEA) identifies students as economically disadvantaged if they qualify for free or reduced-price lunches. Research shows that schools with a greater proportion of poverty-level students have higher numbers of teachers who teach out of their primary field of study. For example, in one study 32% of high school mathematics teachers did not have a major or minor in mathematics. Unfortunately, out-of-field teaching is even more common in large, urban schools (Ingersoll, Han, & Bobbitt, 1995). Without a doubt, greater Houston public schools are affected by a dramatic demographic and economic context.

ECONOMIC CONTEXT

In the past, Houston's economy has focused on oil and natural gas exploration and production. Once a railroad center, Houston later emerged as a dominating force in the oil and gas industry before expanding to areas such as shipbuilding. Aerospace engineering contributed to Houston's economy beginning in 1961 with the establishment of the National Aeronautics and Space Administration's Manned Spacecraft Center, now known as the Lyndon B. Johnson Space Center. Now diversified with other industries, Houston's economy has expanded since the recession of the 1980s. In addition to the more commonly known oil and gas industry jobs, Houston's employment diversity now includes jobs in engineering, computer science and technology, biomedicine, research and development, banking and finance, construction, and retail. Currently, the service-producing sector furnishes 79% of Houston's jobs and the goods-producing sector provides the remaining 21% of jobs.

The increase in Houston's job growth has been evident for more than 10 years. As a result of continued economic growth, Houston continues to serve as a corporate center for the state, national, and international economy. Houston remains a leader in both domestic and international aspects of the oil and gas industry. Many Fortune 500 companies have headquarters in Houston. This economic success spans the areas of retail, oil and gas, banking, medicine, engineering, technology, and research and development. Houston has also experienced growth in other economic areas such as agricultural business. Reportedly, 27% of Harris County land remains d to farming and ranching.

Houston faces renewed challenges as the 21st century begins. For example, recent economic growth appears to be benefiting mainly the middle and upper-middle class populations, and disparities between socioeconomic groups are becoming more evident. In addition, the influx of immigrants promises new language and educational challenges (Thomas & Murray, 2000).

STATE EDUCATIONAL ACCOUNTABILITY POLICY ENVIRONMENT

Texas standards and assessments reform began in the early 1980s (Grissmer & Flanagan, 1998). While most states maintain some form of state and local accountability system based on performance indicators, Texas remains a leader among other states in standards and assessments as well as performance reporting. *The State of State Standards* (Finn & Petrilli, 2000) acknowledged Texas, along with Alabama, California, North Carolina, and South Carolina, for having solid standards and a strong accountability system. Texas received this distinction for demonstrating an understanding of standards-based reform, aligning standards and assessments, holding schools accountable, publicly reporting results, and providing rewards and consequences based on school and district ratings. Statewide assessment in Texas has evolved from minimum competency testing to state curriculum standards testing. The evolution is evident in the progression of testing from the Texas Assessment of Basic Skills (TABS) test, a criterion-referenced minimum competency test administered from 1979–1980 to 1984–1985, to the Texas Educational Assessment of Minimum Skills (TEAMS) examination administered from 1984–1985 to 1989–1990, to the current criterion-referenced test, Texas Assessment of Academic Skills (TAAS), that has been administered since 1991. The TAAS is based on the Texas Essential Knowledge and Skill (TEKS) curriculum standards for kindergarten through grade 12.

The Texas accountability system for schools and districts gained strength after the Texas Legislature passed House Bill 72 in 1984. House Bill 72 sought an accountability system that emphasized student performance. The current accountability rating system, which designates schools and districts as Exemplary, Recognized, Acceptable, or Low Performing, has been in effect since 1994. Since 1994, the Texas Education Agency has assigned accountability ratings to schools and districts based on the following indicators: student performance on TAAS, annual percentage of dropouts, and attendance rates. Performance data are disaggregated into four student groups: African American, Hispanic, White, and economically disadvantaged.

The Texas Education Agency collects data at the district, school, staff, and student levels. The Academic Excellence Indicator System (AEIS), published annually, functions as a tool for determining district accreditation and school ratings. Additional information on students, staff and personnel, finances, programs, and demographics is available in the full AEIS report. AEIS provides information at the campus, district, region, and state level. Data provided by the schools through the Public Education Information Management System (PEIMS), testing contractors, and other state agencies make the AEIS reports possible. The PEIMS is a compilation of data collected in the following areas: organization; budget; financial; staff; student demographics and program participation; student attendance and course completion; and dropout, retention, and graduation.

THE HOUSTON ANNEBERG CHALLENGE CONTEXT

HISTORY OF REFORM

The Houston Annenberg Challenge (HAC) is a school reform initiative launched in 1996 in the greater Houston area in order to initiate and nurture systemic change in the public schools. Houston Annenberg founders envisioned that the accomplishment of this mission depended on a major infusion of public and private dollars. To support their efforts to improve public education in the city of Houston, the group prepared a proposal for funding from the national Annenberg Foundation in St. Davids, Pennsylvania.

The Houston proposal addressed three key issues: teacher learning, school isolation, and size. These three key imperatives, discussed in more detail later in the report, refer to improving teacher professional development, reducing schools' isolation, and creating personalized learning environments for children. The vision for the Houston Annenberg reform effort became a reality with a one-to-two matching grant from the Annenberg Foundation. The Annenberg Foundation contributed \$20 million with the stipulation that Houston raise \$40 million in a public and private funded match. As a result of this funding, the Houston Annenberg Challenge began.

Community leaders employed a variety of strategies to create a plan for this school reform venture, including visiting model schools in other states and convening community meetings. The planning process culminated in a 1996 forum that brought together local government

officials, educators, parents, foundation and corporate representatives, and other community leaders. This forum featured national school reform leaders Deborah Meier and Henry Levin, who presented both inspirational and practical remarks.

Founders of Houston Annenberg committed funds from the initiative to build school capacity. Thus, representatives from school districts across the Houston area, including principals and teachers, participated in the planning process. Ultimately, the planners decided to fund three distinctive support categories: 1) direct support to networks of public schools and their community partners, 2) indirect support to a network of reforming schools, and 3) community support. The planners allocated the bulk of the money for direct support to public schools. They invited schools to submit Requests for Proposals (RFPs) addressing the three Annenberg initiatives of teacher learning, isolation, and size.

THE HOUSTON ANNEBERG CHALLENGE THEORY OF ACTION

Houston Annenberg's theory of action for school change places schools at the center of the reform. Annenberg assumes that those who work closely with children and know them best should decide on changes needed for the school. Annenberg also assumes that strong professional communities develop as educators review their own practices to strengthen student and organizational learning. In addition, Annenberg believes that community support is essential for sustaining school reform in the greater Houston area.

Again, the Houston Annenberg Challenge focused its funding to address three initiatives: teacher learning, isolation, and size. These three initiatives are embedded in the imperatives set by the national Annenberg Challenge. The original Houston Annenberg Challenge proposal to the Annenberg foundation spoke about these three key issues in the following way.

Enhancing Teacher Learning

The proposal stated, "An academically rich environment begins with teachers who are deeply knowledgeable about their subjects, about children's development, and (about) a wide range of effective strategies for teaching in content areas." Therefore, the original proposal pledged financial and informational resources to teachers' professional development and learning. These resources provided schools support to focus on strengthening teachers' knowledge of children, academic subject areas, and children's cultures. The resources also targeted the work setting to include more planning time, professional

development, and teacher networking. Furthermore, Annenberg provided opportunities for principals to strengthen their own leadership capabilities and develop leadership among the faculty and parents to enhance teacher learning.

Reducing Isolation

The second area of focus addressed isolation. Annenberg focused attention on the need to help schools break down isolation within the school, between schools, and between schools, families, and the community. The proposal suggested that schools invite parents, community members, and other participants to become active partners in the Houston Annenberg reform effort. Annenberg leaders involved others in the reform effort by providing classes in the schools for parents, organizing community conferences on education issues, and developing community advocates for public education and the children of the greater Houston area.

Personalizing the Student Learning Environment

Initiatives that target size emphasize personalizing the learning environment for children. For this reform initiative, schools organize around multiple dimensions of size, physical structure, resources, space, and time, so that all teachers know each child well, set high academic expectations, and use this to shape his or her education. Recently, Houston Annenberg stated, "Forging one-on-one relationships with each student is crucial to ensuring that children stay in school through their senior year" (Houston Annenberg Challenge, 2000). The Annenberg leadership encouraged schools to address the size imperative by reducing the teacher-student ratio, reducing class sizes, and reorganizing classes into smaller groups.

THE HOUSTON ANNEBERG CHALLENGE FUNDING CATEGORIES

Direct Support to Schools

The Houston Annenberg Challenge distributed the first wave of dollars to two sets of schools in 1997: one set designated as Beacon schools and the other as Lamplighter schools. Beacon schools consisted of 11 individual schools and represented five school districts in the greater Houston area. These schools already demonstrated the capacity to engage in school reform prior to receiving Annenberg funding. The Houston Annenberg funding supplemented and expanded existing programs and processes while the schools also addressed the three Annenberg imperatives. Furthermore, each Beacon school was also required to focus on at least one academic area such as reading, mathematics, or science.

The second set of schools funded in 1997, designated as Lamplighter communities, included networks of schools that collectively submitted planning grant proposals. The 20 school networks represented six school districts. Their planning proposals included needs assessment, partner identification, and specific goals and objectives. Lamplighter communities applied for implementation grants in the subsequent year, 1998–1999.

By the 1998–1999 school year, Annenberg firmly established the RFP process for funding, a process launched the previous year. The Houston Annenberg Board funded 11 Beacon schools for a second year. The 20 Lamplighter school communities received their first year of implementation funding. Prior to awarding funding, Houston Annenberg leadership required each school or group of schools to participate in a rigorous self-reflection and planning process. Additionally, teams of educators, parents, and community people visited each school. This process evolved in 1999–2000 into a structured peer-review and accountability procedure.

With the 2000–2001 funding cycle, the Beacon schools received funding for a fourth year, the Lamplighter school communities received funding for the third full year, and Annenberg introduced a new category of funded schools. Houston Annenberg called the third category Floodlight schools. With the addition of the Floodlight category, Annenberg formally partnered with another local school reform effort designed to reduce the number of students dropping out of school before graduation.

Indirect Support to Schools

Annenberg designated the second category of funding for indirect support to reforming schools. The original plan for using these funds included publications among reforming schools to create shared venues to address other school, district, and state audiences. The plan also included funds for teacher learning and principal leadership development, support of innovative enrichment of local teacher education programs, and creation of a regional faculty modeled after the Coalition of Essential Schools' National Faculty. During the 1997–1998 and 1998–1999 academic years, the Houston Annenberg Challenge funded local faculty to serve as on-site planning and evaluation (P & E) consultants for the Beacon schools. With the 1999–2000 year, Annenberg incorporated the P & E funds directly into the Beacon school budget. The funds continue in the school budget for the current academic year.

Building a Community of Support for Reforming Schools

Founders of the Houston Annenberg Challenge envisioned building a community of support for reforming schools. Thus, the third type of Annenberg funding provided support to the greater Houston community for continuing school reform work beyond the Annenberg schools. The vision for this support included conducting public policy forums related to children and children's issues, participating in the creation of a research consortia, and advising policy makers on the impact and unintended consequences of state legislation and regulations affecting the school reform process. Consequently, Annenberg committed funds for public information and dissemination about the HAC reform, reforming schools, good school practices, and related work from the reform efforts in other cities across the United States.

THE HOUSTON ANNEBERG CHALLENGE DISTRICTS AND SCHOOLS

As previously noted, districts and schools receive Annenberg funds to sustain, expand, and improve reform efforts based on a rigorous process. In fact, Houston received one of only nine Annenberg Challenge projects awarded nationally in an urban setting. The Houston Annenberg Challenge awarded funds to schools in six Houston school districts in the Greater Houston area: Aldine, Alief, Houston, Humble, North Forest, and Spring Branch Independent School Districts. As a result of this grant, 88 schools currently receive Annenberg funds for reforms. Again Houston Annenberg awarded funding to three school categories: Beacon schools, Lamplighter Learning Communities, and Floodlight schools. There are 67 schools in Lamplighter Learning Communities, 11 Beacon schools, and 19 Floodlight schools (some schools are in multiple categories). Currently, schools from five of these districts participate as case-study sites for the Houston Annenberg evaluation and research study. Houston Independent School District (HISD) schools receive a majority of the Annenberg funding. Annenberg currently funds 69 Houston schools, 11 Aldine schools, 5 Alief schools, 3 Spring Branch schools, 2 North Forest schools, and 1 school in the Humble Independent School District.

Again, HISD is the center of this multi-district configuration granted Annenberg funding. The Houston Independent School District encompasses approximately 312 square miles, serves 210,000 students, and ranks as the largest school district in Texas and the fifth largest in the United States. Aldine Independent School District, located just 15 miles north of downtown Houston, serves approximately 50,000 students from diverse ethnic and

socioeconomic backgrounds. Alief Independent School District, an urban community located southwest of Houston, also boasts the ethnic diversity of their 41,000 students who attend 38 schools. North Forest Independent School District, the smallest district to receive Annenberg funding, serves 13,579 students in 17 schools. In Humble Independent School District, also located north of Houston, 29 schools serve 23,000 students. Spring Branch Independent School District, west of Houston, serves 31,356 at 42 schools.

Schools in Houston have changed greatly since construction of the first free public schools in 1877 and the establishment of the Houston Independent School District in 1924, as the demographics and needs of a diverse population also changed. Today, schools funded by Annenberg grants experience the effect of these changes. Educators from Harris County commonly report that the imperative to respond to the educational needs of a diverse student population shapes the reform efforts underway in schools. For example, studies indicate that a majority of the **growing Hispanic** and Asian residents in the Greater Houston area were not born in the United States. Thus, many children enter school each fall after being in the U.S. for less than **three months** (Klineberg, 1996). Moreover, the shifts in demographics occur throughout the school year as students transfer into, within, and across school and district boundaries. These changes require schools to continually revise their academic programs and services to meet the individual child's needs.

THE RESEARCH AND EVALUATION STUDY

In 1998, Annenberg officials solicited proposals from Texas universities to conduct a three-year research and evaluation study of the reform initiative. The contract, subsequently awarded to The University of Texas at Austin in September 1999, outlined an in-depth study of the Houston Annenberg Challenge. The plan included using a collaborative research team from Rice University, the University of Houston, and The University of Texas, and utilizing both quantitative and qualitative measures in the data collection.

The overarching purposes of the research and evaluation study include determining: how the funded schools put the reform initiative in place; what the schools are doing as a result of the initiative; and what apparent impact the initiative has had upon schools and, most critically, upon students' academic performance. Specific goals of the research study are to:

- Furnish formative feedback to Annenberg for modification of its plans and strategies;

- Provide a summative account of Annenberg's impact on schools, districts, and other stakeholders;
- Inform the public about accomplishments, needs, and challenges of public education in the greater Houston area;
- Inform and guide education reform efforts in the region by sharing what has been learned from Houston Annenberg's experience; and
- Provide information on the best teaching practices.

The summative feedback to the Houston Annenberg is based upon the extent to which the initiative addresses the goals set for the project. The research and evaluation study team evaluated the following three areas.

- 1) **Academic Achievement.** How do Annenberg schools compare with other schools in the Houston metropolitan area on improving academic achievement?
- 2) **School Development.** How are schools progressing on their development efforts? Especially, how are schools doing in the areas of teacher learning? Are they reducing isolation, and creating personalized environments for students? What kinds of changes have taken place? What structures have developed to support their professional work?
- 3) **Long-Term Impact.** How is Annenberg progressing on building the infrastructure to support school reform throughout the region? How will schools become models for systemic reform across districts?

To capture sufficient data assessing both the breadth and depth of the Houston Annenberg's reform work, the researchers proposed a multi-stage, multi-level, and multi-method research design. The evaluation design includes two major strategies: a macroanalysis of all funded schools and a microanalysis of a subset of schools.

To assess the students' academic progress, we used a macroanalysis design that focused on student achievement data. These data include student achievement information on reading and mathematics tests from the Texas Education Agency. The data come from criterion-referenced and standardized tests. Nonacademic data related to retention, dropout, attendance, academic engagement, and quality of student work will be collected through data files obtained by the State of Texas and through survey data from students, teachers, principals, parents, and district staff. We used three years of data to assess the students' academic progress in Beacon schools and two years of data to assess academic progress in Lamplighter schools.

To assess school-level change, we designed the microanalysis section of this study. The researchers drew data from the subset of 12 schools, which are designated case study schools. The assessment requires an in-depth understanding of the change process and how Annenberg functions to support school reform over time. These data provide specific information about the changes taking place at these schools as a consequence of the funding.

To assess the larger impact of Annenberg in the region, we followed specific case study schools as they participated in local, regional, and national activities. We also assessed the activities Annenberg staff engaged in as they built programs to reach wider audiences. Finally, we used surveys to assess perceptions of school partners and stakeholders in the Houston community.

In this report, we continue to answer questions on the impact of Houston Annenberg on public schools in formative ways. We focus particularly upon the emerging evidence that reform supported by Annenberg funding has begun to result in changing school environments and improved student achievement.

Over the next year, we will track Annenberg's progress toward reaching its goal of sustaining school reform in the Houston metropolitan area. We will pay careful attention to indicators that the vision of school reform has become institutionalized across the city. This evidence will contribute to our understanding of the likelihood that the reform will be sustained after the funding from the national Annenberg Foundation ends. Overall, data collected during the three years of the research and evaluation study will build a basis to provide a longitudinal summative report of the Houston Annenberg impact on the area's public schools.

STUDENT ACHIEVEMENT

The Houston Annenberg Challenge expects all funded schools to show significant gains in student academic achievement after three years of funding. Beacon schools have received four years of funding; Lamplighter schools have been funded for three consecutive years; and Floodlight schools have received only two years of funding. Thus, we make two sets of comparisons. First, we trace the academic improvement of the group of schools over time. Second, we compare the funded schools to the overall academic performance of the Houston Independent School District (HISD). We use this district because the sociopolitical and economic context, the student population, and other demographics are similar to those of the funded schools.

As the benchmark for academic achievement, we use the Texas Learning Index (TLI), which is based on the students' performance on the state-mandated TAAS test. This test measures basic skills in core areas such as reading and mathematics. While these standardized assessments fall short of measuring the depth of academic achievement and the range of student outcomes, they do provide a common yardstick for evaluating academic outcomes of the Houston Annenberg Challenge schools.

At Year Two, we are evaluating trends in schools' performance on the Texas Learning Index based on four years of test data, including year 2001. To evaluate the progress of the funded schools, we examine:

- Beacon, Lamplighter, and Floodlight schools' average gains over time by elementary, middle, and high school levels;

- The academic gains of funded schools as compared to the gains of all HISD schools generally; and
- The extent to which funded schools show progress in closing the achievement gap between students of different economic, language, and ethnic groups.

In general, our evaluation found that Beacon schools of all levels are leading all Annenberg-funded (Lamplighter and Floodlight) and non-Annenberg-funded HISD schools in reading and mathematics achievement.

ACADEMIC ACHIEVEMENT GROWTH

Elementary Schools

Beacon elementary schools are leading all Annenberg-funded and non-Annenberg-funded elementary schools in academic achievement in reading and mathematics over the last four years.

Out of all the funded elementary schools, the Beacon elementary group leads the other two groups in academic reading achievement. Over the last four years the students from Beacon schools have outperformed the students from Lamplighter and Floodlight schools. Indeed, every year the students from Beacon schools have mastered all the reading objectives of the state-mandated test. The Lamplighter schools also have maintained their level of performance for the last three years. These schools have steadily approached the mastery level in reading achievement, reaching that level in 2001. On the other hand, the Floodlight schools started off in 1999 with a passing average score. During the last two years, Floodlight schools as a group have moved upward at least five TLI points. As a group of funded elementary schools, they are performing well in improving children's reading skills (see Figure 2).

Figure 2: Elementary School Reading Scores

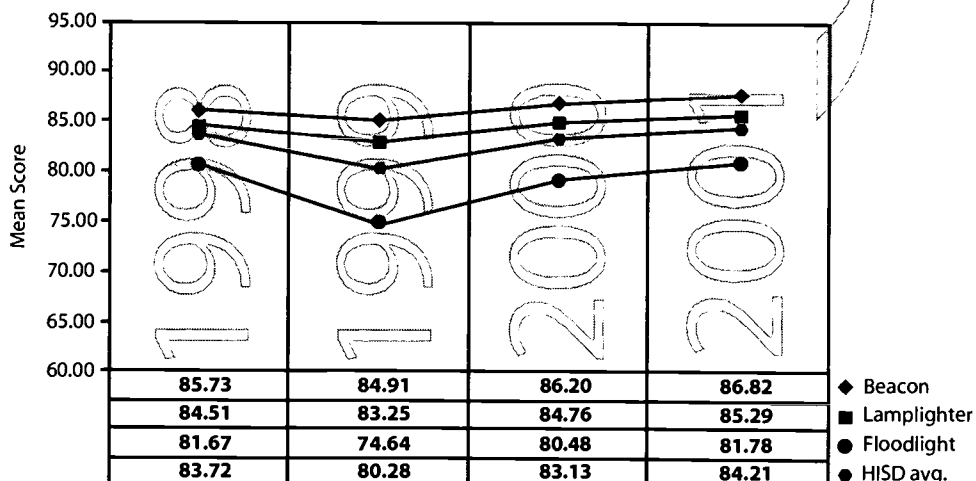
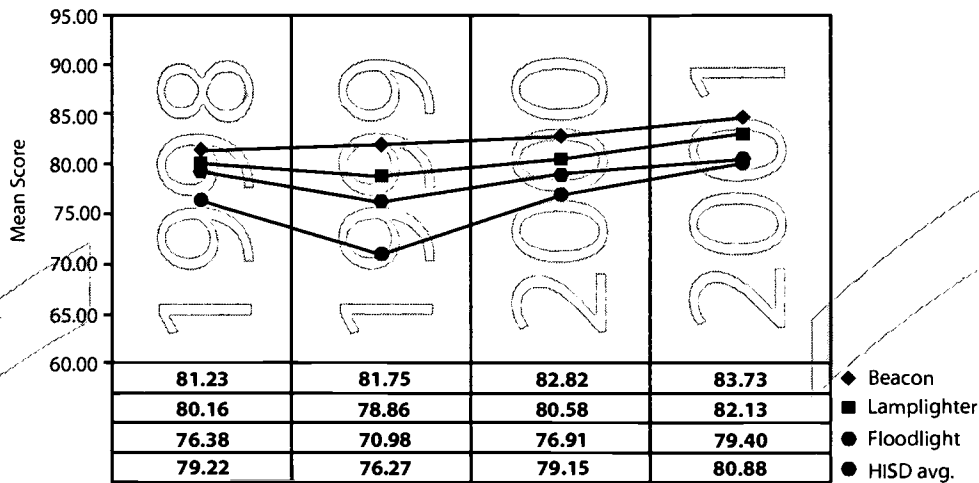


Figure 3: Elementary School Mathematics Scores



Beacon and Lamplighter schools have outperformed comparable HISD schools in reading. The average TLI score for the HISD schools is 84.2. The only exception is the Floodlight schools, which scored 3.5 TLI points lower than the HISD elementary schools as a whole.

Analysis of mathematics achievement reveals a similar pattern. Beacon elementary schools lead all the other funded schools. Indeed, Beacon schools have almost achieved the mastery standard during the 2001 academic year. These schools have consistently raised their TLI scores since Annenberg funding. Similarly, the Lamplighter schools have continued to increase their TLI averages in mathematics since Annenberg funding. They have not yet reached the performance of Beacon schools in this area. They are, however, narrowing the achievement gap between these two sets of schools. While the Floodlight schools have made progress since Annenberg funding, that progress has been slow. Only 2.5 TLI points have been added since Annenberg funding. In fact, Floodlight schools underperform the rest of the HISD

elementary schools as a group in terms of mathematics scores.

When comparing Annenberg funded schools against all other HISD elementary schools, the Beacon and Lamplighter schools outperform the comparison schools in mathematics (see Figure 3). Indeed, both sets of schools are fairly close to achieving mastery of the state test. Only the Floodlight schools are achieving at a rate lower than those of all HISD elementary schools.

Middle Schools

Beacon middle schools continue to outperform other Annenberg-funded schools and HISD middle schools in reading and mathematics achievement.

Beacon middle schools continue to lead all other middle schools in reading achievement, as illustrated in Figure 4. Beacon middle schools have achieved mastery levels on the reading test. In fact, Beacon middle schools have outperformed both Annenberg-funded and

Figure 4: Middle School Reading Scores

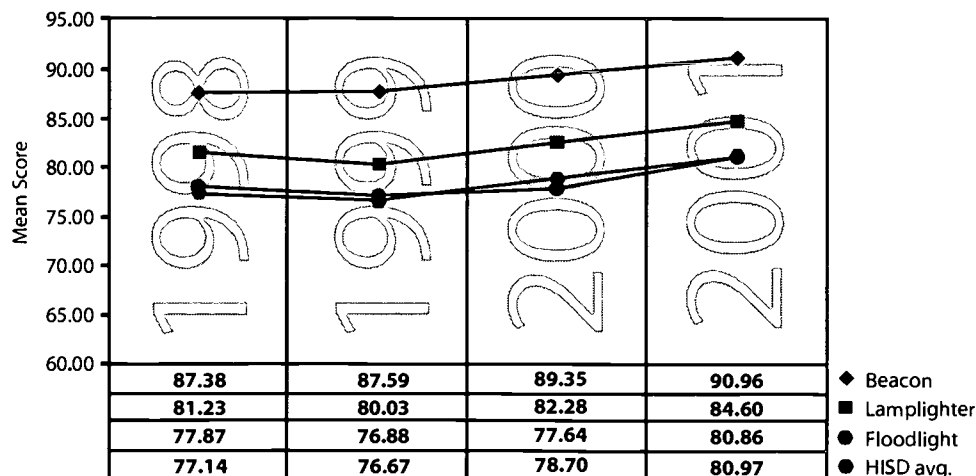
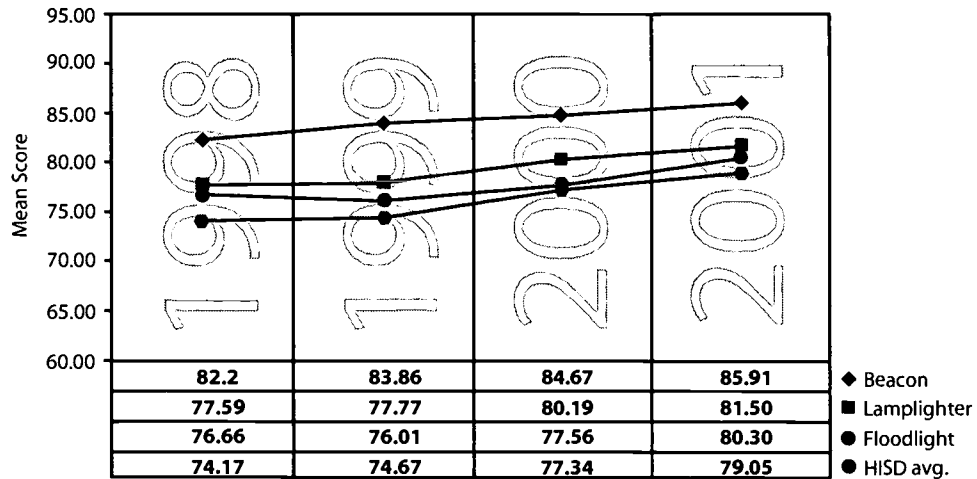


Figure 5: Middle School Mathematics Scores



non-Annenberg-funded HISD schools by 10 or more TLI points. Lamplighter middle schools also have performed well since Annenberg funding was implemented in these schools. Lamplighter schools have gained 4 or more TLI points since they obtained funding from Houston Annenberg, and these schools as a group are approaching mastery of the reading test. Finally, the Floodlight schools have also gained 3 TLI points from its first year of funding to the current academic year (2001). They scored an average of 84.86 TLI points as a group of middle schools.

Comparing the funded schools to all HISD middle schools, Beacon middle schools outperformed all other middle schools by 10 TLI points. Also, the Beacon middle schools outperformed the Lamplighter middle schools by approximately 6 TLI points. Lamplighter middle schools outperformed HISD middle schools by approximately 3.5 TLI points. Floodlight middle schools performed at the same level as the rest of the HISD middle schools.

The data on mathematics achievement gains for middle schools also reveal a significant difference among the various groups being compared in this report. The average TLI scores for Beacon middle schools have increased steadily for the last four years. Indeed, during the current academic year, these schools, as a group, have achieved mastery in mathematics (85.91 TLI) as gauged by the state exam. Similarly, Lamplighter middle schools have experienced significant positive increases in TLI scores since becoming part of the Houston Annenberg Challenge program. Although these schools have not achieved the mastery standard, they are beginning to narrow that gap. These schools scored, on average, 81.5 TLI points as a group of schools. Floodlight middle schools also experienced positive growth since receiving funding from the Houston Annenberg Challenge. Last year these schools scored 77.5

TLI points. This year these schools grew by approximately 3 TLI points.

In our comparison of all the funded schools against all HISD middle schools, the data show that the funded middle schools outperform all other HISD middle schools (see Figure 5). Beacon middle schools lead the other schools with an average of 85.91 TLI points. Lamplighter and Floodlight middle schools outperform all other HISD middle schools by 1 or 2 TLI points.

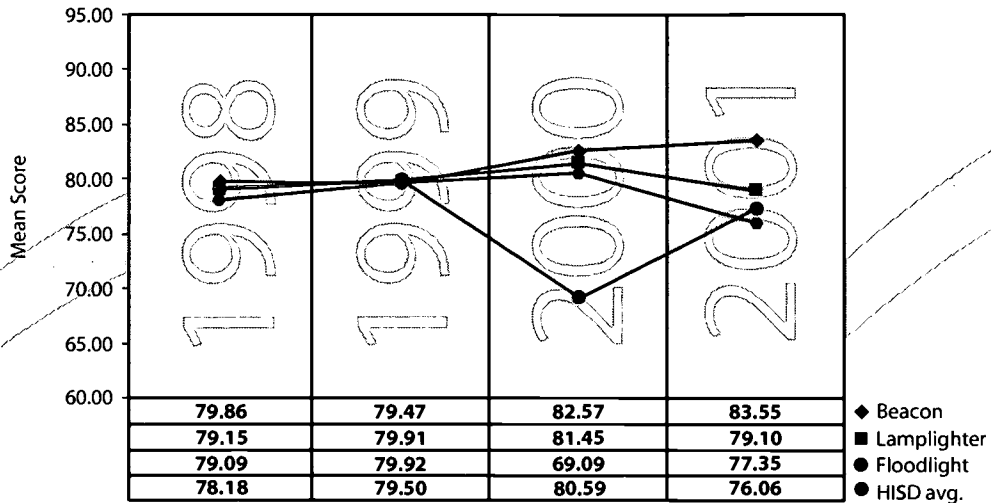
High Schools

Beacon high schools also continue to outperform other Annenberg-funded schools and HISD schools in reading and mathematics achievement.

Beacon high schools have continued to improve their performance on reading achievement tests over the last four years. Their growth has put these schools fairly close to achieving the mastery standard in reading. From 1998 to 1999, the data show a slight decrease in performance. However, the years 2000 and 2001 show significant increases. On the other hand, Lamplighter high schools showed a slight decline in reading TLI scores from year 2000 to year 2001. In spite of that trend, the Lamplighter high schools still show an above-average score of 79.1 TLI points in reading. Similarly, Floodlight high schools began with an average of 69.09 TLI points in the year 2000, and ended with an overall average of 77.35 TLI in the 2001 academic year. Thus, these schools experienced a growth of 7 TLI points from one year to the next. As shown in Figure 6, all the funded schools are outperforming the rest of the HISD high schools.

The trend analysis in mathematics shows that the Beacon high schools again outperformed all HISD high schools.

Figure 6: High School Reading Scores



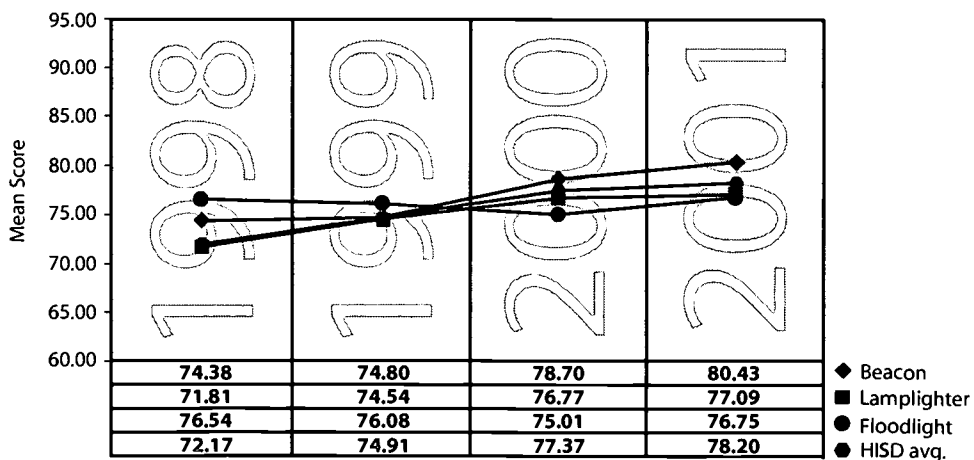
Beacon high schools have increased their performance over the last four years. During the academic year 2001, these schools scored 80.43 TLI points as a group. Lamplighter high schools have increased their level of performance over the funding years. They began with a baseline score of 74.54 during the 1999 academic year and ended up with an average of 77.09 TLI points during the 2001 academic year. Floodlight high schools have maintained their scores, with a slight increase from 75.01 TLI points to 76.75 TLI points during the 2001 academic year. This growth is small but adequate, since these high schools only began receiving funds last year. In summary, Beacon high schools lead all other funded and non-funded high schools in the Houston Independent School District. Floodlight high schools were outperformed by

the HISD high schools in mathematics achievement. Figure 7 shows four-year trends for each set of schools.

CLOSING THE ACHIEVEMENT GAP

The Houston Annenberg Challenge aims to close the achievement gap between students of different ethnicities, socioeconomic status, and language backgrounds. In Texas—and around the United States—poor academic achievement and poverty are closely related. Moreover, White students usually outperform students of color as well as students whose native language is not English. Is the Annenberg Challenge making progress on its mission to close these achievement gaps?

Figure 7: High School Mathematics Scores



Elementary Schools

The trend data analysis on Beacon elementary schools indicates that these schools have narrowed considerably the gap between minority and non-minority students.

In 1999, there was a 16 TLI point differential between these two groups' reading scores. In the year 2000, that gap narrowed to about 7 TLI points. Further, minority students achieved, as a group, almost the mastery standard in reading. On the other hand, the Lamplighter schools show the same achievement gap over three years of analysis (see Table 1).

The trend data for mathematics achievement also show a gap in academic achievement between minority and non-minority students. The trend also shows that, over time, the gap has been slowly decreasing in Beacon elementary schools to less than 5 TLI points. The trend analysis for the Lamplighter schools shows improvement over the last two years of the analysis, but a gap of about 6 TLI points still exists (see Table 2).

Middle Schools

The trend data for Beacon middle schools show that minority student performance in reading has increased over the years.

These students achieved the mastery standard last year. The gap between minority and non-minority students has also decreased from 10 TLI points in 1998 to 7.7 points in 2000. Within Lamplighter schools, however, the gap between minority and non-minority students has not decreased. There is a difference of about 10 TLI points between the two groups over the last three years. Table 3 shows the trend lines and mean scores for the two types of schools.

Table 1: Elementary School Reading by Ethnicity

		1998	1999	2000	Achievement Gap 2000
Beacon	Minority	84.00	74.62	84.03	7.43 TLI Points
	Non-Minority	90.37	90.61	91.46	
Lamplighter	Minority	83.08	81.41	83.26	7.52 TLI Points
	Non-Minority	90.18	90.42	90.78	

Table 2: Elementary School Mathematics by Ethnicity

		1998	1999	2000	Achievement Gap 2000
Beacon	Minority	79.72	85.66	86.26	4.36 TLI Points
	Non-Minority	85.43	85.66	86.26	
Lamplighter	Minority	78.94	77.31	79.41	5.83 TLI Points
	Non-Minority	85.12	84.88	85.24	

Table 3: Middle School Reading by Ethnicity

		1998	1999	2000	Achievement Gap 2000
Beacon	Minority	83.72	84.43	86.49	7.77 TLI Points
	Non-Minority	93.92	93.09	94.26	
Lamplighter	Minority	79.55	78.45	80.87	9.95 TLI Points
	Non-Minority	89.98	89.44	90.82	

Table 4: Middle School Mathematics by Ethnicity

		1998	1999	2000	Achievement Gap 2000
Beacon	Minority	83.72	84.43	86.49	7.77 TLI Points
	Non-Minority	93.92	93.09	94.26	
Lamplighter	Minority	79.55	78.45	80.87	9.95 TLI Points
	Non-Minority	89.98	89.44	90.82	

Table 5: High School Reading by Ethnicity

		1998	1999	2000	Achievement Gap 2000
Beacon	Minority	78.21	78.16	81.77	7.15 TLI Points
	Non-Minority	87.31	88.28	88.92	
Lamplighter	Minority	76.99	77.97	79.43	12.12 TLI Points
	Non-Minority	89.79	89.65	91.55	

Concerning mathematics, the Beacon middle school data show a significant narrowing of the achievement gap between minority and non-minority students. In 1998, the gap between these two groups was 8 TLI points; during the 2000 academic year that gap narrowed to 4.6 TLI points. A similar trend is evident in Lamplighter schools. A gap of 8 TLI points in 1998 has been reduced to 6 TLI points last year. See Table 4 for the information.

High Schools

As with the middle schools, the high school trend analysis shows that the Beacon high schools have decreased the gap between minority and non-minority students.

The gap during 1998 was 9 TLI points between the groups. In the academic year of 2000 that gap narrowed to about 7 TLI points. In fact, minority students are within 3 TLI points of achieving the mastery standard for reading. Unfortunately, the trend analysis for Lamplighter high schools does not show the same decrease in the gap between these two groups. In 1998, the gap was 12.8 TLI points. During the 2000 school year, that gap remained the same, at 12.12 TLI points. See Table 5 for this information.

Beacon high schools have narrowed the mathematics achievement gap between minority and non-minority students. For example, a 1999 gap of 8.09 TLI points was reduced to approximately 5 TLI points during the year 2000. Lamplighter high schools have also significantly changed the gap between these two groups. These schools began with a 12.33 TLI point difference in 1998, favoring non-minority students. During 2000 the gap was reduced to 8.78 TLI points, as shown in Table 6.

Table 6: High School Mathematics by Ethnicity

		1998	1999	2000	Achievement Gap 2000
Beacon	Minority	73.06	73.88	78.05	5.39 TLI Points
	Non-Minority	80.92	81.97	83.44	
Lamplighter	Minority	69.98	72.97	75.43	8.78 TLI Points
	Non-Minority	82.31	83.51	84.21	

Table 7: Elementary School Reading by Economic Status

		1998	1999	2000	Achievement Gap 2000
Beacon	Economically Disadvantaged	83.11	78.74	83.83	5.42 TLI Points
	Not Economically Disadv.	88.73	88.16	89.25	
Lamplighter	Economically Disadvantaged	82.10	79.67	82.33	6.53 TLI Points
	Not Economically Disadv.	88.06	87.94	88.86	
Floodlight	Economically Disadvantaged	81.46	73.77	80.31	2.88 TLI Points
	Not Economically Disadv.	83.57	79.03	83.19	

Table 8: Elementary School Mathematics by Economic Status

		1998	1999	2000	Achievement Gap 2000
Beacon	Economically Disadvantaged	79.03	80.16	81.52	2.99 TLI Points
	Not Economically Disadv.	83.85	83.51	84.51	
Lamplighter	Economically Disadvantaged	78.11	76.14	78.75	4.94 TLI Points
	Not Economically Disadv.	83.16	82.42	83.69	
Floodlight	Economically Disadvantaged	76.26	70.58	76.74	2.98 TLI Points
	Not Economically Disadv.	77.44	72.95	79.72	

Table 9: Middle School Reading by Economic Status

		1998	1999	2000	Achievement Gap 2000
Beacon	Economically Disadvantaged	77.72	79.85	84.45	8.38 TLI Points
	Not Economically Disadv.	91.83	91.00	92.83	
Lamplighter	Economically Disadvantaged	78.00	76.13	79.41	8.48 TLI Points
	Not Economically Disadv.	85.79	84.76	87.89	
Floodlight	Economically Disadvantaged	77.42	76.14	77.35	3.95 TLI Points
	Not Economically Disadv.	80.24	79.50	81.29	

Socioeconomic Status

Socioeconomic status is another indicator related to low academic achievement.

The data analysis indicates that the Beacon elementary schools have closed the reading achievement gap between students classified as economically disadvantaged and students not classified as such. The gap has narrowed particularly from 1999 (nearly 10 TLI points) to 2000 (about 5 TLI points). The Lamplighter schools, on the other hand, have not been able to close this gap. These schools have maintained a gap of between 6 to 8 TLI points, favoring those students **not classified as economically disadvantaged**. Floodlight elementary schools **have maintained an average gap of about 3 TLI points** between the two groups of students. See Table 7 for trends and mean scores.

As with reading, the trends in mathematics achievement show that Beacon elementary schools have closed the achievement gap somewhat. In 1998, these schools had a gap of 4.82 TLI points between those students classified as economically disadvantaged and those not classified as such. By 2000 that gap had been reduced to 3 TLI points. The Lamplighter elementary schools have maintained a 5 TLI point gap. The Floodlight schools have a 3 TLI point difference between the two groups. See Table 8 for trend data and mean scores.

Concerning middle school reading achievement, again the Beacon schools have narrowed the achievement gap between those students classified as economically disadvantaged and those not so classified. The initial gap in 1998 was 14 TLI points, favoring the not economically disadvantaged students. By the year 2000, however, that gap had been reduced to 8.4 TLI points. On the other hand, the Lamplighter schools began with a 7.8 TLI point gap in 1998, which grew slightly to an 8.5 TLI point gap in 2000. The same pattern is evident with Floodlight schools. The gap in Floodlight middle schools seems to be

Table 10: Middle School Mathematics by Economic Status

		1998	1999	2000	Achievement Gap 2000
Beacon	Economically Disadvantaged	75.23	78.72	81.67	5.14 TLI Points
	Not Economically Disadv.	85.39	86.13	86.81	
Lamplighter	Economically Disadvantaged	75.67	75.15	78.70	4.46 TLI Points
	Not Economically Disadv.	80.31	80.95	83.16	
Floodlight	Economically Disadvantaged	76.60	75.57	77.60	.62 TLI Points favoring Econ. Disadv. students
	Not Economically Disadv.	77.00	77.56	76.98	

Table 11: High School Reading by Economic Status

		1998	1999	2000	Achievement Gap 2000
Beacon	Economically Disadvantaged	76.75	76.46	80.86	2.98 TLI Points
	Not Economically Disadv.	81.51	81.84	83.84	
Lamplighter	Economically Disadvantaged	75.03	73.72	77.11	7.87 TLI Points
	Not Economically Disadv.	81.44	82.28	84.98	
Floodlight	Economically Disadvantaged	79.94	79.09	75.57	.60 TLI Points
	Not Economically Disadv.	77.94	80.83	77.17	

Table 12: High School Mathematics by Economic Status

		1998	1999	2000	Achievement Gap 2000
Beacon	Economically Disadvantaged	72.94	81.09	78.80	0.18 TLI Points favoring Econ. Disadv. students
	Not Economically Disadv.	75.15	81.70	78.62	
Lamplighter	Economically Disadvantaged	70.15	71.15	75.56	2.16 TLI Points
	Not Economically Disadv.	72.69	75.82	77.72	
Floodlight	Economically Disadvantaged	78.54	74.59	75.85	3.95 TLI Points favoring Econ. Disadv. students
	Not Economically Disadv.	73.89	77.78	71.90	

increasing, from less than 3 TLI points in 1998 to 4 TLI points in 2000. See Table 9 for trend lines and mean scores. The analysis of middle school mathematics achievement shows, yet again, that the Beacon schools have closed the achievement gap between economically disadvantaged and not economically disadvantaged students. During 1998, these schools had a 10 TLI point difference between these two groups of students. In 2000 that gap was reduced to 5 TLI points. The Lamplighter schools' achievement gap did not improve, remaining at about 5 TLI points. The Floodlight schools, however, have closed

the achievement gap between economically disadvantaged and not economically disadvantaged students. The two groups had roughly the same achievement levels in 1998, and have maintained those levels through 2000. See Table 10 for details.

The high school analysis revealed that the reading achievement gap between economically disadvantaged and not economically disadvantaged students has narrowed considerably for Beacon high schools. In 1998, the gap was 5 TLI points, reduced to 3 TLI points in 2000. On the other hand, the gap in Lamplighter schools—about 8 TLI points—has remained about the same for the last three years. Floodlight schools do not have a significant gap between the two groups; however, these students are meeting minimum standards. See Table 11 for trends and mean scores.

In high school mathematics, Beacon students are performing at roughly the same achievement levels, regardless of socioeconomic status. A similar pattern is evident in Lamplighter high schools, where students classified as economically disadvantaged are being outperformed by 2 TLI points by those students not classified as economically disadvantaged. On the other hand, Floodlight schools have a reverse trend. Those students classified as economically disadvantaged are outperforming those students not so classified. See Table 12 for more data.

Language

Language is another important variable associated with student achievement in both mathematics and reading. Those students whose native language is not English tend not to perform as well as those who are native English speakers.

An analysis of the data within elementary schools shows pronounced achievement gaps in Beacon and Lamplighter schools, 6.8 and 8 TLI points, respectively. This

Table 13: Elementary School Reading by Language

		1998	1999	2000	Achievement Gap 2000
Beacon	Non-native English Speaking	82.70	78.60	80.41	6.80 TLI Points
	Native English Speaking	86.16	85.66	87.21	
Lamplighter	Non-native English Speaking	80.27	75.86	77.74	8.11 TLI Points
	Native English Speaking	85.00	84.38	85.85	
Floodlight	Non-native English Speaking	81.20	68.36	77.70	3.47 TLI Points
	Native English Speaking	81.75	76.33	81.17	

Table 14: Elementary School Mathematics by Language

		1998	1999	2000	Achievement Gap 2000
Beacon	Non-native English Speaking	81.46	78.88	80.58	2.62 TLI Points
	Native English Speaking	81.23	82.11	83.20	
Lamplighter	Non-native English Speaking	79.25	76.91	77.09	4.04 TLI Points
	Native English Speaking	80.26	79.16	81.13	
Floodlight	Non-native English Speaking	75.93	68.77	77.70	3.47 TLI Points
	Native English Speaking	77.14	71.55	81.17	

Table 15: Elementary School Reading by Language

		1998	1999	2000	Achievement Gap 2000
Beacon	Non-native English Speaking	64.01	67.37	70.11	20.34 TLI Points
	Native English Speaking	89.30	89.22	90.45	
Lamplighter	Non-native English Speaking	65.70	65.93	65.41	19.64 TLI Points
	Native English Speaking	83.70	83.00	85.05	
Floodlight	Non-native English Speaking	68.50	68.09	66.50	13.66 TLI Points
	Native English Speaking	79.81	79.10	80.16	

confirms that students who are native English speakers outperform those who are not. On the other hand, the Floodlight schools have a smaller gap between the two groups, 3.5 TLI points. See Table 13 for details.

According to mathematics scores, the Beacon elementary schools show a 3 TLI point difference between the two groups during the 2000 school year. The Lamplighter schools show a wider gap of 4 TLI points. Similarly, Floodlight schools had a 3.5 TLI point gap, favoring native English speakers. See Table 14 for details.

The analysis of middle schools indicates a significant gap in reading achievement, favoring students whose native language is English. During 2000, the Beacon and Lamplighter schools showed a gap of 20 TLI points between the two groups of students. The Floodlight schools show another wide difference, nearly 14 TLI points, as shown in Table 15.

The analysis of middle school mathematics reveals a similar pattern. However, the gaps are not as large as those for reading. The Beacon schools showed a 12.9 TLI point gap; the Lamplighter schools showed a 10 TLI point difference. Floodlight schools showed a 5.5 TLI point difference between the two groups. See Table 16 for the data.

The analysis of high school reading achievement shows a pattern similar to that of the middle schools. In 2000, the gap between the two groups ranged from 13.4 TLI points in Floodlight high schools to 23.2 TLI points in Lamplighter schools. Beacon schools had a reading achievement gap of 14.7 TLI points (see Table 17).

Finally, we analyze mathematics achievement among high school students. The Beacon high schools have narrowed the gap between native and non-native English speaking achievement levels. In 1998 the gap was 7.6 TLI points; during the 2000 school year, that gap was reduced to 5.4 TLI points. This was not the case with Lamplighter schools. For at least three years, Lamplighter high schools have maintained a consistent gap of 11.5 TLI points. Floodlight high schools, however, have reduced the difference in achievement between the two groups from 9 TLI points in 1998 to just 1.5 TLI points in 2000. See Table 18 for the data.

Table 16: Middle School Mathematics by Language

		1998	1999	2000	Achievement Gap 2000
Beacon	Non-native English Speaking	65.15	69.45	72.53	12.86 TLI Points
	Native English Speaking	83.83	85.01	85.39	
Lamplighter	Non-native English Speaking	68.77	68.99	71.58	10.04 TLI Points
	Native English Speaking	78.98	79.55	81.62	
Floodlight	Non-native English Speaking	72.59	72.76	73.07	5.52 TLI Points
	Native English Speaking	77.49	76.81	78.59	

Table 17: High School Reading by Language

		1998	1999	2000	Achievement Gap 2000
Beacon	Non-native English Speaking	59.84	59.45	68.90	14.72 TLI Points
	Native English Speaking	81.64	81.27	83.62	
Lamplighter	Non-native English Speaking	61.24	61.23	62.01	23.17 TLI Points
	Native English Speaking	83.25	83.93	85.18	
Floodlight	Non-native English Speaking	70.20	72.52	66.50	13.43 TLI Points
	Native English Speaking	81.49	82.47	79.93	

Table 18: High School Reading by Language

		1998	1999	2000	Achievement Gap 2000
Beacon	Non-native English Speaking	67.21	67.75	73.60	5.40 TLI Points
	Native English Speaking	74.84	75.23	79.00	
Lamplighter	Non-native English Speaking	61.89	65.24	66.98	11.45 TLI Points
	Native English Speaking	73.85	76.34	78.43	
Floodlight	Non-native English Speaking	69.26	71.61	73.80	1.53 TLI Points
	Native English Speaking	78.33	77.48	75.33	

STUDENT GRADE RETENTION

This section of the report is based on a 2001 analysis conducted by the Sociology of Education Group, University of Houston. Researchers include Jon Lorence, Lawrence Toenjes, and Gary Dworkin.

ELEMENTARY SCHOOL ANALYSIS

The practice of requiring academically challenged students to repeat a grade in which their academic performance was unsatisfactory is a controversial topic. The general consensus in the educational literature is that grade retention is an ineffective practice to help remediate low-performing students. However, recent research based on a six-year panel study of all elementary students in Texas indicates that requiring low-performing students to repeat a grade helped raise their subsequent academic achievement (Dworkin, et al., 1999; Lorence, Dworkin, & Toenjes, 2000). In these studies, not only did students who were required to repeat a grade catch up with their socially promoted peers, but the retained students also continued to outperform their low-performing peers who had been placed into the higher grade. Given the seeming positive effect of grade retention on student performance, at least in the earlier elementary grades, we investigate whether Annenberg-funded campuses are more effective than non-Annenberg elementary schools in helping remediate retained students.

To answer this question, we must determine whether the increase in annual test score performance among students held back a year is greater among students enrolled at Annenberg schools than those who repeated a grade in non-Annenberg schools. Statistically this requires calculating an interaction term between two variables: grade retention status and campus type. The sign and level of statistical significance of this interaction term, which is added to the initial equation

used to predict student TAAS scores, is used to determine differences in the effect of grade retention between Annenberg and non-Annenberg schools. A preliminary review of the data revealed that only a few pupils, at most, were required to repeat a grade in many of the Annenberg and non-Annenberg schools. Therefore only general comparisons can be made between Annenberg and non-Annenberg schools. The impact of grade retention in Annenberg elementary campuses can be examined only in the aggregate, i.e., between funded and non-funded schools on the whole. The small number of retained elementary students precludes making a comparison between a specific Annenberg campus and the matched school most similar in social demographic characteristics. However, the impact of grade retention on Annenberg campuses can be compared to that on the matching non-Annenberg elementary campuses to yield a reasonable estimate. Given that the majority of Annenberg-funded schools are located in the Houston Independent School District, it is also feasible to compare Annenberg HISD campuses with non-Annenberg HISD elementary campuses. The magnitudes of these statistical interaction terms and their levels of statistical significance are presented in Table 19.

Table 19: Interaction of Elementary Campus Category with Grade Retention

Campus Comparisons	1999 Reading	1999 Math	2000 Reading	2000 Math
Beacon Elementary with Matched Control Schools	3.93 [†] (.39)	-1.81 (.58)	0.35 (.92)	-7.88 (.00)
Lampighter Elementary with Matched Control Schools	-1.28 (.46)	0.85 (.54)	6.18 (.00)	1.98 (.07)
Floodlight Elementary with Matched Control Schools	—	—	2.99 (.43)	4.32 (.15)
HISD Beacon Elementary with HISD non-Annenberg Elementary Campuses	-2.42 (.51)	-3.06 (.29)	-4.53 (.02)	-1.86 (.23)
HISD Lampighter Elementary with HISD non-Annenberg Elementary Campuses	-1.41 (.31)	0.22 (.84)	0.82 (.35)	0.48 (.48)
HISD Floodlight Elementary with HISD non-Annenberg Elementary Campuses	—	—	-0.82 (.52)	-0.86 (.38)

Hierarchical Linear Regression Interaction Terms (Levels of Statistical Significance in Parentheses)
 * Statistically significant findings are in bold type.

[†] Interaction coefficient. Also controlled are inter-campus individual level student differences in sex, race/ethnicity, economic status, Limited English Proficiency status, special education status, gifted/talented status, grade level, grade retention status, and the subject area TLI score from the prior academic year. Campus-level variables previously mentioned as statistically significant were also incorporated into the regression analyses.

All of the interaction terms from the 1999 TAAS tests were statistically insignificant. Students repeating a grade at Annenberg-funded elementary schools did as well as students retained in a matching non-Annenberg school. Elementary pupils who repeated a grade while attending an HISD Annenberg school did about the same as students retained in grade at an HISD non-Annenberg school. However, several differences between the Annenberg and non-Annenberg schools were observed on the TAAS 2000 tests. The statistically significant interaction coefficient of -7.88 (sig. = .009) implies that elementary students at Beacon campuses who repeated a grade did not perform as well on the 2000 TAAS mathematics test as students who repeated a grade on a matching elementary non-Beacon campus. On the other hand, students held back a year in Lamplighter elementary schools obtained significantly higher reading TLI scores in 2000 than those students who repeated an elementary grade at a non-Annenberg school. The regression coefficient of 6.18 was highly significant, thus indicating that the finding is highly unlikely to be attributable to random chance or error.

A somewhat similar conclusion can be drawn from the 2000 mathematics TAAS scores, where the interaction coefficient is 1.98 (sig. = .070). Although not quite significant at the .05 level, this finding suggests that Lamplighter elementary campuses do a slightly better job of mathematical remediation than the matched schools. Examining only the HISD elementary schools also yields somewhat similar findings. Almost all of the reported interaction coefficients are due to chance. The only coefficient to reach statistical significance is for the 2000 TAAS reading test (-4.53, sig. = .022) among pupils attending the four Beacon schools. Students retained on a Beacon campus did not do as well on the 2000 TAAS reading test as retained pupils at non-Annenberg elementary HISD schools.

GRADE RETENTION IN ANNENBERG AND NON-ANNENBERG MIDDLE SCHOOLS

Unlike the situation observed among elementary schools, a much larger number of students were retained in the middle grades. Because Texas state law had limited the number of times a student could be required to repeat a grade, low-performing pupils usually could not be held back a grade a second time until they reached middle school. This section investigates whether Annenberg middle schools were able to obtain higher levels of test performance among retained middle school pupils than non-Annenberg middle school campuses. The analyses of covariance and hierarchical linear modeling statistical procedures were used to estimate whether middle-school students repeating a grade at Annenberg campuses outperformed retained students at non-Annenberg middle schools. Assessing the level of remediation effectiveness requires examining the interaction term between whether the student was required to repeat a grade (coded 1 if yes), and type of campus (Annenberg middle school coded 1). Interaction terms that are positive in sign and statistically significant at the .05 level suggest that Annenberg middle schools are able to raise the test scores of retained students at a higher rate than non-Annenberg middle schools. Comparisons between Annenberg and non-Annenberg middle schools were first made among campuses with similar social demographic characteristics. The performance of retained students at

Table 20: Interaction Terms of Middle School Campus Category with Grade Retention

Campus Comparisons	1999 Reading	1999 Math	2000 Reading	2000 Math
Matched Control Campuses				
Beacon Middle Schools with Matched Control Schools	-6.40 ² (.097)	-6.63 (.027)	1.44 (.662)	-2.95 (.192)
Lamplighter Middle Schools with Matched Control Schools (HLM) ³	0.48 (.559)	0.26 (.692)	-0.93 (.304)	-0.34 (.612)
Houston ISD Middle Schools				
Beacon MS with HISD non-Annenberg MS (HLM)	-8.37 (.131)	-7.63 (.091)	1.62 (.854)	0.43 (.948)
Lamplighter MS with HISD non-Annenberg MS (HLM)	-2.89 (.003)	-0.37 (.605)	-0.53 (.526)	-1.71 (.011)
Floodlight MS with HISD non-Annenberg MS (HLM)			6.06 (.338)	5.77 (.225)

(Levels of Statistical Significance in Parentheses)
* Statistically significant findings are in bold type.

² Interaction coefficient with inter-campus individual level student differences in sex, race/ethnicity, economic status, Limited English Proficiency status, special education status, gifted/talented status, grade level, grade retention status, and the subject area TLI score from the prior academic year controlled.

³ Hierarchical Linear Regression Model used to obtain parameter estimates.

Annenberg-funded middle schools was also compared to that of retained students in the same school district. A summary of these analyses is presented in Table 20.

Examining the two Beacon middle schools with their matched control campuses reveals that the students retained at the Beacon schools did **not** demonstrate as much growth during the **retention year of 1999** as those who repeated a grade at the **non-Annenberg** middle schools. The signs of the interaction terms are negative for both reading and mathematics tests (-6.40 and -6.63), although the difference between Annenberg and non-Annenberg campuses is statistically significant only on the **1999 TAAS mathematics test**. Comparing each Beacon middle school with the non-Annenberg middle schools in their respective districts yielded no interaction term with a significant positive coefficient. Similar results were observed among the Lamplighter middle schools in 1999 when comparing either matched middle schools or campuses within the same school district. Interaction coefficients were generally negative but not statistically significant at the .05 level. The one exception among the Lamplighter campuses occurred in the Houston ISD where non-Annenberg middle schools seemed to do a **better job** of upgrading the test performance of retained students than the HISD Lamplighter middle schools ($b = -2.89$, $sig. = .003$).

Annenberg middle schools **were as effective** as non-Annenberg campuses in helping retained students catch up to their promoted peers during the 1999–2000 academic school year. Gains on the reading and mathematics portions of the 2000 TAAS among those students required to repeat a grade in Beacon and Lamplighter middle schools were not significantly

different from those observed among retained pupils attending the matched control campuses. The gap between retained students in HISD attending Lamplighter middle schools and those enrolled at non-Annenberg campuses was also significantly different. Pupils **required** to repeat a grade in HISD project middle schools **received** lower scores on the reading section of the **TAAS in 1999** ($b = -2.89$, $sig. = .003$) and also **somewhat lower** scores on the mathematics section of the **2000 TAAS** than those pupils retained at non-Annenberg middle schools in the district ($b = -1.71$, $sig. = .011$).

SCHOOL DROPOUT

MIDDLE SCHOOL DROPOUT RATES

Although middle school dropout rates are very low, Texas state law nonetheless requires reporting the number of students who leave grades seven or eight and do not return to school. Three sets of comparisons between Annenberg-funded middle schools and non-funded middle schools are presented. The information in Table 21 shows the means and standard deviations among the 21 Annenberg-supported middle schools and those campuses throughout the state with the most similar demographic characteristics. Only 18 matched schools were needed for comparative purposes because three of these campuses contain student bodies comparable to more than one Annenberg middle school. Although the 1997–1998 student dropout rate among Annenberg campuses (mean = .51) appeared somewhat smaller than that of the non-Annenberg schools (mean = .67), the difference was not statistically significant ($t = .75$, $sig. = .457$). More importantly, the change in student

Table 21: Middle School Comparative Dropout Statistics
Mean Percentage Students Classified as Dropouts

	Dropout Rate 1997–1998	Dropout Rate 1998–1999	Campus Change	Statistical Significance*
Annenberg Schools (n=21)	.51% (.56)	.46% (.53)	-.05 (.61)	
Matched Schools (n=18)	.67% (.75)	.54% (.71)	-.13 (.65)	.73
Same District Schools (n=32)	1.25% (1.31)	.58% (.78)	-.67 (1.40)	.037
HISD Annenberg (n=15)	.43% (.49)	.53% (.59)	.10 (.49)	
HISD Schools (n=21)	1.42% (1.40)	.80% (.88)	-.62 (1.58)	.059

(Standard Deviations in Parentheses)

* Statistical significance of the difference in mean change, compared to Annenberg schools.

dropout rates between the two school years was essentially similar, as indicated by a t-test value of $-.35$ ($\text{sig.} = .73$). The decrease in Annenberg middle schools ($-.05$) did not differ appreciably from the decreased dropout rate ($-.13$) observed in the matched non-Annenberg middle schools.

Table 21 also shows the change in annual student dropout rates of Annenberg-supported middle schools and other middle schools within the same school district. The decrease in dropout rates was significantly greater in the district middle schools that did not receive Annenberg support. The average dropout rate among Annenberg campuses decreased from $.51$ to $.46$; however, the mean dropout rate among the non-Annenberg schools was $-.67$. This difference in mean change is statistically significant at the $.037$ level ($t = -2.15$). In other words, there is only about a 4 out of **100** chance that the difference between the change in the **mean dropout rates** is due to error.

Before concluding that non-Annenberg middle schools in the same school districts do a better job of remediating retained students, we **must** point out that the average dropout rate of the non-project schools (1.25) was significantly higher than the **mean** dropout rate ($.51$) of the Annenberg schools. The t-value (2.80) of the difference between the 1997–1998 annual dropout rates of the two types of campuses was highly significant ($.008$). Given that the non-Annenberg middle schools had **much** higher initial dropout rates, it is not unreasonable to **assume** that their dropout rates would decline more **than** those observed in the Annenberg schools. A problem often encountered when comparing schools that were **not** randomly assigned to an experimental or control condition is that one set of campuses initially will have a much larger mean than the other set of schools. Over time, the group with the larger mean will approach the average value of the campuses with the smaller mean. This naturally occurring phenomenon, which is unrelated to any differences in school practices, is labeled the “regression to the mean” effect (Campbell & Stanley, 1963, pp.10-12). Examining the change in difference scores does not take into consideration the fact that the mean dropout rate of the non-Annenberg schools was considerably larger than the rate observed in the schools funded by the Houston Annenberg Challenge.

Consequently, an alternative statistical procedure (analysis of covariance) was utilized to determine if the 1998–1999 middle school dropout rates were similar between Annenberg and non-Annenberg campuses, after controlling for average differences in the initial 1997–1998 dropout rates. Regressing the 1998–1999

student dropout rate on the 1997–1998 dropout rate along with campus type (i.e., Annenberg vs. non-Annenberg middle school) indicated that there was no statistically significant difference in the average 1998–1999 dropout rates of the two types of campuses. That is, after taking into consideration the initial values of the 1997–1998 school dropout rates, the 1998–1999 average adjusted dropout rate (mean = $.51$) in Annenberg-funded middle schools was the same as the adjusted dropout rate of the non-project middle schools (mean = $.55$). The level of statistical significance associated with the new adjusted mean dropout rates was $.872$, indicating the adjusted observed differences were due only to chance. In short, taking into account the initial differences in the percentage of students who dropped out of school, the 1998–1999 dropout rate in the Annenberg-supported middle schools is essentially identical to the dropout rate observed among the other district middle schools.

The third comparison between Annenberg and non-Annenberg schools entails only those campuses in the Houston ISD. This comparison demonstrates whether district-level policies and practices affect dropout rates between the two types of campuses. The data in the bottom two rows of Table 21 include 15 HISD campuses supported by the Houston Annenberg Challenge and 21 HISD middle schools that did not receive Annenberg funding. Again, note that the **average** 1997–1998 student dropout rate among the non-Annenberg middle schools (mean = 1.42) is larger than that observed in the Annenberg middle schools (mean = $.43$). The t-value of 3.01 associated with the difference between the initial means of the two types of campuses is statistically significant ($.006$). The observed significance level of $.059$ in the difference between the change scores reported by the two school groups just **barely** misses the conventional $.05$ level. A cursory examination of Table 21 would suggest that dropout rates **increased** among the Annenberg schools while **decreasing** among the non-Annenberg campuses. As mentioned **earlier in the analysis** of same-district schools, this difference is **most likely** caused by the initial higher dropout rate among non-Annenberg-funded middle schools. Indeed, using the analysis of covariance statistical procedure to adjust for initial levels of student dropouts reveals that 1998–1999 dropout rates are basically the same in Annenberg and non-Annenberg schools. The 1998–1999 dropout rate for Annenberg campuses, after adjusting for the 1997–1998 dropout level, is $.60$, while the adjusted dropout rate for the non-Annenberg middle schools is $.75$. The difference between the adjusted dropout rates is due to chance, as the level of statistical significance associated with the

difference between the mean adjusted middle school dropout rates is .595.

HIGH SCHOOL DROPOUT RATES

Using the same strategy applied to the middle schools, dropout rates among the Annenberg-funded high schools were compared to (1) demographically matched campuses, (2) high schools within the same district, and (3) only those high schools within the Houston Independent School District. The average student dropout rates for Annenberg high schools and demographically similar high schools statewide are shown in Table 22. Although the mean 1997–1998 dropout rate (1.76) among HISD Annenberg high schools is slightly greater than that of the non-Annenberg high schools (mean = 1.59), there was no statistically significant difference between the types of campuses. Investigating the change between the annual dropout rates indicates that the Annenberg high school dropout rates decreased by .33, while the dropout rate among the matched control campuses decreased by .17. Although the small number Annenberg-funded high schools makes it difficult to reach differences significant at the conventional .05 level, the difference between the change in dropout rates over time between Annenberg and non-Annenberg high school campuses can be attributed to chance. The t-value associated with the difference between change scores is .42, which has a probability of occurring 68 out of 100 times if there is no real difference in the decline of students who drop out of Annenberg high schools and the matched campuses.

A similar pattern of findings emerges when contrasting the dropout rate of Annenberg supported high schools with high schools in the same school district. Table 22 shows that the average dropout rate of high schools in the same school districts as the Annenberg campuses did not change over the period of study. However, there was no statistically significant difference between the change in the percentage of students who dropped out of Annenberg and non-Annenberg high schools in the same districts. The calculated t-value of 1.20 (sig. = .24) did not approach the conventional .05 level of statistical significance.

Examining the change in dropout rates between Annenberg-funded and non-Annenberg-funded high schools in the Houston ISD yields findings similar to those previously reported. The information presented in Table 22 indicates that the mean annual dropout rate among the six HISD Annenberg campuses decreased somewhat while a slight increase in the dropout rate was observed among the 21 HISD high schools not funded by the Houston Annenberg Challenge. However, there was not a statistically significant difference between the change in dropout rates of Annenberg and non-Annenberg high schools. The calculated t-value of the difference in dropout rate changes was .90 with a .38 level of statistical significance. In short, the change in annual dropout rate at Annenberg-supported campuses was basically the same as that among non-Annenberg high schools in the Houston ISD.

Table 22: High School Comparative Dropout Statistics
Mean Percentage Students Classified as Dropouts

	Dropout Rate 1997–1998	Dropout Rate 1998–1999	Campus Change	Statistical Significance*
Annenberg Schools (n=9)	1.76% (1.46)	1.43% (1.58)	-.33 (.62)	
Matched Schools (n=12)	1.59% (1.25)	1.42% (.83)	-.17 (.98)	.68
Same District Schools (n=27)	1.64% (2.34)	1.64% (2.48)	.00 (.71)	.24
HISD Annenberg (n=6)	2.02% (1.48)	1.77% (1.75)	-.25 (.71)	
HISD Schools (n=21)	1.75% (2.63)	1.81% (2.77)	.06 (.78)	.38

(Standard Deviations in Parentheses)

* Statistical significance of the difference in mean change, compared to Annenberg schools.

SURVEY ANALYSIS: Research and Evaluation Study, Spring 2001

This section of the report is based on analysis conducted by Amaury Nora and Libby Barlow at the University of Houston. The quantitative data analysis of Annenberg schools for Year Two involved an examination of student performance through TAAS and TLI scores. Another component of the quantitative outcomes assessment included surveying all constituencies involved in the school reform initiative. Ninth- and 11th-grade students, teachers, principals, and parents were all provided questionnaires that measured their respective perceptions, attitudes, and behaviors associated with different school-related issues.

Table 23: Student Demographics (Grades 9 & 11)

	Frequency	Percentage (%)
Age (in years)		
14	303	13.2%
15	587	25.6%
16	609	26.5%
17	634	27.6%
18	164	7.1%
Other	0	0%
Gender		
Male	847	45.6%
Female	1012	54.4%
# of Siblings		
1	503	23.6%
2	574	26.9%
3	450	21.1%
4	258	12.1%
5	130	6.1%
6	220	10.3%
More than 6	0	0%
Race/Ethnicity		
Native American	15	0.7%
Asian American	117	5.2%
African American	575	25.4%
Hispanic	1213	53.5%
White	266	11.7%
Other	80	3.5%

The following report is divided into five sections. The first four sections examine data from Annenberg students, teachers, principals, and parents. Each group surveyed is examined separately regarding group demographics; profiles of perceptions, attitudes, and behaviors; and relationships. The fifth section of the report is a comparison of Year One and Year Two cohorts.

ANNENBERG STUDENT DATA

Demographics

The age of most ninth- and 11th-grade students was distributed evenly among 15, 16, and 17 years of age. Slightly more than half the students in the sample were female. The majority of students had three or fewer siblings. The majority of students in the schools sampled were Hispanic (53.5%).

Profile of Attitudes, Perceptions, and Behaviors

Overall, student attitudes and perceptions regarding different aspects related to school were rather ambiguous (no mean scores reported were above 3.78). Student attitudes regarding math-related issues were roughly proportionate with those for corresponding English-related aspects.

Those perceptions and behaviors that were more positive included:

- ✎ *Care About TAAS* (4.06), indicating that students were very concerned about their performance on the TAAS test.
- ✎ *Parental Encouragement and Support* (3.78), indicating that parents provided words of encouragement that focused on having the students work more intently on classwork and on doing well in school.
- ✎ *Internal Locus of Control* (3.76), which measured student perception that trying hard increased their understanding.
- ✎ *Sense of Self-Efficacy in English* (3.75), revealing that students felt a sense of confidence in their ability to perform well in English classes.

Those perceptions where students were more negative included:

- ✎ *Attended After-School Programs* (2.08), which measured student attendance in after-school programs.
- ✎ *Math Teacher Encourages Student-Directed Learning* (2.37), a measure of the extent to which students perceived that teachers allowed them to choose class rules or math work.
- ✎ *Teaching Approach Used by Teacher* (2.57), indicating that students believe that their academic performance would improve if their teachers would slow down in the classroom.
- ✎ *Parental Involvement with Homework* (2.70), indicating that parents were less likely to be involved in student homework.

Table 24: Student Attitudes, Perceptions, and Behaviors

Construct	Mean*
Sense of Caring from Teachers in the Classroom	3.16
Student Attitude About School	2.91
Student Perceptions of Personal Safety on Campus	3.54
Self-Reported Student Attendance	3.74
Parental Involvement with Homework	2.70
Encouragement and Support Provided by Parents	3.78
Encouragement and Support Provided by Math Teacher	3.49
Sense of Confidence in Math Class	3.48
Math Teacher Encourages Student-Directed Learning	2.37
Encouragement and Support Provided by English Teacher	3.49
Student Autonomy in English Class	2.75
Sense of Confidence in English Class	3.75
English Teacher Perceived as Caring	3.57
Student Motivation Approaching TAAS Test	2.86
Student Confidence Associated with TAAS Testing	3.62
Perceived Difficulty in Moving	3.12
Sense of Separation from Moving	3.15
Parents Include Student in Decisionmaking	3.53
Teaching Approach Used by Teacher	2.57
Attended After-School Programs	2.08
Participated in Clubs and Organizations	3.10
Better Performance in Math	3.78
Participated in Math Group Work	3.41
Use of Audio/Video in Math Class	2.80
Math Tech Equipment	3.62
English Self-Esteem	3.23
Better Performance in English	3.91
Internal Locus of Control	3.76
Dedication and Payoff	3.48
Care About TAAS	4.06
Accept Parent's Decision to Move	2.77

*All means reflect a 5 point scale, with 5 the more desirable score.

Student Differences by Ethnicity. Data collected from the student survey revealed different results among ethnic groups. Table 25 summarizes those factors where differences among the means for each group were found to be significant. Only significant differences among any groups are reported. If a group name does not appear, the average for that group was not significantly different from other averages.

Where there were significant differences between the means of African American students and others, African American students always represented the higher mean. Where differences were found between White students and others, White students more often represented the lower mean.

Hispanic students were found to have significantly higher scores than White students on *Student Attitude About*

School, English Self-Efficacy, and TAAS Motivation. Where differences were found between Asian American students and others, the other student groups more often scored higher. The only group difference involving Native American students was the difference between Native American and White students on parental involvement of students in discussions about moving, where White students reported a higher level of agreement that their parents included them.

While it is difficult to make inferences regarding these differences, there may be policy implications in simply recognizing where the differences lie. Hispanic students, for example, reported lower levels of *TAAS Confidence* than did Asian American, African American, or White students. Teachers may pay attention to this difference when engaging students in confidence-building activities.

Table 25: Student Ethnic Differences

	Higher	Lower
Student Attitude About School	Hispanic	White
Self-Reported Student Attendance	Asian	Hispanic
Parental Involvement with Homework	Black	Asian, Hispanic, White
Math Self-Efficacy	Asian	Hispanic
English Teacher Supports Student	Black	Hispanic
English Self-Efficacy	Black	Asian, Hispanic
	Hispanic	White
TAAS Motivation	Asian, Black, Hispanic	White
TAAS Confidence	Asian, Black, White	Hispanic
Difficulty in Moving to Another School	Black	Hispanic
Parents Include Student in Decisions	White	American Indian

Student Gender Differences. Differences in scores were also found by gender. Significant differences were found on 11 of the 18 factors examined, and females scored higher on 9 of those 11 factors. See Table 26 for information.

Table 26: Gender Differences in Student Attitudes, Perceptions, and Behaviors

	Higher
Teacher Cares	Female
Student Attitude Toward School	Female
Self-Reported Student Attendance	Female
Parental Involvement with Homework	Male
Math Teacher Supports Student	Female
Math Teacher Encourages Self-Directed Learning	Male
English Teacher Supports Student	Female
English Self-Efficacy	Female
Care from English Teacher	Female
TAAS Motivation	Female
Difficulty Leaving Behind School and Teachers when Moving	Female

Males reported higher scores on *Parental Involvement with Homework* and *Math Teacher Encourages Student-Directed Learning*. All factors involving teacher care resulted in higher scores for females. Females also displayed higher scores for *Student Attitude About School*, *Self-Reported Student Attendance*, *TAAS Motivation*, *English Self-Efficacy*, and *Difficulty Leaving Behind School and Teachers when Moving*. These differences revealed a

greater level of personal engagement with adults at school for girls, whereas boys seemed to have received higher levels of support from parents and higher response to self-directed learning from teachers.

Relationships

A number of variables were tested to learn the extent to which they could predict *TAAS Confidence*, *Math Self-Efficacy*, *English Self-Efficacy* and *Student Attitude About School*. The variables tested represented those constructs derived from the data reduction process and were grouped by:

- 1) Background characteristics (age, number of siblings);
- 2) Parental involvement with the student (general encouragement, homework encouragement, parents include student in discussions about moving);
- 3) Student involvement (student perception of attendance, attendance at after-school programs, participation in clubs);
- 4) Classroom experiences (math teacher encourages student-directed learning, student autonomy in English class); and
- 5) The level of care experienced by students from their teachers (perception of care from teachers in general, perception of care from English teacher, support from math teacher, support from English teacher).

The results for *TAAS Confidence* were different for ninth and 11th graders; the results for *English Self-Efficacy* and *Math Self-Efficacy* differed by gender. Only *Student Attitude About School* could be accurately predicted without separating the data in any way.

TAAS Confidence

For all students: *TAAS Confidence* seemed to be related to students' engagement in a variety of activities that included adult supervision expressed in inclusive and caring ways. *TAAS Confidence* was predicted in part by the variables listed below.

- ✍ Student participation in clubs or organizations such as sports teams, student council, cheerleading, drama club, or school newspaper.
- ✍ Student perception that their math teachers care about students and have high expectations for student achievement.
- ✍ Parental practice of including students in discussions about moving, which may represent a broader practice of parental respect for students.
- ✍ Lower levels of the extent to which parents helped

with homework, checked to see if homework was done, or talked with the student about homework. The difference between this and the above factors may be that parents' focused attention on homework is perceived as motivated by parental lack of confidence in student achievement. In contrast, adult contact centered around a team or perceived as an expression of care serves as a general confidence booster, which the student is then able to transfer to confidence in TAAS ability.

- A younger age within each grade level. In the ninth-grade sample, 22.8% of the students were above the traditional ninth-grade age of 15. Among 11th graders, 11.9% were above the traditional 11th-grade age of 17. This may indicate that older students within each grade have repeated a year and are, as a result, less confident of their TAAS abilities than their younger counterparts.

For ninth graders: *TAAS Confidence* was also predicted in part by:

- Lower numbers of siblings, which may be an indicator of the amount of attention parents are able to give at home. More siblings mean less attention from parents, which results in less confidence about TAAS.
- Similarly, the extent to which the English teacher uses computers in the classroom and includes students in decisions about rules or what work is to be done, and by a general perception on the part of students that their teachers care about them.

For 11th graders: *TAAS Confidence* was also predicted in part by:

- Participation in clubs and organizations,
- Math teacher support of student, and
- Parents including the student in discussions about moving.

Math Self-Efficacy

For all students: Factors suggest that engagement with supervising adults at school who express interest in the student's progress had a positive impact on *Math Self-Efficacy*, whereas focused attention from parents on homework was not helpful and was in fact fostering a lowered sense of self-efficacy in math. Factors that contributed to *Math Self-Efficacy* include:

- The extent to which the student perceived the math teacher to have high expectations for the student, to express confidence in the student's ability to do well, and to care if the student did well;
- Frequency of participation in school clubs or organizations such as a sports team, student council, cheerleading, drama club, or school newspaper; and
- Lower levels of the extent to which parents helped

with homework, checked to see if homework was done, or talked with the student about homework.

For female students, factors contributing to *Math Self-Efficacy* included a general sense that all teachers are fair, respect the student, and care about the student. For girls, a greater variety of forms of positive feedback from adults at school had a significant impact on *Math Self-Efficacy*, suggesting that girls transferred the confidence gleaned from adult contact in all areas to *Math Self-Efficacy*. Specifically, girls also benefited from:

- A sense that their English teachers had high expectations for students and expressed confidence in the student's ability to do well;
- Good attendance patterns, which suggests that the frequency of adult contact contributes to the degree or amount of positive feedback experienced by girls.

For male students, *Math Self-Efficacy* was not predicted by different forms of support from adults in school as for the females, but by a form of support coming from parental praise for doing well in school and encouragement from parents to work hard.

English Self-Efficacy

For all students:

- Participation in clubs and organizations such as a sports team, student council, cheerleading, drama club, or school newspaper, organizations which all involve faculty sponsorship.
- A student's sense that his or her English teacher had high expectations for the student, expressed confidence in the student's ability to do well, and praised the student's efforts. While praise and encouragement from the English teacher was important to self-efficacy in English class, so was the more indirect support from adults in clubs and organizations.

For male students:

- A student's sense that the math teacher had high expectations for the student, expressed confidence in the student's ability to do well, praised the student's efforts, and cared if the student did poorly.
- Support from the math teacher affected *English Self-Efficacy* but support from the English teacher did not affect *Math Self-Efficacy*. This indicates the importance boys place on math and their perception that mathematical ability is a measure of overall academic ability.

For female students:

- ✦ Lower levels of encouragement for student-directed learning from a math teacher were predictive of higher self-efficacy in English. Encouraging student-directed learning involves allowing students to decide what work is to be done or what problems to work on for the class, which girls may experience as a lack of support or a form of abandonment.
- ✦ Girls' needs for active support from teachers was further seen in the addition of care from the English teacher as predictive of *English Self-Efficacy*. While boys seemed to be able to do without the English teacher's concern if they are not doing well in English, for girls this experience of care contributed to *English Self-Efficacy*.

Student Attitude About School. This construct reflects how positively the student feels about going to school or returning to school after a vacation, and whether the student is bored at or looks forward to going to school. Overall, student attitude improved when students came to school and when they felt parents and teachers cared. Those characteristics that best predicted a positive attitude were the same for all students regardless of gender, ethnicity, or grade:

- ✦ Frequency with which students attend after-school and weekend programs for extra help,
- ✦ The level of care students perceive from their

teachers in general,

- ✦ Lack of tardiness and absences, and
- ✦ Parental practice of including students in discussions about moving.

Table 27 summarizes the items that were found to be predictive of *TAAS Confidence*, *Math Self-Efficacy*, *English Self-Efficacy*, and *Student Attitude About School*.

Looking at the student data as a whole, it is important to note that participation in clubs and organizations was a significant contributor to most of the outcomes. College persistence literature has definitively demonstrated that student involvement plays a critical role in college persistence and therefore college success. This student data shows that involvement was also important to high school student success in terms of its relationship to higher *TAAS Confidence*, higher *Math Self-Efficacy*, and higher *English Self-Efficacy*. Similarly, support from the student's math teacher was significant for most groups in three of the four outcomes. This may reflect a general cultural tide that stresses the **importance** of math as an academic field necessary for **post-secondary professional** success in a business- and **technology-oriented** context. Students sensitive to this **sentiment** may **find feedback** from their math teachers more important than **feedback** from other teachers, and may **use** it as an indicator of **their** general success as students.

Table 27: Student Relationships

	TAAS Confidence		Math Self-Efficacy		English Self-Efficacy		Student Attitude
	Grade 9	Grade 11	Male	Female	Male	Female	
Background							
Age	✓*	✓*					
Number of Siblings	✓*						
Parental Involvement							
School Encouragement			✓				
Homework Encouragement	✓*	✓*	✓*	✓*			
Include Students in Discussions About Moving	✓	✓					✓
Student Involvement							
Student Attendance				✓			✓
Attend Extra Help Programs							✓
Participate in Clubs & Organizations	✓	✓	✓	✓	✓	✓	
Classroom Experiences							
Math Teacher Encourages Student-Directed Learning						✓*	
Autonomy in English Class	✓						
Teacher Care							
Care from Teachers in General	✓			✓			✓
Math Teacher Support	✓	✓	✓	✓	✓		
English Teacher Support					✓	✓	
English Teacher Care				✓		✓	
Percent of Variance in Outcome Explained by Model	16%	16%	19%	24%	26%	29%	23%

* Indicates items that are in inverse relationship to the outcome

Finally, it is important to note that parental encouragement on student homework had a negative relationship to the two outcomes for which it was found to be significant. In fact, there was no analysis in which parental encouragement on homework bore a positive relationship to a reported outcome. Parental involvement more generally is known to be influential in student success. Involvement with student homework represents an area in which parents are **intruding**, or micromanaging, a student role rather than actively engaging in a parallel parental role. A **negative** experience of micromanaging would be compounded for the student by the knowledge that **parents are not enrolled in class and probably do not know more than the student about a given subject.**

ANNENBERG TEACHER DATA

Demographics

The majority of teachers sampled (79%) were female. Nearly half of the teachers (49%) had more than 10 years of classroom experience. While 53% of the student population was Hispanic, the majority of teachers sampled were White (52%), with African American teachers comprising the next largest group (30.7%). Compared to 52.3% of the teaching staff, more than 85% of the district staff is White.

Table 28: Teacher Demographics

	Frequency	Percentage (%)
Gender		
Male	378	20.8%
Female	1439	79.2%
Teaching/Administrative Experience		
0–2 years	277	14.9%
3–5 years	332	17.9%
6–10 years	345	18.6%
More than 10 years	900	48.5%
Race/Ethnicity		
Native American	1	0.1%
Asian American	33	1.9%
African American	43	30.7%
Hispanic	219	12.4%
White	24	52.3%
Other	46	2.6%

Profile of Attitudes, Perceptions, and Behaviors

As detailed in Table 29, those constructs for which teacher scores were higher included:

- ✦ *Student Participation in Class* (4.57), which measured how often teachers used participation as a method of assessment;
- ✦ *Include Student Input* (4.46), which measured the frequency with which teachers related subject matter to students' experiences or had students explain their reasoning;
- ✦ *Develop Reading Skills* (4.12), which measured the frequency with which teachers focused lessons on developing reading and writing skills;
- ✦ *Cover Facts and Concepts* (4.10), which measured the frequency with which teachers focused lessons on covering the basic facts and concepts related to a specific topic; and
- ✦ *Have Students Work in Cooperative Groups* (4.06), which measured how often teachers used cooperative group work as an instructional strategy.

For the following constructs, lower scores are more desirable:

- ✦ *Use Objective Tests to Assess Student Outcomes* (2.91), which measured the frequency with which teachers relied on objective questions, short answer tests or TAAS results to assess student learning and progress; and
- ✦ *Use Traditional Methods* (2.96), which measured the frequency with which teachers used instructional strategies such as lecture, workbook exercises, or call and response activities.

The lowest scores were represented by the following constructs:

- ✦ *Essay Tests* (2.19), which measured the frequency with which teachers used essay tests as a method of assessment;
- ✦ *Have Students Discuss and Debate Ideas for More Than Half a Period* (2.74);
- ✦ *Assign Projects of at Least One Week's Duration* (2.80);
- ✦ *Perceptions of Parental Involvement* (2.55/4), which measured the number of parents involved in various activities at school; and
- ✦ *Use Writing to Assess Student Outcomes* (3.23), which measured the frequency with which teachers used short and long writing assignments to assess student learning and progress.

Table 29: Teacher Attitudes, Perceptions, and Behaviors

Construct	Mean
Effectiveness of Professional Development	3.46
Teacher Interactions with Students	3.45
Teacher Collaboration	3.41
Perceptions of Parental Involvement	2.55*
Interaction with Parents	4.11
Develop Reading Skills	3.63
Use Traditional Methods in Teaching	2.96
Include Student Input in Class	4.46
Cover Facts and Concepts	4.10
Focus on Developing Student Skills	4.12
Use Projects to Assess Student Outcomes	3.30
Use Writing to Assess Student Outcomes	3.23
Use Objective Tests to Assess Student Outcomes	2.91
Site-Based Decision-making	3.89
Perceptions of Student Performance	3.69
Engagement in School Reform Efforts	3.85
Use of Space and Time	3.71
Mobility Rates	2.76*
Student Absenteeism	2.76*
Dropout Rates	3.03*
Student Retention	3.21
Student Engagement	3.80
Professional Development Experiences Have Been Self-Directed	3.27
Professional Development Experiences Have Advocated Practices I Do Not Believe In	3.59
Professional Development Experiences Have Been Isolated with No Follow-Up	3.53
Assign Projects of at Least One Week's Duration	2.80
Have Students Work in Cooperative Groups	4.06
Have Student Discuss and Debate Ideas for More Than Half a Period	2.74
Reviewing Content of Skills from a Previous Grade Level	3.44
Studying a Topic in Depth	3.98
Developing Mathematics Skills	3.79
Incorporating Homework into the Assignment	3.87
Student Participation in Class	4.57
Essay Tests	2.19

Scores are based on a scale of 1–5, where 5 is the more desirable score.

*Scores based on a scale of 1–4, where 4 is the more desirable score.

Teacher Differences by Ethnicity

Significant differences were found between ethnic groups on 17 of the 19 factors tested. Though there were 33 Asian American teachers in the sample, Asian Americans were not found among the groups revealing significant differences. Most often, the differences were between African American and White teachers, with Hispanic teachers showing occasional differences. The two factors found not to yield significant differences among ethnic groups were the extent to which teachers perceived parents to be involved, and the frequency with which teachers included student input in class. See Table 30 for details.

African American teachers reported higher scores on all factors than White teachers. While this may reflect a tendency of African American teachers to make more positive assessments and/or of White teachers to make more negative assessments, it may also reflect a difference in the commitment or attitude brought to school reform each group.

It should be noted that African American teachers showed higher scores for all types of pedagogy, both traditional (*Covering Facts and Concepts, Using Objective Tests*) and those that might be associated with reform (*Developing Skills, Using Projects to Assess Learning*). This finding may indicate a greater willingness on the part of African American teachers to engage in a variety of styles, neither abandoning traditional methods in favor of reform, nor shunning reform in favor of what is known and familiar.

The pattern of differences between Hispanic teachers and others was inconclusive, though it is noteworthy that when Hispanic scores were lower they were paired with White teachers, and when they were higher they were paired with African American teachers. Those factors on which Hispanic teachers displayed significant differences were most often related to teaching style, though they represented neither traditional methods nor reform exclusively.

Differences by ethnicity for teachers and students mirrored each other, leading to the question: Are teachers influencing student attitudes, or are students influencing teacher attitudes?

Teacher Gender Differences

Gender differences were found to be significant among teachers in the sample. On all but one of 14 factors, females represented the higher mean. Male scores were higher only for *Use of Objective Tests to Assess Student Learning*.

Factors representing traditional pedagogy did not result in any gender difference. All constructs representing reform pedagogy (*Developing Skills, Using Varieties of Assessment*) resulted in a gender difference, with females scoring higher (more frequent use of reform methods). See Table 31 for the data.

Table 30: Ethnic Differences in Teacher Attitudes, Perceptions, and Behaviors

	Higher	Lower
Effectiveness of Professional Development	Black, Hispanic	White
Frequency of Collegial Activity	Black	Hispanic, White
Interactions with Other Teachers	Black	White
Joint Teaching	Black	White
Interaction Between Teacher and Parents	Black	White
Plan Lessons to Develop Reading Skills	Black, Hispanic	White
Use Traditional Methods	Black	Hispanic, White
	Hispanic	White
Design Lessons to Cover Facts and Concepts	Black	Hispanic, White
Design Lessons to Develop Skills	Black, Hispanic	White
Use of Projects to Assess Student Learning	Black	White
Use of Writing to Assess Student Learning	Black	White
Use of Objective Tests to Assess Student Learning	Black	Hispanic, White
Teacher Collaboration	Black	White
Student Scores	Black	White
School Engaged in School Reform	Black	White
Increase in Use of Space and Time	Black	White

Table 31: Gender Differences in Teacher Attitudes, Perceptions, and Behaviors

	Higher	Lower
Effectiveness of Professional Development	Female	Male
Interactions with Other Teachers	Female	Male
Perceptions of Parental Involvement	Female	Male
Interaction Between Teacher and Parents	Female	Male
Plan Lessons to Develop Reading Skills	Female	Male
Include Student Input in Class	Female	Male
Design Lessons to Develop Skills	Female	Male
Use of Projects to Assess Student Learning	Female	Male
Use of Writing to Assess Student Learning	Female	Male
Use of Objective Tests to Assess Student Learning	Male	Female
Teacher Collaboration	Female	Male
Student Scores	Female	Male
School Engaged in School Reform	Female	Male
Increase in Use of Space and Time	Female	Male

Table 32: Teacher Relationships

	Engagement in School Reform				Perceived Student Scores			
	Asian	Black	Hispanic	White	Asian	Black	Hispanic	White
Background								
Teaching/Administrative Experience					√			
Relationship with Parents								
Parental Involvement	√	√	√	√		√	√	√
Interaction with Parents			√	√		√		√
Professional Development								
Effectiveness of Professional Development		√		√		√	√	√
Teacher Interactions			√		√			
Joint Teaching					√*			
Percent of Variance in Outcome Explained by Model	43%	41%	36%	39%	57%	34%	33%	31%

* Indicates items that are inversely related to the outcome

Table 33: Principal Demographics

	Frequency	Percentage (%)
Gender		
Male	8	40%
Female	7	60%
Teaching/Administrative Experience		
0–2 years	1	1.6%
3–5 years	5	8.2%
6–10 years	10	16.4%
More than 10 years	36	59.0%
Race/Ethnicity		
Native American	0	0%
Asian American	1	1.6%
African American	23	37.7%
Hispanic	8	13.1%
White	23	37.7%
Other	0	0%

Table 34: Principal Constructs

Construct	Mean
Encourage Teachers and Student Standards Assessment Efforts	4.80
Perception of Teacher Interactions with Parents	4.48
Perceived Student Use of Drugs	2.74
Attrition	3.64*
	3.74*

Scores are based on a scale of 1–5, where 5 is the more desirable score.

*Scores based on a scale of 1–4, where 4 is the more desirable score.

Relationships

Engagement in School Reform

For all teachers:

- ✎ Level of parental involvement,
- ✎ Using data as a basis for decision-making, and
- ✎ Having the support of the district for the school's reform goals.

For African American teachers:

- ✎ Effectiveness of professional development, a strong sense of a relationship between the effective execution of reform-related professional development topics and behaviors and attitudes typical of the school, which reflect or might result from reform efforts.

For Hispanic teachers:

- ✎ Interaction between teacher and parents, and
- ✎ Interaction between teachers.

ANNENBERG PRINCIPAL DATA

Demographics

The majority of principals in the schools sampled were female. The majority of principals reported more than 10 years of teaching or administrative experience. The most represented ethnic/racial groups among principals were African American (38%) and White (38%). See Table 33 for more data.

Profile of Attitudes, Perceptions, and Behaviors

The highest scores were associated with the following constructs:

- ✎ Encourage Teachers and Students (4.80/5), which measured principals' perceptions that they

encouraged teachers to communicate and try new methods, and held students to high standards;

- *Perceived Student Use of Drugs* (3.64/4);
- *Perceived Attrition Among Students* (3.74/4), which measured the perception of principals that students were dropping out; and
- *Assessment Efforts* (4.48/5), which measured principals' perceptions that their schools examine performance, evaluate programs, and use assessment data on student performance.

The lowest mean scores were associated with the construct *Teachers and Parents* (2.74/5), which measured principals' perceptions that teachers seek parental support and feedback.

ANNENBERG PARENT DATA

Demographics

The majority of parents sampled were female (68%) and Hispanic (47%). Slightly more than half of the fathers and 30% of the mothers attained an undergraduate degree or higher. More data is presented in Table 35.

Profile of Attitudes, Perceptions, and Behaviors

Parent scores tended to be high, with the lowest at 3.01. All averages fell between 3 and 4.

Constructs yielding the highest scores included:

- *Praise Child* (3.58/4), which measured how often parents praised or encouraged their children for school work; and
- *Satisfaction with School* (3.81), which measured parental support of the school, involvement in fundraising, attendance at events, and satisfaction with information programs.

Those constructs with the lowest scores included:

- *Include Child in Decisions* (3.01), which reflects the extent to which parents included children and their feelings in discussions about moving; and
- *Parent Involvement* (3.03), which measured the extent to which parents visited classrooms, served on committees, talked with teachers, or took their children to the library.

Just over half of the parents hoped that their children will graduate from high school and go to a four-year college; 20% expected their children will do this; and 23% expect their children will graduate from high school, work, and go to a four-year college.

Parent Information Not Reported in Tables

The mean number of times families moved from one district to another during the last two years was

Table 35: Parent Demographics

	Frequency	Percentage (%)
Gender		
Male	131	32%
Female	279	68%
Race/Ethnicity		
Native American	1	0.3%
Asian American	21	5.3%
African American	111	27.8%
Hispanic	186	46.6%
White	70	17.5%
Other	10	2.5%
Level of Schooling Completed		
Father		
Grade School	42	9.7%
High School	113	26.2%
Associate Degree (AA)	39	9.0%
Baccalaureate Degree (BA/BS)	156	36.1%
Graduate or Professional Degree	82	19.0%
Mother		
Grade School	52	12.2%
High School	189	44.3%
Associate Degree (AA)	57	13.3%
Baccalaureate Degree (BA/BS)	84	19.7%
Graduate or Professional Degree	45	10.5%

Table 36: Parent Attitudes, Perceptions, and Behaviors

Construct	Mean
Teacher Attitude Toward Parents	3.76
Teacher/Parent Contact	3.51
Parent Involvement	3.03
Satisfaction with School	3.81
Difficulty Moving	3.05
Leaving	3.73
Include Child in Decisions	3.01
Praise Child	3.58*
Help Child	3.01*

Scores are based on a scale of 1–5, where 5 is the more desirable score.
*Scores based on a scale of 1–4, where 4 is the more desirable score.

2.04. The mean number of times a child changed schools within a school district as a result of a move was 1.50.

A total of 45% of parents stated that their children have one hour of homework on a typical day, 23% reported two hours, 29% reported less than an hour of homework, and 3% reported three hours or more.

A COMPARISON OF YEAR ONE AND YEAR TWO DATA

Students

The clear trend in Year One data shows higher means or percentages than the Year Two data, which generally reflects a movement away from the more desirable outcome. Exceptions to this, where the change is toward the more desirable outcome, are indicated in bold in the tables.

Teachers

Teacher expectations for students to attend college have generally increased as reflected both by the **decrease** in expectation that no students will achieve each of the three markers, and by the increase in expectation that almost all students will achieve each of the three markers.

Principals

Principals perceived increases in the district's understanding of the school's reform agenda, the extent to which the district allows the school to make decisions about instructions, and the extent to which the district allows the school to make decisions about hiring teachers.

Principals reported decreases in the district giving the school control over its budget, the district allowing the school to make decisions about educational standards, the district allowing the school to make decisions about curriculum, and the district allowing the school to make decisions about scheduling.

Table 37: Parental Expectations for Children

	Hope		Expect	
	Number	Percent	Number	Percent
Leave High School Before Graduating	22	5.0%	8	1.8%
Leave High School and Help at Home	45	10.2%	21	4.7%
Finish Education in a GED Program	12	2.7%	6	1.4%
Graduate from High School and Get a Job	17	3.9%	25	5.6%
Graduate from High School and Go to a Two-Year or Technical School	46	10.4%	21	4.7%
Graduate from High School, Work, and Go to a Two-Year College	13	2.9%	46	10.4%
Graduate from High School, Work, and Go to a Four-Year College	60	3.6%	103	23.3%
Graduate from High School and Go to a Four-Year College	222	50.3%	188	42.4%
Graduate and Go Into the Armed Services	4	0.9%	25	5.6%

Table 38: Mathematics Experiences

	Younger Students		Older Students	
	Year One Grade 8	Year Two Grade 9	Year One Grade 10	Year Two Grade 11
Math Self-Efficacy	3.72	3.48	3.60	3.51
Can Do Better Math Work	3.82	3.76	3.96	3.78
Teacher Encouragement and Support	3.64	3.49	3.74	3.53
Involve Students in Math Class Decision-Making	2.54	2.38	2.80	2.30
Use Computers in Classroom	2.32	2.29	2.14	2.11

Table 39: English Experiences

	Younger Students		Older Students	
	Year One Grade 8	Year Two Grade 9	Year One Grade 10	Year Two Grade 11
English Self-Efficacy	4.04	3.71	.99	3.82
Can Do Better English Work	3.78	3.75	3.99	3.79
Don't Try Hard Because It Does Not Make A Difference	3.78	2.15	1.90	1.96
Teacher Encouragement and Support	3.68	3.44	3.77	3.58
Involve Students in English Class Decision-Making	2.80	2.69	2.92	2.79
Use Computers in Classroom	2.82	2.42	2.76	2.51

Table 40: School-Related Behaviors

	Younger Students		Older Students	
	Year One Grade 8	Year Two Grade 9	Year One Grade 10	Year Two Grade 11
Avoidance of School-Related Activities	2.06	3.77*	2.22	3.74*
Attended After-School Help Programs	2.20	1.99	2.30	2.16
Participated in School Clubs or Organizations	3.25	2.81	3.41	3.43

Table 41: Student Perceptions of Parental Expectations

	Younger Students		Older Students	
	Year One Grade 8	Year Two Grade 9	Year One Grade 10	Year Two Grade 11
Graduate from High School	98.2%	97.7%	98.9%	98.5%
Not Graduate from High School	1.8%	2.3%	1.1%	1.5%

Table 42: Student Perceptions of Parental Expectations After Graduation

	Younger Students		Older Students	
	Year One Grade 8	Year Two Grade 9	Year One Grade 10	Year Two Grade 11
Attend College	95.9%	91.4%	95%	95.6%
Not Enroll in College	4.1%	8.6%	5%	4.4%

Table 43: Educational Aspirations of Students

	Younger Students		Older Students	
	Year One Grade 8	Year Two Grade 9	Year One Grade 10	Year Two Grade 11
Leave High School	1.3%	3.1%	.4%	1.1%
Graduate and Get a Job	7.2%	10.9%	6.7%	4.7%
Graduate and Go to College	91.5%	86.0%	92.9%	94.2%

Table 44: Teachers' Expectations of Students

Teacher Expectation that Students		Year One	Year Two
Will Graduate from High School	None	.3%	.2%
	Some	7.0%	7.4%
	About Half	20.9%	19.8%
	Almost All	71.8%	72.6%
Will Attend Two-Year College	None	3.6%	3.5%
	Some	48.0%	46.9%
	About Half	34.7%	34.5%
	Almost All	13.7%	15.1%
Will Attend Four-Year College	None	5.1%	4.4%
	Some	50.0%	48.2%
	About Half	26.7%	25.6%
	Almost All	18.2%	21.9%

Table 45: Principals' Perception of Their Districts

The School District	Year One	Year Two
Understands School's Reform Agenda	3.82	3.97
Gives Schools Control Over Their Budgets	4.41	4.39
Allows School to Make Decisions About Educational Standards	3.67	3.52
Allows School to Make Decisions About Curriculum	3.74	3.54
Allows School to Make Decisions About Instructions	4.10	4.16
Allows School to Make Decisions About Hiring Teachers	4.56	4.62
Allows School to Make Decisions About Scheduling	4.65	4.49

EFFECTS ON TEACHING AND LEARNING

EFFECTS ON TEACHER LEARNING

The Houston Annenberg Challenge has invested heavily in Houston public schools. During the first year of the initiative's research and evaluation study, analyses revealed that participating schools used the majority of their Annenberg funds—approximately 90%—on professional development for teachers. By encouraging professional development and providing administrators and teachers access to ongoing programs, the Houston Annenberg Challenge exposes practicing educators to the latest research on effective teaching tools and methods. Additionally, educators participating in professional development activities and programs share ideas and expertise with their peers, pinpoint problems, and collectively search for more effective teaching strategies.

The impact of the Houston Annenberg Challenge in the greater Houston metropolitan area is significant. During Phase I—the implementation phase, which began in 1998—the Houston Annenberg Challenge provided more than \$14.4 million in direct grants to 88 schools in the greater Houston area. Participating schools are located in six Houston area school districts: Aldine, Alief, Houston, Humble, North Forest, and Spring Branch. These schools encompass more than 4,500 teachers and approximately 76,000 students enrolled in pre-kindergarten through 12th grade.

Substantial evidence demonstrates that the Houston Annenberg Challenge investment in professional development is positively impacting teaching and learning in funded schools. Administrators and teachers collaborate in unprecedented ways to improve campus learning environments and student achievement. Teachers adopt curricula changes, new methods, materials, and strategies to improve instructional practices in teaching of language arts, social studies, and math and science. Furthermore, Annenberg schools use the most current technology to engage K–12 students in their own learning. Schools also integrate art into the more traditional curricula areas. Finally, Annenberg schools are experimenting with innovative bilingual and dual-language approaches to instruction.

Developing a Culture of Teacher Learning

Teachers believe that traditional district or campus training programs do not meet their needs. Traditionally, central office or campus administrators select staff development programs. Often these staff development offerings consist of “one-shot” presentations or workshops with little follow-up or support. Administrators do not

consider professional development a high budget priority, so funds are limited. As a result, staff developers may resort to contracting with commercial vendors who focus on demonstrating particular classroom products to teachers. Teachers seeking specific types of pertinent training frequently find it necessary to use personal funds.

Moreover, district-wide training programs attempt to simultaneously meet the needs of teachers at multiple schools. Teachers perceive that course content in broad-based training is often aimed at a middle skill level. This training is inadequate for those participants requiring additional basic instruction or more challenging advanced instruction. Since broad-based training is by definition based upon group needs, teachers report that such training is often not relevant to them. Researchers agree, judging most current staff development to be intellectually superficial, disconnected from deep issues of curriculum and learning, fragmented, and noncumulative (Ball & Cohen, 1999).

Studies show that many district leaders perceive staff development as the transmission of knowledge from expert to novice (Spillane, 2000). In the Spillane study, district curriculum specialists explain that they filter information down to the teachers by “telling and showing” them techniques or programs. According to this view of staff development, teachers are passive learners who cannot contribute valuable knowledge, skills, or experiences.

In the past, professional development was rarely taken seriously—teaching was thought to be a common-sense activity. Complicating the matter is Lortie's (1975) theory that most teachers develop their ideas about teaching practice from their own school experiences, through an “apprenticeship of observation.” The majority of today's teachers sat in classrooms and listened to teachers who did most of the talking; as students their role was to memorize and repeat facts or learned skills.

This traditional view of staff development is outdated and incompatible with the prevailing vision of school reform. Today's educational reformers expect teachers to help diverse student learners become competent and skilled. Schools are urged to connect with their communities. Reformers expect students to succeed in ways unprecedented in the history of U.S. public education (Ball & Cohen, 1999).

Today's educational reformers expect teachers to know meanings and connections, not just procedures and information. Teachers are required to connect ideas across disciplinary fields and to students' everyday lives.

Teachers must understand children's interests and needs. Furthermore, teachers need to understand cultural differences, including differences in language, class, family, community, and gender. Ultimately, teachers have to expand their ideas about learning. Teachers must know pedagogy so that they can connect children effectively with content, adapting and shifting teaching modes in response to students. In effect, teachers are now expected to develop and adapt their teaching practices in response to their everyday classroom experiences (Ball & Cohen, 1999).

Gradually a concept of teacher *professional* development has emerged from the more limited notion of *staff* development. In order for teachers and schools to deliver excellent instruction that promotes high academic achievement for all students, sustained professional development is necessary. Some educators suggest that implementation of the new vision of professional development represents a paradigm shift. According to this new paradigm, teacher professional development occurs every day on the job among teams of teachers who share responsibility for high levels of learning for all students. While this paradigm includes formal training programs, it also recognizes the power of informal learning. To implement this new paradigm, school leaders must change organizational structures to create new school cultures that foster experimentation, collaboration, and continuous improvement (Sparks, 2000).

Ball and Cohen (1999) call the new paradigm "pedagogy of professional development." They describe it as a dynamic interaction between teachers, students, curriculum content, and environment. In this complex interaction, *teaching* is defined as what teachers do, say, and think *with* students, about curriculum content, using particular methods of instruction, in specific environments, over time. Researchers and master teachers see teaching as a collection of practices, including pedagogy, learning, instructional design, and managing instructional organization. Research also suggests that when teachers' knowledge, skills, and strategic actions are seen as resources, student achievement rises significantly (Cohen, Raudenbush, & Ball, 2000). Teachers learning from their day-to-day teaching practice constantly improvise, conjecture, experiment, and assess as they adapt and develop their practice (Ball & Cohen, 1999).

Annenberg schools support this emerging vision of educational reform. Annenberg schools view professional development as necessary to maintain and refine implemented reforms. In this environment, professional development serves many functions,

including new staff orientation and training. Professional development also creates forums for teachers to have collegial conversations about curriculum programs and instructional problems and solutions. Teachers participating in professional development gain a common knowledge base of reforms and their underlying philosophies. Teachers engage in active inquiry into current beliefs and practices. Finally, professional development keeps teachers current on district, regional, state, and national issues and guidelines. Teachers at reform schools report that prior to Annenberg their greatest need was for intellectual and professional resources. Teachers say Annenberg funding gives them the necessary role models, research literature, and collegial support to implement reforms.

Teachers participate in professional training both on- and off-campus. Annenberg funds help teachers with travel expenses and conference registration fees, enabling them to attend high-quality professional development activities that would otherwise be cost-prohibitive. Entire school faculties attend training on specific curricula approaches being implemented campus-wide. Additionally, teachers self-select training to meet their specific needs. Sometimes schools bring in consultants to provide training on-campus. This approach allows the consultant to customize the material and discussion to a school's particular needs.

An academically rich environment begins with teachers who are deeply knowledgeable about their discipline area, about how children learn, and about which pedagogical strategies best support student learning. This special teacher knowledge is called "pedagogical content knowledge"—a form of knowledge that combines subject matter (content) knowledge with an understanding of instruction, producing a highly specialized type of knowledge unique to teachers (Shulman, 1987).

Many Annenberg schools focus their professional development on areas of greatest need. For example, some elementary schools focus on improving students' early literacy skills. Middle schools focus on engaging older "reluctant" readers in sustained reading and writing activities. By participating in high-quality professional development, teachers in these schools develop and implement creative and innovative instructional practices geared specifically to their students' needs.

Campus-Wide Professional Development

Many schools use their Annenberg funding to train the entire faculty or teams of teachers in a specific program selected for school-wide implementation. For example,

elementary schools have focused on early literacy by adopting such program strategies as Guided Reading, Reading Recovery, Balanced Approach to Reading, and Accelerated Reader. Similarly, Annenberg elementary, middle, and high schools train teams of teachers in writing strategies such as Writer's Workshop and the New Jersey Writing Project. Elementary schools have targeted math instruction by incorporating the Everyday Math program into the curriculum.

Researchers report that one of the most effective teacher learning programs undertaken by an Annenberg middle school, Sunnyvale*, is unquestionably the New Jersey Writing Project (NJWP). Reading and language arts teachers cultivate a reading-writing connection for their students using authentic literature and establishing connections with the students' own experiences and knowledge.

Students' reading and writing scores have increased dramatically since the program's inception. For instance, sixth and seventh graders' Iowa Test of Basic Skills scores increased by two to three grade levels in just one year. TAAS reading and writing scores for all grades have improved over the course of the program. Sunnyvale was the only middle school in its district to show improved TAAS writing scores in 2000.

One of the most impressive aspects of NJWP at Sunnyvale is that teachers use their knowledge of the curriculum as more than a lesson plan; they also use it as a starting point for developing their own creativity and expanding their own learning. For example, one very involved teacher has become certified as a NJWP trainer and has continued suggested readings in educational psychology, brain-based learning, and working with at-risk students. Ultimately, he has developed a set of NJWP activities into a district training seminar entitled Turning At-Risk into Resilient. In this workshop, he guides other teachers through research literature about working with at-risk students. Then he offers activities and samples of his own students' writing to demonstrate the effectiveness of his techniques. For this teacher, professional development has made an empowering and far-reaching impact. In fact, he now serves as the "external advisor" on Critical Friends Groups to a group that is redesigning teacher preparation courses at five local universities. He comments that his ability to participate as an "equal" in this group of professors and administrators has boosted his confidence so much that he is considering returning to school to pursue a graduate degree (Sunnyvale Middle School Case Analysis).

Reforming schools also concentrate professional development on curriculum alignment. Schools integrate the curriculum within grade levels (horizontal alignment) and between grade levels (vertical alignment). As teachers from elementary, middle, and high schools initiate discussions, further alignment is occurring across feeder patterns. (A feeder pattern is a configuration of elementary, middle, and high schools designated by the district as attendance zones for specific neighborhoods.) Annenberg schools also align schools' curricula with state and national standards.

At many schools teachers learn to integrate the curriculum in innovative and challenging ways. Teachers at these schools collaborate to develop lessons that simultaneously address several curriculum areas. Fine-arts teachers work closely with math, science, and history teachers to incorporate drawing, music, drama, and dance into abstract lessons on math, energy, and historical events.

One elementary school, Cochrane, has fully integrated art into the school's science, math, and language arts curriculum. Cochrane's administrators and faculty have a well-developed vision of teaching and learning. The campus Annenberg Coordinator and Art teacher discusses their approach:

The big picture at Cochrane is that we have the ability to integrate all the arts into the four subjects of math, science, language arts, and fine arts. It's not just music or visual arts, either. Students are exposed to the whole picture of how to think creatively. We are the first school in this district — the first in Texas, as far as I know — to use this strategy. We're looking at a different way to teach children how to learn, to be life-long learners, not just TAAS prep kids. The students get exposed to learning through visual, auditory, and kinetic activities. They learn holistically. What we do in visual arts is reinforcing what they need to know in math. For example, it is essential that they understand lines so they can judge angles in Geometry.

In our vision, teachers from all disciplines have to meet, because we have to share our knowledge and our strengths. That way, when the student is with us they get the best of all worlds, not just one focus. We bombard students from all areas on how to think about mathematics, or how to think about science. The creative thinking process that happens in an art form triggers the way we all learn. When we make pictures in our head, it makes everything a lot livelier.

Annenberg has supported us greatly with teacher development. For 25 years I taught, and I never went anywhere. I never, ever was able to share with other educators the ideas that I knew could work. With Annenberg, a whole new doorway was opened for us. We can be a voice, go places, and present what we know works. We can exchange ideas so we can start bending people's minds.

Typically, everything comes from the top down. Education comes from the university, as professors tell us how to develop a program. Or the Board of Education tells us what to do. But what we really need to do comes from us, from our home school, from the ground up. Here at Cochrane, we create our own curriculum; we design our own programs. We look at the needs of our students, and every year we re-evaluate what we are doing. The children come first. (Interview)

Funded schools also use Annenberg money to train teachers in school-wide approaches to organizing the learning environment and providing instruction. For instance, a number of elementary schools have implemented Tribes programs to reinforce social skills, engage students in cooperative learning activities, and support multiple learning styles. Additionally, middle schools have adopted experiential learning strategies such as Project Co-nect and Project-Based Learning.

For example, Raven Middle School adopted Project Co-nect as the school's major reform effort. The school's participation in Project Co-nect is solely fully funded by Annenberg dollars. Raven has blended the five Project Co-nect benchmarks (shared accountability, project-based learning, continuous improvement, team-based organization, and use of technology) with the three Annenberg imperatives (teacher learning, class size, and isolation).

This year Raven teachers attended the second Houston-Based Project Learning Conference. Some Raven teachers and students presented projects that they had developed. One teacher reported that the Project Co-nect professional development taught her to trust her own teaching ability, increased her confidence in trying new things, and guided her to review student work in a different way.

One conference presentation showcased a seventh-grade community history project. A team of teachers collaborated with a local university to assist students with interviewing World War II veterans and recording and writing down their oral histories. A history teacher and a humanities teacher at Raven created the project to make history more relevant to their students. These teachers also wanted to incorporate technology into the study of

humanities. They led the class to look for ideas in their own neighborhood. Collectively, they wondered what families, neighbors, and the larger community could tell them about history from their own experiences. The neighborhood's recently completed World War II memorial provided inspiration. With an additional grant from the National Endowment for the Humanities, the group developed a plan.

First, they learned how to gather oral histories from a professional historian at the Metropolitan Research Center of the Houston Public Library. Then the students conducted background research on World War II. Finally, war veterans were recruited to talk with nearly 40 seventh graders at Raven. The student researchers videotaped interviews with the veterans and collected photographs and memorabilia.

A history major from Rice University helped the students interview the veterans, organize the materials, and edit hours of videotape. The teachers guided the students through the process of making sense of the information they had collected. Excerpts of the final video were uploaded to the Internet. A Rice University staff member helped the students create a booklet of their work, entitled *The Heights Remembers World War II: Our Community in History*. The booklet contains photographs of the veterans and the student researchers and a series of stories collected as oral histories. Veterans recount experiences such as "Houston Going to War," "The Last Year in Europe," "Childhood Memories of the War," and "The Bataan Death March." The students proudly displayed the booklet to the mostly adult audience at the conference. They reported that the booklet has been widely distributed to students, teachers, and community members (Raven Middle School Case Analysis).

Annenberg schools continue to train more teachers each year in the popular Critical Friends Group process. Teachers report that participation in Critical Friends has taught them how to be reflective practitioners and how to use the reflections to change their teaching. Additionally, as teachers from different disciplines get to know each other in Critical Friends Groups, they are able to strengthen curriculum alignment and integration.

A young high school geometry teacher has made major changes in his teaching practices, combining his Critical Friends work with training he received at the Conference of the National Council of Teachers of Mathematics. He believes engaging in powerful reflection was the turning point for him.

The Critical Friends Group has been a very powerful reflective tool for me. Initially, we did some text-based discussion and looked at theory and research. We worked on building trust in the group, and we examined student work. This past fall, I brought some student work so that I could get feedback from my colleagues on how to make it better.

For instance, last spring I went to the National Council of the Teachers of Mathematics Meeting in Chicago. One of the sessions emphasized project-based learning. For my geometry class this fall, I tried getting students to work on a project where they went out into the real world — their home, their neighborhood, their world — and found examples of different types of quadrilaterals. I asked them to describe these examples in geometric terms. Some of the students did a really good job. One project blew me away! A group of four girls found the most unique shapes in places I had never thought to look, like a trapezoid in the bumper of a pickup truck. But most of the projects were very superficial. The kids weren't used to working on projects in a math class.

So I brought some samples to the Critical Friends Group, and we ran a "tuning" protocol. That means that we followed a specific agenda where I described the work, and the other teachers asked surface "clarifying" (factual) questions. Then they asked deeper, more thought-provoking questions. Finally, they shared "warm" and "cool" feedback — things they liked and things that they'd like to see changed. The group was made up of math, special education, science, and English teachers. Because of the broad base of experience in the group, I was able to improve the overall lesson. They helped me reword it to elicit a stronger, deeper response from the students.

One of the things the group emphasized, which the state curriculum also emphasizes, is real world application. I was praised for pulling that into the project. I was also given some specific feedback on how I can get more of the student response that I'm after.

For example, architecture lends itself really wonderfully to geometry. The unit coming up next is about pyramids and solids. We can pull in examples from art and architecture for the lesson. Today we were talking about circles and landscaping on a college campus. Circles have a lot of different properties like angles and segments. In a garden on a college campus, the sidewalks often go around a circular garden. That's a great example of chords within a circle.

Most of my students will be going on to college, and several have visited The University of Houston or The University of

experience to make the unit about circles a lot more realistic.

The students have responded very positively to this. I've had a lot of comments like, "Oh, wow, I've never thought about math in that way," or "I'm so excited to come to class." To hear a high school student say that about math class is really unusual. (Interview)

Local, Regional, State, National, and International Conferences

Annenberg funding enabled teachers to attend many high-quality conferences (see Figure 8). Before Annenberg, few teachers were able to participate in off-campus professional development. Teachers report that these conferences allow them to discuss curriculum issues and challenges with national peers. Increasingly, teachers from Annenberg schools present their own work at national conferences. Last year, a team of teachers presented a session on professional portfolio development at an international conference in Ireland.

Figure 8: Sample of Conferences

- ◆ Reading Recovery Conference
- ◆ National Council of Teachers of Science Conference
- ◆ National Council of Teachers of Mathematics Conference
- ◆ National Association for the Education of Young Children
- ◆ Fondren Reforming Schools
- ◆ Summer Institute IV
- ◆ Advanced Placement/Gifted and Talented Conference
- ◆ Aim High: Shoot for Excellence
- ◆ Helping Your Struggling Students Be More Successful in Mathematics
- ◆ Lights, Camera, Action!
- ◆ Winter National School Reform Faculty Meeting for Critical Friends Groups
- ◆ National Association for Bilingual Education
- ◆ National Two-Way, Bilingual Conference

Teachers comment that these conferences have helped them "raise the bar" in their teaching, forcing them to think on a conceptual level, and to assist their students in doing the same. These seminars have helped many teachers

restructure their curriculum to focus on higher-level learning. They have also learned to focus on the student as a unique individual whose prior knowledge and experience can support classroom learning.

Teacher-Selected Professional Development

Teachers also use Annenberg funds to self-select professional development activities. Teachers choose specific training on topics such as autism, attention deficit disorder, classroom management, technology, gifted and talented students, and advanced placement courses. Many teachers participate in diversity training sponsored by a local university. A six-week seminar called Cultural Conversations encourages open discussions on ethnicity, race, and culture. Cultural Conversations focus on cultural bias, systematic inequalities, language differences, racial identity development, and teacher expectations.

A chemistry teacher from Longview High School reported that Annenberg funding enabled her to participate in two seminars that significantly influenced her teaching practice. One seminar focused on "Multiculturalism, Teaching, and Making Teaching Relevant for Minority and At-Risk Students" and the other on "Authentic Assessment." The teacher used knowledge obtained in these seminars to design and implement a method of teaching and assessment that she calls "oral defense." She describes the impact of the professional development on her teaching practice with her predominantly African American students:

The seminars made me think, "What are we actually teaching? What are those outdated practices that are not making a connection with our students?" Those seminars really made an impact on me. I began to look at my students, how I was teaching, and whether I really was making a difference. I had to go back and really change everything. I knew in my heart what I wanted to produce out of my students.

For example, I knew their verbal skills were low. I knew their vocabulary skills were lacking. I knew they did not know how to study, that they didn't know what it really meant to learn. Their teacher would introduce the information, and they'd just have to spill it out on the test, maybe remembering 20% of it after the test. They'd make the scores for the test, but if you asked them to reproduce the information in another form, they could not do it. They could not make the connections. They could give you the memorized answer. But the application was missing.

I came up with the idea of having the students apply for their final grade by presenting an "oral defense" project. I myself, "What should every student know? What is

basic information?" I designed categories to make sure all the basic information was included. I looked at the curriculum and looked at the benchmarks of the state and the district. Then I put together a rubric. For the oral defense project, each student has to address a problem (a chemistry principle), connect it to prior knowledge, show a visual (what the problem looks like outside of numbers), and demonstrate the principle in a laboratory setting. Then the students have to answer questions from three assessors.

I was just amazed to see the quality of the work! If I look at projects, I cannot tell which came from an honor student and which from a content mastery (special education) student. It makes me think that when they go out into the working world, no one will label them. Annenberg has changed my teaching; it's changed the way I view students. Students are willing to learn if you create a template for them. And if you are honest with yourself and change approaches that don't work. I think I've grown more than my students. (Interview)

Many teachers attend training to integrate technology into their classrooms. Teachers and students create presentations using software programs such as Microsoft Word or PowerPoint. Increasingly, teachers are training students in more complex graphics and communication software. An elementary school science specialist used Annenberg funds to attend a conference where she observed students videotaping classroom activities. She now uses the same strategy with her elementary science students.

Annenberg sent me to a conference last summer, and I went to a session where a teacher had used a digital video camera with her students. The children had become so empowered using this video camera. They enjoyed using it so much that their parents became involved, too. When the teacher presented at this conference, the children and their parents came with her. I could see the sparkle in their eyes! They were so proud to be able to use this technology.

I had been using a video camera in my classes, but not to that extent. So I decided to try to use the video camera as much as possible in the lessons. When I tape the lesson, I am able to see things I might need to change. The children are able to see what they can accomplish, and they can also suggest things to add to the next lesson. For instance, the tadpole eggs might not be in the pond when you have the lesson with one class. But I am able to show the video to that class so they don't miss the opportunity. I connect the children with what they know.

The technique I learned in that one professional development conference impacted me not only this year — I am going to use it in my teaching from now on. (Interview)

Collectively, the documented benefits of the Annenberg investment in professional development suggest that public schools with well-trained teachers who engage in excellent teaching practices in schools that are well stocked in resource materials will provide more effective learning environments. Additionally, staff members in these more effective learning environments tend to have clear visions for the campuses that focus on actively engaging all students in learning. They believe in identifying and addressing unique needs of individual students and having high academic standards for all students. Furthermore, the most successful schools constantly work to improve the academic setting by adjusting to a continuously changing community environment.

As a result of attending high-quality professional development programs and activities, teachers are changing the way they teach. Teachers collaborate with each other to improve their instructional practices and to create innovative, integrated curriculum lessons. Teachers engage students with active learning strategies by encouraging them to explore and experiment in natural settings. Teachers use familiar and relevant examples drawn from students' daily lives to connect students to new knowledge. Teachers expose students to complex subject matter and skills while holding them to high achievement standards. By using these strategies, teachers help students develop critical thinking skills that ultimately deepen students' understanding and expand their knowledge.

BUILDING LEARNING COMMUNITIES

As teachers in Annenberg-funded schools engage in professional development activities, they create peer networks within schools, between schools in the same district, and among schools in the region, state, and nation. Traditionally, teachers work in virtual isolation, alone in classrooms with their students (Lortie, 1975). In contrast, Annenberg funding has enabled teachers to develop mechanisms that allow them to collaborate effectively with their peers. Through collaboration, teachers observe each other's classroom instruction, videotape lessons, analyze student needs, investigate teaching problems, and generate ideas for new teaching strategies.

Teachers from Annenberg schools collaborate actively in Critical Friends Groups, Literature Study Circles, Professional Academies, Teacher Writing Groups, and

Teacher Action Research Teams. Expert teachers emerge from these activities as peer leaders in roles such as Critical Friends Group Coaches, Content Specialists, and Reading Learning Facilitators. Furthermore, a number of teachers have become certified as curriculum trainers in national programs, including the Coalition of Essential Schools (CES) and the New Jersey Writing Project (NJWP).

Annenberg school administrators and faculties design creative schedules so that teachers can share pedagogy and content knowledge learned at conferences with others at their campus. They change their schedules to incorporate daily professional development time. School administrators plan quarterly professional development forums or colloquia. Teachers in middle schools and high schools meet weekly to review and revise curriculum and instruction programs. Many schools share their knowledge with other campuses in the district or region. One high school has developed a monthly newsletter. A group of elementary, middle, and high schools collaborate on an Epiphany Series of lectures and special events featuring national speakers. All of these teacher-led activities have had the effect of developing learning communities within and among Annenberg schools. Moreover, many of these activities are open to the public, thus enabling teachers and administrators from non-Annenberg schools to learn from the reforming schools. Research suggests that the heart of these activities lies in the creation of small, collegial communities of teachers focused on improving their instructional practices.

The power of such learning communities is supported by an extensive body of research (Lieberman, 1988; Little, 1993; McLaughlin, Talbert, & Bascia, 1990; Westheimer, 1998). Significantly, this research details ways in which the professional community of teachers plays a vital role in school reform and improvement. Learning communities create "spaces" for teachers to form professional relationships, share information, and provide collegial support. The creation of small, collegial, communities of practice contrasts sharply with the traditional approach to staff development.

Critical Friends Groups

Teachers in Annenberg-funded schools collaborate using a variety of methods and processes. One of the most popular processes is the Critical Friends Group (CFG), a method of teacher-led study group that originated in 1995 at the Annenberg Institute for School Reform at Brown University through a program entitled the National School Reform Faculty (www.harmony.pvt.k12.in.us/www/brochure.html).

CFGs are the product of a simple idea: providing deliberate time and structures to promote teacher professional growth that is directly linked to student learning. A CFG consists of 8 to 12 teachers who agree to work together to define and produce improved student achievement. As a group, members establish student learning goals, help each other think about better teaching practices, look closely at curriculum and student work, and identify school culture issues that affect student achievement. Each CFG chooses a peer coach who helps the group build the sense of trust necessary for a direct, honest, and productive working relationship. The coach also helps the members master techniques that sharpen self-insight, promote creativity, and encourage candid, usable peer feedback.

Teachers voluntarily participate in CFGs, and they may receive stipends for their participation. CFG groups may meet weekly, bi-weekly, or monthly for one to two hours per meeting. Groups may meet on the school campus or at a variety of off-campus locations. Some schools schedule annual CFG retreats, providing opportunities for members of all CFG groups at the school to interact.

This year at one Annenberg high school, five teacher Critical Friends Groups (CFGs) and two student Critical Friends Groups met, generally once a month. Most met after school or on Saturdays; two faculty groups met within the school day. Sixty-four teachers and 32 students participated. Many faculty are in their second or third year of voluntary participation. They report that the groups provide a sense of community for them, a place where they discuss their professional lives and their teaching. They say the CFG meetings help them feel less isolated; they feel they have close colleagues with whom to discuss issues with students, instruction, or the school's work. The CFGs provide a regular setting in which professional work can be discussed in terms set by the teachers themselves.

Teachers believe CFG participation reduces isolation by increasing trust, communication, commitment, and continuity among the faculty. Both new and veteran teachers benefit from participating in CFGs. Teachers express appreciation for the groups:

I am very isolated down here...[CFG] has given me an opportunity to work with teachers across the school and contribute knowledge from my experience...plus it's fun.

As a new teacher, I was able to get to know some people on the staff and form relationships with them.

I need a lot of peer support right now to be able to do a good job. It helps me to get to know and trust people so I

feel more comfortable asking for support or help.

After this retreat, I felt like I knew the people in the group more like friends rather than just coworkers. This makes sharing problems and concerns a lot less threatening, and one could get past the reservations and take an honest look at the problems. (Nixon Elementary Case Analysis)

Following structured agendas and protocols created by group leaders and NSRF guidelines, group members engage in meaningful discussions about student work and instructional methods during CFG meetings. Teachers talk about gaining a new perspective from listening to their peers, about gaining confidence as they discover that their thoughts are valuable to others, and about learning how to be reflective about their teaching practices.

[CFG] has helped me to look at people in different ways. To still be thought of as valuable [even though I'm not in the classroom] is very important. [Hearing from classroom teachers] helps me not forget how hard it is in the classroom. Everybody has good ideas, too. Some of my group members come up with some great ideas that I haven't even thought about. You just need to get a different perspective and [CFGs] provide that.

When people bring in work samples, I realize that I know more than I thought I knew.

I feel as though I gained some insight as to how I can be more reflective and evaluative in my teaching practices. (Nixon Elementary Case Analysis)

Critical Friends Groups promote individual and collective learning among teachers. Teachers also observe that CFG participation has provided focus and support during times of stress, such as during campus-level administrative changes. CFGs promote both horizontal and vertical teaming among teachers. Horizontally, teachers learn to work effectively with other teachers at the same grade level or within the same discipline. Vertical teaming of teachers across grade levels and disciplines is perhaps one of the strongest benefits of CFG participation. Gaining a holistic perspective of students' individual needs, cultures, and strengths has helped teachers personalize the learning environment. Teachers report that using the CFG protocols to focus on student work has improved their instruction.

It has allowed me to be in contact with all different grade levels and other teaching positions and see things from their perspective. I feel like we have a give-and-take relationship with ideas and suggestions.

The biggest way [my participation in a CFG has changed the way I think about teaching] is that it has given me a greater understanding of what is going on in other classrooms and grade levels. This has helped me to think about where my students need to "go".

[CFG] has helped me to be a more compassionate teacher. I do not only see a child on paper but as a real, living human being with problems and feelings.

I am looking at the whole child, his family and culture, as I try to meet his needs.

My CFG has looked at a piece of student work from the classroom. It has helped my partner and me refine our center's sheet, thereby affecting two teachers and 41 students.

I am now going to value students' voices by listening and engaging in genuine conversation for the purpose of seeking first to understand, and second to provide a safe environment and third nurturing learning that builds on the students' strengths. (Nixon Elementary Case Analysis)

CFG coaches lead the groups, based on techniques obtained through CFG Coaches Training, generally sponsored by the national or Houston Annenberg organizations. They draw from a variety of protocols to structure conversations. They discuss a range of topics including shared readings, student work, lesson plans, or new ideas on teaching or school reform. CFG meetings generally begin with some informal time and refreshments, and then move toward a more formal "sharing," in which each member talks about recent personal activities at school or in the classroom. These conversations help create a sense of connection and community among the group. Teachers define what's important to them, and what they want to share about their own work. Collectively, they direct and define the discussion.

Coaches may exert influence on the direction of the conversation and on the particular protocol employed. However, since coaches are teaching peers, rather than administrators with power over jobs and programs, teachers in CFGs feel free to question the direction of a discussion, suggest new topics or protocols, and even critique the process itself. This democratic mode of functioning creates a strong sense of peer group community and collegiality among participants. Teachers affiliate strongly with CFGs: they often refer to discussions or work in "my CFG."

Researchers suggest that teacher commitment to the Critical Friends Group process is related to the self-directed nature of the groups and the opportunity they give teachers to interact with teachers outside their departments. One teacher says her CFG participation allows her to look at her work "with fresh eyes." Researchers observe that examination of student work and teachers' lesson plans seems to be a powerful experience for teachers engaged in CFGs. Using a specific strategy called a "tuning protocol," teachers present lessons they are working on, perhaps alongside some student work resulting from a trial in the classroom. Their colleagues provide "warm" (positive) and "cool" (constructive) feedback. CFG members work hard to develop skills in providing helpful feedback.

CFG members use "reflective practice" (Schön, 1983) to guide their work. For example, a teacher identifies a classroom problem and then solicits group feedback. Teachers' subsequent discussion pushes the presenting teacher to reflect on pedagogical issues, including materials, timing, assignments, assessment, or topic focus. When teachers meet consistently as a group and establish positive, respectful relationships, they gain the confidence to open themselves to possible criticism from others.

Principals across networks of schools in Lamplighter Learning Communities support CFGs by endorsing annual increases in the number of teachers participating and the number trained as coaches. Annenberg schools assess CFG effectiveness by using indicators such as increased numbers of participants and positive "reflection sheets" written about the sessions. Most of the Annenberg funding in one Lamplighter network of schools went toward CFG coaches' training, travel to conferences, and print materials for CFGs.

One high school teachers' Critical Friends Group discussed a *New York Times* article advocating teachers to incorporate appreciation of students' diversity into their classrooms (Rothstein, 2001). The article's author urged teachers to celebrate diversity of student interests, values, and personal experiences. Furthermore, the author argued that students should be able to express alternative viewpoints in discussions, writing assignments, and projects. For instance, Rothstein pointed out this country's immigrant population, and asked teachers to withhold the demand that "we" ask students "to feel that 'we' fought the Revolutionary War, 'we' participated in the struggle to end slavery, or 'we' liberated Europe from Nazism." Students who do not see the "we" in historic moments of the United States may have different perspectives of history and democracy. Immigrant

students may question especially the U.S. role as a colonizer of other nations.

Two teachers from this CFG used the group's discussion to create lesson plans encouraging their students to consider multiple viewpoints. Two other teachers from the CFG created project-based learning assignments involving students' diverse abilities and values. All four teachers used cooperative learning strategies as the students took responsibility for their own learning through collaboration. All teachers videotaped their projects for presentation to the CFG for constructive feedback.

The first two teachers looked at ethnic and racial diversity and the ways literature deals with prejudice and inequity. With the support of the CFG, one teacher developed small group projects in which her 11th-grade English students compared the views of Martin Luther King and Malcolm X, based on their writings. Each student group presented findings to the class. One student—an African American girl who was an honor student and a school leader—organized a student group to consider how Malcolm X's views of respect differed from Martin Luther King's views.

The other teacher constructed a similar project for her 11th-grade English students. Students compared the views of recent immigrants with views expressed by earlier immigrants in different social classes by examining their writings. Both of these teachers use culturally relevant articles for their predominantly Latino and African American students. In one class students read Gish Jen's short story, "In the American Society." Students discussed the Asian immigrant character's struggle to find his place in American country club society. This led to a discussion of how they as students find their place in school and society. Latino students discussed the customs they had given up from their homelands and the difficulties they may face finding their place in this country. Each teacher encouraged the students to share their life experiences and values, and urged them to look for personal connections in their reading.

The second pair of teachers used an upcoming school-wide multicultural fair to design project-based learning activities. One teacher organized her class of repeating ninth graders into small groups to create a set of activities about Australia for the multicultural fair (sponsored by another member of this CFG group). Two unique elements made this unit especially valuable for these repeating freshmen. First, these students worked with magnet school students to design and construct games and booths for the multicultural fair. Second, the students learned about Australian ecosystems and culture, and immediately presented their new knowledge to a

peer audience.

The fourth CFG teacher, who sponsored the multicultural fair, also wanted to offer her students a practical experience. She found the life story of a famous diplomat who was coming to speak at the high school. She divided her 10th-grade English class into small groups to read separate chapters of this man's autobiography, focusing on his U.S. government service. Each group was asked to make inferences about the diplomat's political values and his view of his work using information from the book as evidence. The student groups developed questions for the diplomat based on their analysis. Students disagreed with each other, and some students disagreed with the diplomat's view of South American countries where he served. Two of the students had lived in these countries and two more were second-generation immigrants who saw their homeland very differently from this diplomat.

The teachers videotaped segments of the lessons in these four units so that members of the CFG group could offer suggestions for the effective development of new lessons. The CFG group devised a Video Scene Protocol that enabled them to remain on task for separate meetings on each of the segments. The protocol is similar to other CFG protocols with a focusing question, viewing of the videotape and note-taking, clarifying questions, answers to the focusing question, presenter's responses, and a debriefing. These teachers used the videotapes as a springboard for discussion of other ways they could collaboratively enhance student participation.

In her reflections about the discussion one teacher wrote, "I like the idea of assigning groups, grouping stronger students with weaker students, and picking weaker students to give explanations." Another teacher was interested in developing more follow-up activities to enhance students' comprehension. The presenter of the Malcolm X and Martin Luther King readings asked to be videotaped a second time so that she could implement some of the suggestions she learned from the videotape review. Three of the teachers profiled here were subsequently asked to serve on the new high-school Instructional Council charged with coordinating program development for the newly acquired Carnegie Grant. These three experienced teachers were renewing their work with the help of their peers so that they could personalize the learning environment for their students. In the process they were breaking isolation barriers among teachers and groups of students.

Teachers from schools in the network collaborate across schools as a result of Critical Friends Groups. A fifth-grade teacher came to the high school to teach a digital

portfolio class while a high school English teacher went to the fifth-grade class to implement activities from Rice's School Writing Project. In another example, a Spanish teacher from the high school taught a Spanish class at the middle school.

One of the videotaped teachers reflected on her CFG work this year:

CFG has given me the opportunity to actively extend my own awareness. In the group we think and question together; we approach a problem situation as a team of consultants. The same can happen in a teacher-student classroom and in teacher-administrator situations.

This teacher's comment illustrates advantages of building a learning community: stronger voices for different perspectives, collaborative leadership with peers, new possibilities for students' collaborative work, shared understanding about teaching, and intellectual and emotional stimulation (Lieberman, 1995).

Literature Study Groups

Administrators and faculty in Annenberg schools also participate in literature study groups. At one elementary school, 51 teachers, administrators, and the librarian participated in six different literature study groups. These groups have studied books such as *What's Worth Fighting for in Your School?*, *The Seven Habits of Highly Effective People*, *A Framework for Understanding Poverty*, *Nonfiction Matters*, *The First Day of School*, and *Strategies that Work*. Study groups meet twice a month during the morning professional development time in the spring semester. Teachers provide written reflections about the study groups—typically, one-page written surveys about what they liked and what could be changed or improved. Literature study groups enable faculties to engage in long-term literature studies. With ongoing groups, teachers have more time to be reflective about the topics, their own practice, and how to implement new approaches.

Veteran teachers often report that they appreciate having a choice of many high-quality professional development activities. Seasoned teachers express that they feel freedom to choose which techniques, programs, or new ideas to implement. Indeed, one teacher said her motto was "adapt, not adopt." Another teacher reported that each year she picks one or two things that she focuses on truly integrating into her classroom—not merely trying an idea once or twice, but consistently weaving it into her lessons and teaching style. This year, she has been working on incorporating more

Her interest in these activities resulted directly from her attendance at an Annenberg-funded conference early last fall.

In contrast, some inexperienced teachers express a sense of being overwhelmed by so many new ideas and programs. Our research in Houston Annenberg schools shows that the most effective campus-wide professional development strategies are comprehensive efforts in which experienced teachers work closely with new teachers, providing guidance, suggestions, and support. Professional teacher gatherings like literature study groups provide valuable support systems. A 25-year teacher at an Annenberg elementary school explains how the support system works:

When you're a first-year teacher, it's really scary. But during group meetings it's amazing to see what happens. New teachers have a place to go and say, "Hey, this lesson is driving me crazy! What am I going to do?" And as a team that is honorable to everybody and keeps everything confidential, we say, "Oh my gosh, let's help you get something going."

It may be as simple as helping with organization, like keeping track of grades. When you're a first-year teacher, that's really hard. So the support team comes in and says, "Ok, let's see what you've got." They lay it all out, look at the problems, and then say, "All right, I'll buy you color folders, let me do the color coding." So as a team we set the new teacher up, and we become more like a family safety net.

In middle schools, teacher study groups typically meet twice a month during an eight-week period. Groups with similar professional development needs meet to study the latest literature on instructional techniques. Between meetings, teachers work to implement the new techniques in their classrooms. Additionally, they conduct further research on the topics and report their findings back to the group. Together they create applications for their individual classrooms. Teachers report they have strengthened their knowledge base as a result of participating in study groups.

Teacher Research and Writing Groups

Other methods of teacher collaboration are used in Annenberg-funded schools. Besides engaging actively in Critical Friends Groups and literature study groups, teachers also participate as members of action research teams. In these teams teachers collaborate with university researchers to study classroom problems and develop innovative solutions that improve student learning. In addition to providing opportunities for

teachers to develop peer networks, using these collaborative processes encourages teachers to move beyond their "safe" and familiar boundaries. Whereas teachers traditionally have worked most closely with other teachers in the same discipline or grade level, professional collaboration has allowed teachers in Annenberg-funded schools to expand their boundaries by working with teachers across disciplines and grade levels. Students benefit from this teacher collaboration by having access to a team of teachers who can mentor and support their academic development in primary subject areas as well as in extra-curricular activities.

An outside consultant who is on the faculty at a local university leads a teacher research and writing group for a group of Annenberg schools. Participants work separately by school as well as in a united group to support each other in critical exploration of important teaching and learning issues. Teachers read and discuss scholarly works, they establish their own research agenda regarding their school and its needs, and they become active analysts and writers, seeking out arenas in which they can publish and present their findings in the hopes of widening their community of learners. This particular teacher group is working with their university faculty mentor to publish a book about their work.

The focus of the group's book is a critical examination of how teachers know and experience school reform. The book proposal details over 20 chapters, each to be contributed by teachers from participating schools. It explores such issues as how teacher knowledge is brought to the surface through the use of tools like the portfolio, and how teacher knowledge is successfully shared and made public. The following two excerpts from the proposal to the publisher detail chapters that will be authored by middle school teachers:

Through court orders, historical documents, and evaluation reports, the socio-cultural narrative of Sunnyvale will be brought to light. The school's transformation to a campus whose magnet program focuses on mathematics, science, and fine arts is outlined. The process through which Sunnyvale and its feeder pattern schools focused on repairing community relationships as the central element of their HAC reform effort is examined.

Within the context of a magnet school focused on mathematics, science, and the fine arts, language arts, as a subject area, has made considerable strides. Growth is evidenced in teacher development (within and across schools), teacher leadership (teachers serving as trainers and MVP), and student achievement (Sunnyvale showed the

greatest gains in the district on the writing portion of standardized tests). The authors argue that teacher development, teacher leadership, student achievement, and school reform are inextricably linked, not phenomena that can be pulled apart and independently analyzed. (Sunnyvale Middle School Case Analysis)

Professional Development Academies

Teachers at one Annenberg high school established three Professional Development Academies: International, CyberCorps, and Career Connections. Each academy has a "dean" who arranges monthly meetings, organizes activities, leads the group, and facilitates the professional learning. Teachers affiliate with one of the academies. At Professional Development Academy meetings, teachers discuss general business or a relevant topic, and often present what they have learned at conferences.

The International Academy sponsors trips for students and faculty to hear nationally known speakers at local venues. For two years faculty from this group has worked with students to organize successful multicultural fairs at the school. The CyberCorps Academy helps run a campus-based computer center that is used by students after school and for community classes at night. Students teach and provide technical support at the center.

Teachers at this high school report that the Professional Development Academies allow them to pursue answers to problems *they* define in their classrooms—problems that are relevant to their teaching, their subject matter, and their students. Teachers believe their participation in the academies has changed their teaching practice.

Building Leadership Capacity

Content Specialists. Content Specialists are expert teachers with experience and expertise in a particular subject area. Content Specialists function both as lead teachers and as resident staff developers. At one Annenberg elementary school, these master teachers have four essential roles: they teach students directly, they provide continuous content-focused professional development for teachers, they support teachers in their classrooms, and they continue to expand their own professional knowledge and skills.

Content Specialists work additional hours and have responsibilities well beyond those of classroom teachers. Content Specialists observe teachers in the classroom and work with individuals and small groups of both challenged and gifted students. Typically, they visit every classroom once a week, observing, troubleshooting and monitoring progress, and demonstrating instruction. A first-grade teacher reported that the specialists simply asked

teachers what they needed and then provided it. In mathematics, for example, the Content Specialists correlate the Everyday Math curriculum with the TAAS objectives, help teachers plan supplementary instruction for objectives, organize after-school TAAS tutorials, and organize the testing materials. Additionally, they organize the school's Family Math Nights. The Content Specialists work together to ensure that lower- and upper-grade instruction is complementary. When new students come to the school, the math and reading specialists assess them and, if necessary, provide supplemental instruction.

NJWP Trainers. Some teachers in reforming schools are being certified as trainers for the New Jersey Writing Project (NJWP). These teachers function not only as campus experts; increasingly they are training teachers from schools across their district. In addition, one Annenberg middle school plans to fund NJWP training for 12 teachers from *throughout the district*. By expanding resources to teachers on other campuses, this school takes a major step in creating a community of learners.

CES Facilitators. An Annenberg elementary school trained 12 teachers as Coalition of Essential Schools (CES) facilitators for the 2001–2002 school year. Throughout the school year, administrators and teachers at this school worked extensively with the local Coalition of Essential Schools consultant. She led the school through the process of redesigning a major social studies curriculum. With the redesigned approach, teachers provide more in-depth information and integrate the social studies program more fully with other subject areas.

CFG Coaches. Since CFGs are teacher-led, many teachers learn how to lead and facilitate groups. For some teachers, this may be their first opportunity to function as a leader. By serving as a leader, teachers deepen and strengthen their own understanding as well. One Critical Friends Group coach who is a fourth-grade teacher sums up her experience this way:

I have seen many powerful ideas come alive as a result of my participation in a Critical Friends Group. As an educator, I am interested in ways to improve my teaching practice because I feel my students will improve in their learning. They have benefited most from the process of "Looking at Student Work." When I first presented student work it was at my Critical Friends Coaching [training] in July of 1999. Little did I know how direct and to the point my colleagues were planning to be with me! I was able to get many ideas on improving the process of writing, how to expose my students to different situations, and most important, ideas to improve my writing instruction.

In turn, I have also taught my students to look at their own work and be open to suggestions of their peers. The process of getting my students to the point of accepting constructive criticism from their peers and acting upon the constructive criticism has taken many hours of planning, discussion, and implementing new techniques for overall success. During this process, they were actually peer tutoring, or as they refer to it, "little teachers." The process took about seven months. The end product was when my students had the opportunity to peer-tutor a third-grade class in preparation for TAAS. (Clark Elementary Case Analysis)

As teachers become proficient in conducting effective CFG groups at their own campus, they are invited to help start groups on other school campuses in the district.

Sharing Knowledge

Annenberg schools share their knowledge about curriculum and school reform in a variety of innovative ways. Some faculties revise the school's bell schedule to allow for daily professional development time. Faculty at other schools arrange for weekly professional development meeting times or structure quarterly planning days.

Annenberg Planning Days. One Annenberg elementary school used Annenberg funds to address issues of isolation between and among teachers by creating opportunities for grade-level teachers to work together during the school day. Teachers meet in grade-level teams for four half-day planning sessions annually, one per nine-week instructional period. Most teachers choose the option of combining these four half-days into two full days, one per semester.

During these Annenberg-sponsored planning days, teachers collaborate on their instructional planning. Additionally, teachers collectively review and analyze student achievement data. Many teachers, and as a result many children, benefit from these Annenberg planning days. For many teachers, these planning days have effectively reduced isolation among and between teachers and have positively impacted the quality of classroom instruction.

Teachers and administrators speak positively about Annenberg planning days. The principal stated that Annenberg planning days were meant to be "protected time," during which teachers are "empowered" to make well-reasoned, effective instructional decisions. Annenberg days were frequently characterized by teachers as "priceless." A first-grade teacher describes her experience:

[Annenberg planning days] allow you and your teammates to bounce ideas off of each other, figure out how you're going to organize activities, and how you're going to tie the essential elements into the lesson plan. When we work together to figure out how to tie in the word-building skills, we're not planning just for a single class project. We're also developing the same thematic activity for all the students, including the most at-risk, the average, and the high-achieving and gifted students. Our Annenberg funding has allowed us to have planning days and a wealth of materials. If we didn't have those planning days, our students would not be able to benefit from well-planned and thought-out units. (Glendale Elementary Case Analysis)

A fifth-grade teacher reported that Annenberg planning days facilitated closer working relationships between teachers as well as a better understanding of more global educational needs of the children. These lines of communication seemed especially helpful for the fifth-grade teachers because they are in separate departments, divided by curriculum content areas. This teacher describes the benefits:

*For me personally, the best thing about our Annenberg funding is that we were able to establish planning days. The planning days are great because we're departmentalized in fifth grade. Now I can talk with the fifth-grade teacher who does reading. I correlate what she's doing in reading with what I'm doing in language arts and writing. Now I know everything that the kids are reading. They'll come to me and say, "Miss Brooks, did you read *The Giver*?" and I'll say, "I sure did." And they're just amazed that I've read this book, because I make a point of reading the books that I know she's going to use. I can see the excitement in the kids because I've read the same books.*

First-grade teachers used their Annenberg days to plan long-range thematic lessons by pooling their teaching resources. One of these thematic units of study included a unit on elections, coinciding with the November presidential election. In addition, the first-grade teachers used their first-semester planning day to level and label newly adopted reading series texts, to complete purchase requisitions for their yearly instructional budget, to discuss the mathematics curriculum with the school's mathematics coach, and to discuss recent parent-teacher conferences with the assistant principal. Third-grade teachers created long-range lesson plans, discussed curriculum issues with the principal, met with an instructional coach to discuss the mathematics curriculum, and reviewed student data from a practice TAAS test administration.

"Resource" teachers also used Annenberg planning days

in much the same way as the "regular" education teachers. For example, a special education teacher used an Annenberg planning half-day to administer the DRA reading assessment, to "assess student's strengths and determine lessons I need to teach." The English as Second Language (ESL) teacher wrote nine-week lesson plans, reviewed newly purchased materials, and planned TAAS mini-lessons using TAAS study guides.

Teachers consistently spoke of the benefit of having time to plan during school hours rather than during short daily planning periods, after school, or (even less desirably) on the weekends. Teachers admitted that most of the work that they conducted during these planning days would have been work they would have done anyway, but the planning days allowed them to complete the tasks collaboratively. Teachers widely acknowledged that the work completed during the planning days was of higher quality than the work they would traditionally have done after school, during their 50-minute daily planning time, or during the weekend. Teachers agreed that the planning day allowed them to prepare "better," higher quality units of study. One teacher explained that the planning day gave them time to talk through the unit of study with each other. Another teacher added that this conversation led to "better" coverage of the curriculum. Teachers believe that by working collaboratively they are able to create more creative, richer activities for their curricula.

Colloquia. As reported, Annenberg schools use much of their funding for professional development activities—consultants, conferences, and pay for substitute teachers while teachers attend conferences and workshops. Therefore, administrators and teachers look for ways to share their new knowledge with each other. One elementary school organized in-house colloquia as a mechanism for sharing knowledge.

During an afternoon in-service at the school, staff chose from among nine session topics. The afternoon was organized into blocks of three 45-minute sessions. Over the afternoon, teachers attended three sessions, choosing from topics such as Coalition of Essential Schools; Critical Friends; Technology Fair; National Association for the Education of Young Children; Creative Connections; Improving America's Schools; National Association of Black School Educators; Singing and Reading Games; and Texas Association of Health, Recreation, and Dance. Teachers report that they like the colloquia because they appreciate being able to choose sessions based upon their own particular needs. They also like learning from other teachers. Additionally, they enjoy learning practical ideas for activities that they can begin using immediately, such as reading games, a new website

to explore, or a new approach to teaching writing.

The colloquia transformed “teachers as learners” into “teachers as experts.” Benefits of this transformation include redefining campus resources for certain kinds of questions or problems, and providing teachers the experience of presenting before their peers. Once again, teachers as experts become teachers as leaders.

Beacon Newsletter. Faculty at one Annenberg high school created a newsletter as a way of sharing information. *The Beacon*, an internal newsletter published approximately monthly, highlights teacher learning opportunities and Annenberg school reform activities. Originally adults published the newsletter, but this year for the first time a student became co-editor. Committee chairpersons submit articles and journalism students help with production. Teachers and students use the newsletter as a tool for reflection and enhancement of school reform activities.

During 2000–2001, *The Beacon* included articles that recruited teachers for the Professional Academies, listed Critical Friends Groups members, and announced student scholarship winners. Community activities, such as student delegations to lectures sponsored by the Houston World Affairs Council, were also highlighted. Students attended lectures such as “Understanding the Islamic World” and “Russian Youth in the 21st Century.” The newsletter also provided Professional Academy minutes and minutes of monthly Summit meetings held to review the school’s Annenberg-supported work.

The last edition of the school year featured an article on the teachers’ recent presentation at the American Educational Research Association annual meeting. In this presentation teachers discussed their view of “Powerful Learning.” The teachers consider powerful learning a process, not a product. Using a Venn diagram, the teachers linked powerful learning and positive engagement using four elements: interdependent germination, reality/relevance, lack of isolation, and passion/caring. Teacher and students continue to discuss “what they know and how they know it” as they look for evidence of powerful learning experiences.

School Portfolios. Annenberg schools place increasing emphasis on creating and maintaining school portfolios. Teachers prepare portfolios by collecting quantitative and qualitative measures of student learning. Teachers and students use portfolios to tell their school’s story about how teaching and learning occurs. Teachers view portfolios as a way to present the school’s reform work. Sometimes referred to as “uncommon measures,”

portfolios provide an alternative source of evidence that difficult and important work is being accomplished in a world where numbers are often the only visible measure. Portfolios contribute to teacher learning and to the school community as a whole by forcing leaders and other participants in the reforms to be explicit about what they are doing, why they are doing it, what they hope to accomplish, what they managed to accomplish, and what they learned along the way.

During the spring of 2001, a group of Annenberg schools conducted a Portfolio Open House at a local university. Faculty presented brief histories of their schools’ portfolio development, and middle and high school students shared personal experiences with reform activities. Each school exhibited its portfolio along with award-winning student artwork. The Open House drew a large audience from non-Annenberg schools, from local universities, and from the community. Portfolios provide reforming schools an additional way to share knowledge and experiences.

Summary

Collectively, the documented benefits of the Annenberg investment in professional development reveal highly effective learning environments. This research suggests that when public schools invest in high-quality professional development and resource-rich instructional materials, the result will be well-trained teachers who engage in excellent teaching practices and students who are committed to in-depth academic study. Administrators and faculty on campuses such as these have clear visions for their schools that focus upon actively engaging all students in learning, identifying and addressing unique needs of individual students, and having high academic standards for all students. Furthermore, the most successful schools constantly work to improve the academic setting by adjusting to a continuously changing community environment.

Teachers believe the benefits of professional learning communities are innumerable. Participating teachers report feeling empowered and having the confidence to contribute in informed and creative new ways to their school. Ultimately, teachers believe their students benefit from their teachers’ participation in these professional groups. Teachers in Annenberg schools see their primary research goal as examining the ways that teachers in high-poverty schools can promote the success of individual students. In addition, teachers think that their own practice as researchers and writers allows them to support the development of these skills in their students. Teachers from these professional learning groups present their findings regularly at national and even international conferences.

CURRICULUM INNOVATIONS

With Annenberg funds, teachers receive training on the best curriculum programs and practices. Schools purchase the latest curriculum materials in subject areas such as language arts, math, science, and technology. Annenberg funds also support program areas such as social studies and fine arts. This training, combined with quality resource materials, enhances teachers' classroom instruction. In the following section examples of curriculum innovations illustrate ways Annenberg teachers use training and resources to enhance subject-specific instruction.

Language Arts Curriculum

Many elementary schools use Annenberg funds to focus on literacy. Reading is a complex developmental process, and students begin as "emergent" readers, passing through various stages of development to become "independent" readers. Annenberg schools take reading achievement very seriously. They emphasize teacher training, exposing teachers to the latest methods of reading instruction and ways to increase accuracy of individual student reading level assessment. Teachers have identified book purchasing as a top priority, actively adding a wide assortment of fiction and nonfiction books to their school and classroom libraries. Annenberg funds have supported the curriculum programs described in this section of the report.

Guided Reading. "Guided Reading" is a curriculum and instruction model that consists of a teacher working with a small group of three or four students at similar reading levels. The process includes the group working together and the teacher working individually with students. Books with predetermined readability or difficulty levels are central to the Guided Reading process. Rather than grouping students by ability level, this method includes children in their own learning process. Books are color-coded by reading level so children can independently select books targeted at their own skill level. Even more importantly, children can advance quickly through the levels as their reading skills increase. Teachers and students value this system of cataloging books for both its practical applications and its flexibility for meeting individual student needs. The Guided Reading Process allows teachers, students, and parents to set high goals that are realistic and practical for the children. Regarding goal setting, a third-grade teacher said, "I think it's important to push each individual as far as possible. For some it will be level 48, for some it will be 30. But we want them to love literature along the way. We don't want them to lose that."

Guided Reading allows children to actively engage with a wide assortment of books. In contrast to the traditional "basal readers," or single texts intended for use by the entire class, teachers and students use whole libraries of books. Given a choice of an array of "leveled" books, children are more likely to select books geared to their appropriate reading level. This process puts books into children's hands early, quickly engaging children in reading. In contrast to the traditional "round robin" method of one student reading aloud at a time, a typical Guided Reading strategy may have a small group of students reading aloud softly at the same time. The teacher circulates among the readers, listening to each child's proficiency. Although teachers acknowledge that use of this strategy may lead to a noisier classroom, they believe the method ensures that all children are actively reading and not simply waiting for their next turn to participate.

Teachers use Annenberg funds to create the grade-level reading libraries essential for a successful Guided Reading program. Teachers determine books' reading levels using publishers' information, recommendations by literacy experts, or commercially available computer software. Teachers emphatically state that the "leveled" books have helped them provide more small group instruction that is more focused on individual student needs.

The Guided Reading method has an additional benefit, according to participating teachers — it has strengthened their teaching practices. Teachers are pleased to be teaching strategies for reading that help children master content in other curriculum areas. Furthermore, teachers see children developing as independent readers who enjoy books. A first-grade teacher described her experience:

Now we have such a nice variety of materials and the leveled sets of books. We can teach the children the strategies that they need instead of just, "I want to get to level 12 or 13." That's not really the key. We want to keep building on the strategies that we've taught them so they gradually become stronger readers and can handle the tougher material coming up. This is key. They can tell us, "I need to skip this word, and read on and use the context clues," and that strategy carries over into all the other curriculum areas. In the last year and a half I've seen a lot more time spent on teaching students useful strategies. This is how I can get them to keep building sequentially on their skills, to keep building until they get to that independent level where they can pick up any book in the classroom and read it. The training I have received has really helped. (Glendale Elementary Case Analysis)

In the intermediate elementary grades, teachers expand the Guided Reading process to include broader literacy activities. These longer-term activities may be organized as group projects or "literacy circles." In a literacy circle a small group of third graders may read and develop a book report on a single book. Each member of the literacy circle is assigned a different duty, such as "word searcher" or "question director." The word searcher uses the dictionary to look up words unfamiliar to the group. The question director makes sure the group responds to all the important questions contained in the assignment. Teachers often select multicultural books such as biographies of distinguished African Americans — Frederick Douglas, Harriet Tubman, and Martin Luther King. Students may choose to produce their report in the form of a "story web," identifying issues and facts in the book by categorizing them as "problems," "accomplishments," "early years," and "family members." Children find this literature interesting and relevant, and consequently become deeply engaged in the story and its analysis.

During Guided Reading time, teachers employ an array of other specific techniques to help develop children's reading skills, including using a variety of multi-sensory activities to teach children early literacy skills. For example, teachers show children that books are composed of words that are constructed of letters of the alphabet. Then they show the children how to read by taking apart, or decoding, words. To decode words, children must learn the concept of phonics. Phonemic awareness, frequently cited as a strong predictor of reading success, has been defined as:

The insight that every spoken word can be conceived as a sequence of phonemes. Because phonemes are the units of sound that are represented by the letters of an alphabet, an awareness of phonemes is key to understanding the logic of the alphabetic principle and thus to the learnability of phonics and spelling. (Snow, Burns, & Griffin, 1998, p. 52)

Critical Components of a Balanced Reading Program.

Another reading approach used in Annenberg-funded elementary schools is the Critical Components of a Balanced Reading Program. Faculty of a local university developed this program, which is structured as a semester-length graduate course. University faculty members provide ongoing course instruction at two levels of competency, primary and intermediate. Teachers attend lectures, engage in theoretical discussions, practice application of new techniques and strategies, study research-based literature, and participate in inquiry groups. Depending upon the level of interest at a school, the university faculty may teach the course on-site. If space

is available, teachers from nearby campuses are invited to attend.

At some Annenberg schools the entire faculty has completed the Critical Components course. Teachers at these schools observe that literacy instruction is more comprehensive, diagnosis of reading needs more accurate, and classroom instruction more successful. Teachers believe that the literacy training builds a "common language" and philosophy among teachers, enabling them to communicate more effectively and to support each other in new ways. Teachers also enjoy participating as active learners, and they report developing a new sense of professionalism. Instead of passively receiving new information, teachers learn how to critically evaluate instruction quality, and they gain confidence in their ability to ask questions. Teachers report feeling energized by high-quality instruction and by the belief that they are keeping current with the latest educational research.

Accelerated Reader. Elementary schools use Annenberg funds to support another strategy called Accelerated Reader (AR), a computer program that helps students develop reading skills. The AR software contains comprehensive questions drawn from numerous children's trade books published in both English and Spanish. AR personalizes the learning environment by allowing children to work at their own pace, and serves as a motivational tool by offering children reading incentives. AR also provides teachers with individual student reading achievement data.

National reading research suggests that software programs such as AR can reinforce, motivate, and extend early literacy instruction (Snow, Burns, & Griffin, 1998). AR is most effective when used as a complement to good teaching practices and a sound curriculum. Participating schools use Annenberg funds to purchase the AR software, books in the AR database, and small prizes that children earn by taking computer tests on the books they read. Once again, children are actively engaged in their own learning process. AR allows children to self-select books based on their own interests. Teachers believe AR allows them to individualize instruction. While AR is most often used to support other instructional practices, some teachers have used it as a primary teaching method. A fourth-grade teacher explained:

We were on a block schedule, and I had three classes a day. For an hour and a half each day the children were in my room. We would work on reading, book projects, and literature circles, using AR as our tool. It really

improved their reading tests, we had competitions with the points, and they got prizes. It was a win-win situation. This year I'm trying to incorporate AR as much as possible because I think that it really benefits the kids. At the beginning of the year, their reading comprehension ranged from first-grade level to fifth-grade level. By the end of the year, those kids were going to seventh- and eighth-grade level books and succeeding because they felt enabled to do that. (Glendale Elementary Case Analysis)

Some teachers believe the Accelerated Reading program works best with mid- and upper-level elementary students. Educators and parents typically expect to see children at these levels begin to enjoy independent reading and select books about their own interests. One fourth-grade teacher stressed the program's positive effects on reading practice:

Good readers need to be comfortable with understanding the main idea, summarizing, knowing how to find the meaning of words, etc. As fluency and comprehension grow, reading practice begins to take precedence over typical reading lessons. The Accelerated Reading program both supports and rewards independent reading. Rewards come in the form of tangible prizes and an elementary version of academic prestige.

An Alternate Assessment in Language Arts. With Annenberg funds, middle school teachers have created a variety of excellent programs designed specifically to engage previously low-performing students in reading and writing activities. These energetic and creative teachers are deeply committed to meeting the learning needs of all students.

In one long-term professional development program, a University of Houston professor guides teachers to develop curriculum interventions for "reluctant" readers. Typically, these intervention activities allow students to use several learning modalities—auditory (listening to dramatic readings of poetry or stories), visual and kinesthetic (drawing pictures of images evoked by the readings), and cognitive and kinesthetic (writing in daily journals.) Additionally, these activities enable students to draw from their own personal and cultural experiences. Students produce portfolios of their work, publish classroom poetry anthologies, and give public readings of their compositions at local bookstores.

Necessarily, with such an array of instruction practices, teachers have had to expand their methods of assessment. For example, one sixth-grade language arts teacher has designed and implemented an alternate assessment in language arts. This teacher combined information from

her long-term study group with personal knowledge to create a sophisticated language arts evaluation method. This rubric allows her not only to evaluate the student's work, but the student at work as well.

Using nine learning objectives from the International Baccalaureate "Middle Years Program" (MYP), the teacher devised a rubric that assesses student knowledge, skills, and critical thinking ability. Whereas the MYP is often used in magnet classes, this teacher has incorporated the program's learning objectives into her teaching with "regular" students, some of whom are considered "at risk" of academic failure. The MYP stresses intellectual rigor and high academic standards. Additionally, the MYP seeks to develop young people's individual talents and to relate their experience in the classroom to the world beyond. This middle school teacher chose nine learning objectives for her sixth-grade language arts students, as shown in Figure 9.

Figure 9: Language Arts Learning Objectives

- ♦ Express a personal response to literature and demonstrate the ability to approach works in an independent fashion;
- ♦ Demonstrate some awareness of the effects of style and techniques employed by authors (such as figures of speech, plot devices, and characterization);
- ♦ Demonstrate knowledge and understanding of the works studied;
- ♦ Demonstrate the ability to comment on the language, content, structure, meaning, and significance of both familiar and unfamiliar pieces of writing;
- ♦ Demonstrate the ability to express ideas with clarity and coherence in both oral and written communication;
- ♦ Demonstrate the ability to use language to describe, analyze, explain, narrate, entertain, and express feelings;
- ♦ Demonstrate a critical awareness of differing media of communication;
- ♦ Demonstrate competence in the general skills and strategies of the writing process; and
- ♦ Evaluate own writing and the writing of others.

The teacher also created a rubric containing eight assessment criteria based on a scale of 0 to 8. She has clearly defined each criterion and provided descriptors of proficiency at every level. The eight criteria are Writer's Notebook, Writing Process, Content of Writing, Mechanics of Writing, Genre Studies, Media/Visual Literacy, Approaches to Learning, and Evaluation/Reflection of Processes.

For instance, a student demonstrating high achievement with the Writer's Notebook is assessed with the following standard:

The student's notebook is incorporated into his/her daily life in a way that demonstrates a truly personal response to life as a writer. It contains evidence of serious reflection, many writing strategies (personal responses to literature, narratives, observations, etc.), and a variety of media (mementos, photos, quotations, etc.). The student has maintained more than one notebook throughout the year. (Teacher's rubric)

This teacher uses a variety of assessment techniques to evaluate students' progress on the rubric. In addition to using running records, grades, and tests, she also reviews student portfolios. Portfolios include "Work in Progress" folders, "Pieces Completed" folders, and Student Written Reflections. Her assessment approach is very labor-intensive, but it enables her to stay student-centered, focusing on the unique needs of each student.

Latino Boys Writing. A young Latino seventh-grade teacher designed and implemented an after-school program for Latino boys considered at risk of dropping out of school. His Latino Boys Writing Group is now open to all male students at the middle school, but it especially supports boys considered "at-risk." The teacher recruited a local Latino writer, Alvaro Saar-Rios, to work with him on the project. Together, they reach out to boys that may feel disconnected from school. As mentors and teachers, they try to connect the boys' experiences outside of school with their writing experiences in the group. The teacher describes the group:

We meet weekly for an hour or more. I always order a couple of pizzas and the local pizza guy gives us a discount. If I don't have money for pizza, I'll buy some popsicles or something, or bags of chips. We come in and we write. Sometimes we don't have anything to eat, which is ok, because the kids still come.

Alvaro and I always have a piece of our own writing, either a poem or a story. We read our work to them, and we talk about the work. Then the kids will try to write something similar. Or they'll write in their notebook and share that with the group, because we focus on writer's notebooks throughout middle school. We read aloud daily in class, and we've even published an anthology of class writings.

The goal with Latino boys is to draw them into the school community. The boys who participate in the Latino Boys Writing Group are those kids who sit back in the

classroom, the ones who kind of fade into the background if you don't engage them. They are not necessarily on a sports team or in a club or the chosen leaders. But these kids are part of our school population. They're valuable. So we invite them to the Latino Boys Writing Group to connect them with the school setting, to make them a part of the school. I'll call the parents if I have any questions or concerns. They have my number, and they'll call me at home sometimes.

Sometimes we don't even get to writing or reading poetry in our Latino Boys Writing Group because we're talking about things that happened during the day. Or we are talking about making good choices. Alvaro and I always try to serve as springboards for their thinking about making good choices, thinking about their lives and the stories that they can tell through their writing. There have also been times right before or after the holidays when only two boys come to the Group. But Alvaro and I will still meet with them because, you know, they came. We don't want to say, "No, we're not going to meet today because there's only two boys here." We want them to know that they are all important to us. (Interview)

Obviously, at the middle school level, reading and writing activities are closely connected. Teachers frequently refer to the students as "writers" and "readers," and they often make comments about various behaviors that "readers" and "writers" do. For instance, a teacher says to a student observed studying a book jacket, "I see you're looking for clues on the cover to tell you about this book. Good! That's what a reader does! You're a reader!" Teachers often model behaviors of readers and writers by openly participating in activities with their students.

The two language arts teachers profiled here are faculty at a middle school that has targeted its Annenberg funds explicitly toward students with lower academic achievement. This school's administrators and faculty have learned to use multiple data sources to identify individual student instructional needs and develop innovative intervention strategies. Trend analysis of student achievement scores reveals a substantial upward trend for all student subgroups. In fact, with the 2001 TAAS scores, the school's rating was upgraded by the Texas Education Agency to the level of "Recognized."

Rice University School Writing Project. Teachers and students at an Annenberg high school that is part of a Lamplighter Learning Community have benefited from teachers' participation in the Rice University School Writing Project. Teachers throughout Houston meet for semester-length seminars on the mechanics and dynamics of writing. University faculty members

personally engage participating teachers in the writing process. Teachers work on their own writing and learn new ways to engage urban students in writing. These teachers' classrooms become writing workshops. Students learn to write with richer vocabularies and stronger voices. Some students who tend to skip most of their classes come to these English classes to write.

The impact of this teacher learning on students at Port High School is illustrated by the story of one ninth-grade student. Irineo* has a reputation as a disruptive student who is not engaged in his schoolwork. However, Irineo revealed his writing promise in drama class, auditioning his classmates for roles in a play he had written himself. Irineo's English teacher asked his drama teacher how she had gotten Irineo to write. The drama teacher shared techniques from the Rice Writing Project. Several weeks later, in a dramatic turnaround, Irineo produced a 23-page modernization of Julius Caesar as an English class assignment. In one scene from his script, Cassius (Johnny) urges Brutus (Ricardo) to join him against Caesar (Carlinco).

Johnny: You know exactly what I mean. We can't let this place go under. These are our families, our homes. My girl is bearing a child as we speak. I don't want any son of mine growing up in a place run by Carlinco.

Ricardo: What are we supposed to do?

Johnny: You mean you still don't understand what I am speaking of?

Ricardo: No.

Johnny: I speak of freedom! I speak of relief! I speak of patriotism! I speak of revolt! I speak of Carlinco's end and our beginning!

Irineo wrote one of just two poems from Port High School to be accepted by an anthology. After seeing flyers calling for submissions to an anthology, Irineo said he thought about teenagers' confusion and feelings of invincibility and then wrote this poem.

Unrecognized

*The enemy known as time swallows you whole,
But within it lies our greatest ally,
All pains are washed away by it,
While bringing in new ones.*

*The diamond we know as life,
Slips through our fingers every second,
We can never contain it,
We can never appreciate it,
And we never even realize it.*

Mathematics Curriculum

Everyday Math. Content Specialists at Angelou Elementary School helped the administration decide which of several possible math programs to adopt school-wide. After careful consideration, the group selected "Everyday Math." During 1999–2000, the Content Specialists conducted workshops for the teachers and helped them to plan units, gather lesson materials, and introduce the program to the students. Content Specialists gathered materials including manipulatives (hands-on learning materials). They organized grade-level team planning and assessments for all students. The Angelou teachers believe the Content Specialists' assistance gives them time to focus on the most important part of teaching—direct instruction.

One teacher used Annenberg funds to attend a national Everyday Math conference, and talked about gaining the courage to try new ideas in her classroom:

When Everyday Math was adopted, I'd been teaching math for eight years. I thought, "My kids have to learn regular math facts, and now I have to teach them Everyday Math, too? They have not mastered the basics yet, and now we're moving on?" I was really nervous about it, thinking, "If they don't pass TAAS, nobody better say anything to me because I'm just teaching what I'm told to teach!" But when I went to Chicago for the Everyday Math conference, I spoke with teachers from other states. They said they had the same worries at first. They said Everyday Math had changed them, and they were shocked.

At first I didn't want to use the curriculum, not because I didn't like it, but because it was new. When we were in Chicago we got to express our feelings about the program. Other teachers said, "At first I didn't like Everyday Math; I felt it wasn't teaching the kids." The conference helped me keep an open mind and be at least willing to try something new.

Now, after a year of teaching Everyday Math, I can see that the kids understand math this way. The light has come on for them. The professional development really helped me understand the program and stick with it until I was comfortable using it with the kids. (Angelou Elementary Case Analysis)

Angelou teachers are expected to share their learning with others at the school and in the district. Because of faculty knowledge of Everyday Math, Angelou is considered a district leader in the curriculum. Angelou teachers have helped teachers at other schools implement the curriculum, and now the program is widely used in this district.

Real-World Problem Solving. The math curriculum at Sunnyvale Middle School emphasizes practical problem solving and using “real-world” games in math instruction. These activities provide authentic learning experiences that enable students to personally understand practical applications of math skills. In addition, these strategies transform traditional math teaching methods into an approach that parallels the case standards of the National Council of Teachers of Mathematics, shifting from isolated facts and memorized procedures toward conceptual understanding and problem solving (Kohn, 1999, p. 13).

Sunnyvale teachers participate in the Rice University Math Initiative, as well as in various other local and national conferences. From these professional development activities Sunnyvale’s math instructors have learned to organize their students into small groups to practice math skills. In one strategy, students compete in a stock market investment simulation by investigating hypotheses. (For example, is there a correlation between the length of a person’s hair and the number of times per minute a person blinks?) Students also play games of chance to understand the concept of probability. Students look for examples of geometric shapes in their daily lives. Finally, students collect data and perform conversions to discover the relationship between decimals, fractions, and percentages as they explore the use of math in everyday settings, such as cooking and balancing a bank statement.

Sunnyvale has also initiated a special program in collaboration with a nearby high school that gives interested eighth graders access to a ninth-grade algebra course. Every morning a handful of eighth graders ride by bus to attend first period class at the high school. As students have participated in this exchange program, their math scores have improved significantly, and student interest in algebra has increased substantially. As a result of this successful program, the district has agreed to make a policy exception and allow Sunnyvale to offer algebra in the coming year. Improvements in math instruction support the long-term goals of both students and the community by increasing the likelihood that these students will enroll in college-prep courses and eventually achieve a post-secondary education.

Science Curriculum

Science Specialists. At Angelou Elementary, the science Content Specialist works with students in all grades. She teaches kindergarten in the morning, and in the early afternoon she instructs upper elementary students in the hands-on Science Lab. She spends the remainder of her time supporting teachers in classroom instruction, modeling lessons for other teachers in both the Lab and her kindergarten classroom, and providing professional development.

This Content Specialist introduces classes to science lessons, which are then continued by the classes’ regular teachers. For one kindergarten lesson, she brought a plastic tub containing different kinds of bones, including skulls and seashells. She showed each bone to the students and asked them various questions. The interested students had many questions of their own. The Content Specialist focused the children on comparing and contrasting the bones in terms of shape, length, weight, and other attributes. At one point in the lesson, she informed students that scientists “wonder what things are or how things work, do research, and then find out.” Several times, she reminded students, “This is what scientists do.”

She passed the bones around for the students to touch and feel, and gave special instructions on handling the more fragile bones. The engaged students were very responsive. She also explained to the students how she uses resources such as experts and books. As an example, she showed the children how to use a book to confirm or disprove a hypothesis about what type of bone they were seeing. In addition to teaching lessons herself, she provides follow-up ideas, activities, and materials for the regular classroom teachers. In the science lab she keeps organized units for the teachers to check out. Each unit contains materials, books, and descriptions of activities to use in the classroom.

Scientists in Residence. The science department at Sunnyvale Middle School sponsored a successful “in residence” program that brought astronomers and an inflatable planetarium to the school. Students learned about stars, constellations, and the planets, and personally “witnessed” what the night sky looks like from different global perspectives. In the coming year the department plans a return visit by the astronomers, and has also invited a biologist, a geologist, and an environmental scientist to work with students on-site. Although the department has experienced a nearly 100% staff turnover rate over the past two years, it recognizes the need to strengthen and rebuild its program, adding personalized instruction and increasing student input. An enthusiastic seventh-grade teacher has already begun

to renovate and improve an outdoor wetlands learning center, with the help of students and parents. Student initiatives will be organized to assess and improve the butterfly garden and other outdoor environments around the school. The department hopes to increase student input "by 100%." The school's on-site science specialist comments that she looks forward to more hands-on learning aimed at increasing the students' ability to apply higher level thinking skills to scientific problems. She is optimistic about the upcoming year.

Project-Based Learning: Project Co-nect. Raven Middle School uses Annenberg funds to support campus-wide participation in Project Co-nect, a project-based learning approach to school improvement (see Figure 10). A Raven science teacher asked to be designated an elective science teacher so that she could experiment with project-based learning strategies. This 13-year classroom veteran, who is also the campus Project Co-nect coordinator, explained her philosophy regarding project-based learning:

This year I have been able to branch out and become an elective science teacher. My class is listed as a study skills class, but that's not really what we do. We are totally project-based learning. We take all the skills and concepts we learn in other classrooms and we do projects around Raven Middle School to improve the community.

I wanted to try this approach because I was bored trying to do TAAS, TAAS, TAAS, and I believe in project-based learning. I had done a lot of projects with kids on campus after school and on Saturdays. Those are things that students really remember and get the most out of. So, I had a boss who listened and who wanted someone to pilot project-based learning. She needed a teacher to go out on a limb and show other people what is possible. I am more or less a scout, out there trying to get things going and showing the other teachers what works and what doesn't. At first, many Raven teachers were afraid to try the type of projects I'm doing. I am trying to show them they can include all the required curriculum objectives and still do projects. They don't have to do worksheets. (Raven Middle School Case Analysis)

Raven teachers have engaged students in a number of projects at the school or in the community. For example, a group of eighth graders conducted a sociological study of the graffiti in the restrooms and then launched a cleanup campaign. As a result of the students' project, the district sent professional painters to assist with the cleanup. Another veteran teacher spearheaded a student calendar project in his photography class. For this project, students wrote brief but compelling personal stories

about their lives in the neighborhood. The final student-made calendar will be available to the parents next year.

It is not unusual to see Raven students working with shovels and gardening tools. A group of sixth graders used a \$5,000 grant to lay pipe to the school's greenhouse. A Raven seventh-grade science teacher from Nigeria who has a PhD in agriculture is assisting the campus Project Co-nect coordinator with other greenhouse-related projects. Teachers and students also have developed a waterfall project and a butterfly garden in the school's atrium.

Academic clusters are also developing projects to integrate the curriculum across discipline areas. The science department chair explained a cluster nutrition project:

The students are taking a closer look at how healthy eating will affect them 10 years from now. They learned they haven't been eating healthy. Now they are evaluating what is a good meal and what is not. They are able to evaluate the school menu. Then the students wrote persuasive letters to their mothers about eating healthy and preparing balanced meals. (Raven Middle School Case Analysis)

Technology

Teachers use technology with students in many ways. For example, teachers at one Annenberg elementary school engage students with computers for tutoring and extra practice. Children attending this school tend to move often, and they may miss basic skills instruction when they change schools. The school used Annenberg funds to purchase individualized computer software programs to focus students on TAAS-related drills in reading and math. Students also use the self-paced Accelerated Reader (AR) software program, as discussed earlier. Many teachers use child-centered websites such as www.funbrain.com to introduce their students to the Internet. Some technologically savvy teachers have even created classroom Web sites.

Lights, Camera, Action! Sunnyvale Middle School students use very sophisticated technology in the school's in-house television production studio. A dedicated and enthusiastic teacher serving as the technology specialist leads students through the process of producing and broadcasting a daily live news show. The technology specialist and visiting experts give students hands-on instruction in every aspect of the production process, including filming, editing, and writing. Older, more experienced students take charge of nearly all aspects of

Figure 10: Project Co-nect Critical Friends Benchmark Descriptions

Benchmark	Title	Description
1	Shared Accountability for Results	The entire school community holds itself accountable for ensuring that all students perform at the highest possible level.
2	Project-Based Learning: Teaching for Understanding and Accountability	All students are regularly involved in projects and other activities that ask hard questions, involve the application of academic knowledge to real problems, produce deep understanding, and lead to authentic quality work. Many activities generate and depend on multiple, two-way partnerships with parents, businesses, and other outside organizations.
3	Comprehensive Assessment for Continuous Improvement	Assessment is standards-based and uses multiple measures of student achievement. Reporting of results is informative, timely, and interactive. Results are used to guide continuous improvement in teaching and learning.
4	Team-Based School Organization	Teachers are organized in small learning communities or clusters with ample time for planning and reflection. Student grouping is flexible and purposeful, designed to keep students and teachers together for more than one year. An instructional leadership team (with guidance from the principal and help from community allies) provides overall leadership and support for continuous improvement within the school.
5	Sensible Use of Technology	All members of the school community have good access to modern technologies, with adequate technical support and training. Technology is fully integrated into the curriculum, enriching, and extending teaching and learning in ways that would not otherwise be possible. Technology expertise is distributed through the school community, and has become a community resource.

the morning broadcast, and also mentor younger students on the production process and operation of the technical equipment. Over 300 students have participated in the morning broadcasts so far.

Additionally, the technology coordinator provides each student with one-on-one training. Thirty students have attended off-campus training called "Lights, Camera, Action."

Sunnyvale uses Annenberg funds to pay for training and software and a Technology Infrastructure Funding (TIF) grant to purchase state-of-the-art communications equipment. Students trained in this program become the school's videographers, helping to document the school's news and special events. Outside of the morning broadcast, these students are still the experts—many of them teach technology to their teachers and administrators. By giving individual access to complex communication and technology activities, this program provides benefits to the students that extend well beyond the classroom and the school. The students learn about future career possibilities, and they are able to document and express their personal experiences. Since student input is strongly encouraged, the students also develop confidence and autonomy.

Technology Across the Curriculum. Raven Middle School is another leader in technology use. Using a TIF grant, administrators arranged for the entire school to be connected to the Internet via a computer network. Each teacher has at least one computer. Raven also houses a first-rate computer lab dedicated to technology training for all of the district's teachers. Teachers and administrators have received training in TAAS database management and Web page design. The school also houses a community computer lab designated for after-school student technology clubs and evening training courses for parents and community members.

Last year Raven Middle School eliminated the computer literacy program as a course and, instead, incorporated technological literacy into all curriculum content areas. Each content area is responsible for teaching a component of Microsoft Office. For example, language arts students learn how to use Microsoft Word; science students organize data using Microsoft Access; social studies students prepare presentations with PowerPoint; and math students use Microsoft Excel to create charts and graphs.

Using technology to communicate is one way Raven Middle School addresses the Annenberg imperative to reduce isolation. Raven Middle School's principal

believes that e-mail can increase communication and decrease isolation among the faculty. Each teacher has a "hotmail" e-mail account, which must be checked twice a day. Administrators and teachers send important communications via the hotmail accounts, and teachers can post agenda items for upcoming meetings. "Technology," according to one teacher, "not only helps kids learn, but it also allows teachers to communicate with each other." The language arts chairperson reported, "We are constantly communicating online." The chairperson, who is also the school's head librarian, created a Raven Middle School Web page, which connects the school with the community by providing school information and important contact information for each department and teacher.

The East Center. One Annenberg high school, Longview, created a separate campus for ninth-grade students in order to assist students with the transition from middle school and to enable teachers to form closer relationships with the students. Since Longview is a very large high school—with more than 2,000 students—administrators and teachers hope this structural change will keep students connected to school, reducing the risk of students dropping out. The separate ninth-grade campus, known as the East Center, has developed a computer resource room for students, faculty, and community members. The school reports that popularity of the computer center is growing; records show that student use of the computer center doubled between February 2000 and February 2001. The East Center provides critical access to technology for all of Longview's students, but it is especially important to the 42% who qualify as "economically disadvantaged," since those students are less likely to have a computer at home. Seventeen students serve as the center's "Lab Rats," assisting students and faculty. These students gain employment experience, build their computer skills, and are introduced to possible careers in technology.

Social Studies Curriculum

Guided Support. While organizing students into Advisory Groups is a fairly common practice in middle and high schools, one Annenberg middle school has created an innovative variation. Approximately two-thirds of the students on this campus attend magnet classes at the school; the remaining students attend because the campus is in their neighborhood. The magnet students are primarily White and middle class, while the "regular" students tend to be African American or first- or second-generation Mexican immigrants from working-class families. Previously, the magnet and regular students rarely interacted or attended classes together. After visiting schools in Canada, the teachers at

this school thought of a way not only for the two student groups to get to know each other, but also for students of different grade levels to interact. Using a curricular design called "Guidance Support Groups" (GSG), administrators and teachers formed student groups composed of a mix of regular and magnet students from all three grade levels. GSG, which also substitutes for the old "homeroom" concept, supports all students through structured activities designed to build character, develop leadership, and increase world awareness.

Ninth-grade students from across the spectrum are selected as GSG leaders. These student leaders are trained in facilitation skills and group activities. Student-led group activities focus on complex social issues such as bigotry, stereotyping, and racism. These middle school students show a remarkable ability to openly discuss complicated issues.

Teachers, students, and parents report being very pleased with this new GSG arrangement. Some teachers who were skeptical about the plan were pleasantly surprised by its success. The students who emerged as leaders were not always those whom the teachers would have predicted. Teachers also report seeing older students stop in the hall to help younger students, something that rarely happened prior to the program.

In surveys students clearly said the GSG is quite helpful to them. Some mentioned their experiences running the GSG. Student leaders of the advisory groups are required to help develop and implement the instruction. Student responses exhibit enthusiasm about learning to teach and working with other students. Student leaders indicated a sense of responsibility for all the students in their group. Students also reported being pleased when their teachers encouraged them. Parents have also written support letters to the GSG faculty. Parents report seeing changes in their children based on their GSG experiences. They see their children's leadership potential growing and extending.

Teachers believe GSG, first implemented in 2000–2001, will continue to improve. According to the plan, advisory groups will remain intact as the students progress through the school. For example, current sixth graders will be in the same group in seventh and eighth grades. Each year new sixth graders will join the group as the eighth graders leave. Teachers hope this continuity will increase student collegiality and group cohesion.

Anti-Defamation League Training. Longview High School students are assigned to an Advisory group during their sophomore year (upon entering Longview's

main campus), and they remain with the same teacher, in the same student group, for all three years. Teachers have designed the advisory curriculum to address challenging issues such as diversity and multiculturalism; fighting bias; and choices about drinking, drugs, and sexuality. With Annenberg funding, Longview adopted an anti-bias curriculum designed by the Anti-Defamation League (ADL). By the end of the 2000–2001 academic year, most of the school's faculty had taken "ADL training," a short course on identifying and ameliorating bias. The ADL resources also influence faculty who are participating in the school's professional development activity, the International Academy. Furthermore, students have used ADL resources to create an after-school club for students interested in developing anti-bias projects and activities.

Arts-Infused Curriculum

In many Annenberg schools, art teachers are deeply involved in school-wide curriculum development. Emerging research supports integrating art into the curriculum. Researchers believe that arts-infused curriculum allows students to expand significantly their cognitive development. By integrating art into the curriculum, students engage in visual, kinesthetic, and auditory ways of learning. Additionally, students learn to develop new methods of communication through poetry, music, visual art, and dance. In the following sections, examples are given illustrating ways in which Annenberg schools use an arts-infused curriculum.

Cochrane Elementary, created in 1996 as a magnet school for fourth- and fifth-grade students, focuses on mathematics, science, and fine arts. Whereas magnet programs typically attract primarily White students, the majority of students attending Cochrane are African American (44%) or Hispanic (39%). In just a few years Cochrane has already established an international reputation as a state-of-the-art educational campus.

Cochrane integrates fine arts into all curriculum areas using an approach called "Learning through the Arts." Teachers actively integrate art into mathematics, science, technology, and language arts lessons. Students learn to appreciate the arts as they are developing subject-specific knowledge and skills. Students choose major and minor subject areas for more in-depth study. Cochrane teachers believe that this holistic educational approach fosters students' academic, emotional, and social development. All students are encouraged to enhance unique talents while developing a solid foundation of skills and hands-on experiences.

From the bus circle in front of Cochrane, visitors hear the soothing sound of strings. Violin classes are very small at

Cochrane. The instructor reminds his students that they need to play in a way that shows their love of music. He also stresses the performer's need to actively engage the audience. He encourages students to play as if they are an airplane soaring in the air, adding, "Be light on your strings or you will crash." The violin teacher is very expressive and obviously enjoys making music himself. He cultivates the same qualities in his students; playing the violin requires more than technical skills, but a certain attitude as well.

Art teachers at Cochrane believe that every student can be creative and imaginative if given the time and space. The art classroom is a double size studio lined with windows to let in bright natural light. Exhibits featuring leaves, plants, colored bottles, beads, large columns, flowers, and many more still-life objects create separate work areas. Original student artwork hangs on the walls. No student ever says, "I can't," because each child, regardless of talent or experience with a pencil or paintbrush, is encouraged to feel capable of producing a masterpiece. Students study techniques of line, shape, overlapping, wrapping, and direction, with particular emphasis on color and design. One strategy exposes students to a variety of artistic styles, teaching them about different artists and their works. For example, in one lesson students critiqued André Derain's "The Turning Road." Derain's landscapes feature curving lines and forms, in bright, vivid, unnatural colors that express nature's energy and emotion. Students explored Derain's techniques by drawing their own landscapes.

A Cochrane language arts teacher used a simple strategy to help students locate the elements of a story: beginning, middle, plot, and end. Using the book *The Rainbow Fish*, the teacher asked the students to identify the four elements of the story. The students generated a lot of ideas, which the teacher documented on overhead transparencies. Then each student folded a piece of construction paper into four squares. After a second reading of *The Rainbow Fish*, the students labeled and illustrated each of the four story elements on a square. The teacher then encouraged the students to create a new ending for the story.

Integration of Art and Mathematics. Teachers at Cochrane incorporate art into teaching mathematics. Art enhances the learning environment and helps students make connections between mathematical concepts and everyday experiences. Math classrooms are full of vibrant color and decorated with student work.

Students use art to learn the concept of measurement. After measuring and cutting strips of construction paper

in specific shapes and dimensions, they combine the pieces to create an image of a special place they like to visit. One student portrayed a weekend farm. Another wrote, "My Mom, because she is special to me. If my Mom is no longer with me when I grow older, I will always remember her when I see a flower." A third student portrayed "a peaceful place where I can see cars going by. It is special to me because I like to wave to people when they go by, and I like to see them wave back."

In another mathematics classroom, students study the concepts of line, angle, and shape. Teachers engage students in activities using visual literacy skills, cooperative learning skills, computation skills, movement, judgment, and estimation. For instance, math students viewed the art print "Man With a Cane" and identified horizontal, vertical, diagonal, perpendicular, and curved lines. They also found angles and shapes in the print. Ultimately, students created their own line direction artwork. Some students produced individual pieces of art, and others worked in groups to create pictures on ceiling tiles.

A choreographer funded by the Houston Annenberg Challenge used dance to teach students basic concepts of geometry. A local community resident, the choreographer has worked with some of the most well known African American dancers in America, including Michael Jackson. Under the choreographer's direction, the students developed movements to represent diagonals, circles, squares, and so on. The mathematics teacher then divided the class into groups, providing each group with old-fashioned chalk slates. Each group developed a series of dance steps reflecting the mathematical terms drawn on their slates. Students performed their compositions for the class, critiqued each performance, and exchanged slates and traded dances. At the conclusion of the lesson, the teacher refocused the students on identification of the different geometric terms that were introduced at the beginning of the class.

One Cochrane teacher created a lesson called the "Geometry Art Project." Students first studied basic definitions of terms such as obtuse angles, parallel lines, symmetry, vertical lines, intersections, and rectangles. The teacher divided students into groups and gave each group a basket of geometry tools. The teacher told the children to place a sheet of paper in a horizontal position and then, using a ruler from the basket, to draw two horizontal lines anywhere across the page. The students looked at each other's papers to try to find three rectangles that had been formed by the two horizontal lines. The teacher then told the students to use their imaginations and draw three vertical lines on their papers.

The students at each table tried very hard to make their pieces look different from those of their neighbors. This time they had to locate 12 rectangles and as many right angles as possible. Next, the students drew two diagonal lines. This time the challenge was to locate pentagons, triangles, trapezoids, and quadrilaterals within the varied and unique drawings. This activity continued with curves and angles. The students proudly colored their work, signed their names, and displayed their finished products of geometric artwork on the classroom walls.

Art and Science. Science teachers at Cochrane Elementary also incorporate the arts into their curriculum. The teachers have found that connecting science with art helps students learn the concepts of both subjects. The teachers have also made innovative use of the school's sophisticated technology laboratory.

A geology instructor taught students about Pangea by treating it as an artistic puzzle. Students cut all the continent shapes from poster board, and then tried to piece them together to form the continents as they were 180 million years ago. The students found this very challenging, and some even began to suspect that their teacher had played a trick on them. Finally, with the use of a model, small groups of students solved the puzzle together. As a follow up activity, students placed the continents in their correct positions according to the formula $speed \times time = distance$.

Another geology teacher used models to teach the concept of plate boundaries. Students were introduced to key terms: *transformed*, *divergent*, and *convergent boundaries*. Teams of four or five students made pie plate models, using pudding to represent water and a Three Musketeers candy bar as a landmass. The students then studied the effects of certain forces on the water (pudding) and the land (candy bar). Once they understood the effects of shifting plate boundaries, the students sketched what happened in their lab notes and labeled their diagrams based on their observations of the practical model. After this hands-on lesson, of course, the students shared a snack of pudding and candy.

Cochrane science teachers are fortunate to have an art specialist to help them create innovative lesson plans. Students studying the North American desert created animal masks, paying particular attention to the physical and behavioral adaptations of the animals they had selected. Students conducted extensive research on desert dwellers, thinking carefully about their selected animal's survival skills and unique color scheme. Students then prided themselves on sculpting and molding the most imaginative masks possible.

One of the most interesting components of the science program at Cochrane Elementary is the Technology 2000 lab. Students rotate weekly into workstations in the lab, and teachers use activity portfolios to monitor their progress. The portfolios outline all activities the students must complete, along with a specified amount of time. Students choose partners and work in dyads to build a simple machine, master a new computer program, or learn to use a digital camera. Students reflect on their activities by completing portfolio questions. Some students take digital photos of each team, and attach the photos to their portfolio. Other pairs of students use electrical legos to create ice warriors that walk and use pinchers, or use wheels and plastic bubbles to design a car that can travel short distances. Another pair might work on the computer to figure out a drawing program. In this dynamic learning environment, students are immersed in problem solving. Students building objects learn by trial and error. They talk to each other constantly, trying to come up with the right formula to make their object work. Theory making and theory testing are essential components of the activities students engage in within the context of the Technology 2000 lab.

Because students work on concurrent activities in the lab, teachers need to develop effective means of evaluating multiple projects. Teachers use individual student portfolios as well as rubrics. One of the central goals of the lab is teamwork. Students constantly question one another and make notes in their portfolios as they read the step-by-step instructions for each activity. Portfolios help the student gauge what is expected of them and allows them to see the value of the relationship they form with their partner and other pairs of students. The rubrics particularly allow the teacher to see how students assess their participation and engagement in the projects.

Because of the variety of activities and amount of equipment used in the Technology 2000 lab, no more than 10 to 12 students are in the lab at one time. Teachers have ample time within each class period to meet with all the dyads individually and to serve as a guide to help them accomplish their tasks. On some occasions, smaller, gender-based groups, such as Girl Tech, are formed to help young girls overcome the perceived hurdle associated with females in science. Consequently, the lab provides a very personalized learning environment. The Technology 2000 lab forms a tremendous challenge for students. They must draw on their problem solving skills, reasoning and troubleshooting skills to complete their assignments. Students feel a great sense of accomplishment when their creations look and function as they are intended.

Summary

Our research in Houston Annenberg schools reveals that teachers use new knowledge and skills and rich resource material to implement curriculum changes. Researchers tracked schools' use of Annenberg funding into classrooms. Researchers have compiled substantial evidence of curriculum innovations occurring across all subject areas and all grade levels.

TEACHING AND LEARNING ENVIRONMENTS

Annenberg funding has impacted instruction significantly. Teachers learned instructional methods by attending professional development activities. Teachers have developed or have invented other innovative instructional strategies as a result of peer support programs such as Critical Friends Groups. Students clearly benefit from these teaching strategies; academic achievement is high in many Annenberg schools, especially Beacon schools.

As teachers in Annenberg schools use these new instructional strategies, students from all ethnic groups are achieving higher academic success than ever before. Our research of the Houston Annenberg Challenge reveals that teachers use an array of instructional innovations. Teachers also infuse the arts into all subject areas. Using *arts-infused instruction*, teachers help students celebrate the arts as aesthetic ways of knowing, and they also guide students to use the arts as tools for deepening their understanding of curriculum content.

Additionally, teachers collaborate to integrate the curriculum so that students are exposed to a number of content areas in one lesson or a set of lessons. Using *integrated curriculum instruction*, teachers develop lessons placing important content knowledge in real-life contexts. Finally, teachers are helping students become fluent in more than one language. Native Spanish-speaking children are becoming proficient in English and native English-speaking children are becoming fluent in Spanish by participating in innovative *dual language instruction* classrooms.

Annenberg school administrators and teachers ground their innovative work in emerging research literature on how people learn. As a result of learning research, we currently know more about how humans learn than ever before. Scientists from many disciplines, including social psychology, cognitive psychology, anthropology, and neuroscience, have conducted research that collectively has led to the development of a science of learning. This research provides new ideas about ways to facilitate learning. New instructional practices developed from this

research enable more people to be successful in educational environments than traditional classroom methods. Students are more successful because these effective instructional practices help them to develop deep understanding of important subject matter. Research also shows that with deeper understanding students significantly improve their academic achievement (Bransford, Brown, & Cocking, 2000).

The new science of learning emphasizes learning with understanding. Teachers using traditional instructional practices focus students on memorizing facts. However, emerging learning research provides evidence that students do not develop "usable knowledge" by memorizing a list of disconnected facts. Learning scientists recommend that teachers expand their instructional practices in two critical and fundamental ways.

First, teachers should build upon students' pre-existing knowledge—prior knowledge, skills, beliefs, language, and culture—to help them develop more mature understanding. By building upon students' pre-existing knowledge, teachers create contextualized learning environments for students. Research provides evidence that learning is enhanced when teachers pay attention to the knowledge and beliefs that learners bring to a learning task, use this knowledge as a starting point for new instruction, and monitor students' changing conceptions as instruction proceeds (Bransford et al., 2000, p. 11).

Second, researchers suggest that teachers should help students take control of their own learning by engaging students in active learning activities. Teachers using active, in-depth learning strategies guide their students to make sense out of facts and data, to assess their own work, and to reflect on their successes and failures. Teachers also encourage students to collaborate with each other as they learn. Research shows that active learning strategies increase students' ability to transfer new knowledge to different settings. In the following sections, we describe innovative instructional and learning strategies seen in Annenberg school classrooms.

Instructional Environments

Dual Language Instruction. One Annenberg elementary school, Los Altos Elementary, provides instruction in English and Spanish as a dual language program. The dual language approach is often considered an "additive" bilingual program. By additive, educators mean their goal is to add a second language to each child's proficiency.

This approach contrasts with traditional bilingual education programs, which typically are used to transition students from one language to another (primarily to English). Researchers consider dual language programs an “enrichment” educational approach.

At Los Altos, children whose native language is Spanish are in the same classroom as children whose native language is English. Students learn two languages simultaneously as teachers provide instruction in both. Los Altos’ administrators and teachers believe all students can become fluent—listening, speaking, reading, and writing—in both English and Spanish by attending the school from kindergarten through the fifth grade. Through this approach, students achieve academic biliteracy and genuine bilingualism.

The dual language program at Los Altos is a “90/10” instructional model. This means that kindergarten teachers provide 90% of their instruction in Spanish and 10% in English. English instruction increases by 10% each year. At the fifth-grade level, students receive 50% English and 50% Spanish instruction. Teachers organize daily instruction by thematic units, and they use authentic literature to promote cultural awareness and community connections. Additionally, teachers engage students in hands-on, interactive learning activities that include substantial opportunities for the children to practice speaking, reading, and writing in both languages.

Research shows that dual language programs like the one at Los Altos are more effective at assisting students in becoming bilingual and maintaining high academic achievement than other types of bilingual education programs. Researchers have identified characteristics of these successful programs; Los Altos clearly exhibits all the characteristics researchers have deemed significant (see Figure 11). Studies show that dual language programs that have a strong cognitive emphasis and that continue for at least six years can fully close achievement gaps for language minority students (Thomas & Collier, 2001).

A third-grade teacher at Los Altos frequently incorporates art and culture into her lessons. A recent lesson demonstrates all the characteristics researchers attribute to successful programs. This teacher used artwork by Georgia O’Keefe to strengthen students’ vocabulary while they engaged in hands-on activities. Working in collaborative groups of four students, the children practiced sophisticated art techniques—contour line, color, folds, and depth—with watercolor paints to create their own interpretations of the O’Keefe painting style. The resulting artwork is featured on the cover of this report.

Figure 11: Characteristics of Successful Bilingual Programs

- ♦ Meet students’ developmental needs—academic, cognitive, emotional, social, and physical;
- ♦ Operate in a natural learning environment;
- ♦ Use natural, rich language abundantly;
- ♦ Engage in meaningful real-world problem solving;
- ♦ Support student collaboration;
- ♦ Provide a media-rich learning environment (video, computers, print);
- ♦ Use challenging thematic units that get and hold students’ attention; and
- ♦ Use students’ bilingual and bicultural knowledge as a bridge to new knowledge across the curriculum. (Thomas & Collier, 2001)

Through both guided and independent practice, this teacher introduced her students to a complex knowledge base in an interesting and meaningful manner. More than simply an art activity, this lesson explicitly addressed five state curriculum objectives of the Texas Essential Knowledge and Skills (TEKS).

In another Los Altos classroom a fifth-grade teacher used a simple, familiar object, the banana, as the focus for an integrated curriculum lesson. Conducting the lesson in both English and Spanish, this teacher incorporated TEKS objectives for reading and language arts, math, and science into the study of bananas. Students in small workgroups learned the history and nutritional value of bananas along with their specific properties. Students read and analyzed informational handouts, estimated and measured the outer and inner length and circumference of actual bananas, weighed the bananas, and learned about density as they experimented with the bananas’ floating properties. The student groups recorded their findings and reported to their classmates. Following this lesson, the teacher helped the students make a snack of banana splits.

Arts-Infused Instruction. Increasingly, teachers infuse art across the curriculum in Annenberg schools. When teachers integrate art into their teaching, they draw upon an emerging body of research that supports their efforts. Emerging research suggests that formal education systems have two purposes: expanding and deepening students’ understanding and developing students’ cognitive ability. In this view literacy is considered much more than simply reading and writing. Theorists conceptualize literacy as ways of constructing and communicating meaning. Students learn to read and write, but they also learn to communicate through poetry, music, visual art, and dance (Eisner, 1998).

Elliot Eisner, Professor of Education and Art at Stanford University, is a leading authority on arts-infused education. He describes teaching as a device for changing minds.

When we decide what to teach, we really decide what kind of minds we want to develop. The arts are areas of work that have a number of very important features for the development of cognitive skills. For example, one of the things people need to do when they work with an art form—whether it's poetry or dance or the visual arts or literature or music—pertains to questions about when they know their work is finished. There is no algorithm; there is no recipe, no formula to help them make that judgment. They have to make that judgment on some other basis and that other basis is somatic knowledge. By that I mean, they decide through their experience with their work, how they feel about it, when they have the feeling that the work is complete, coherent. The ability to make that kind of judgment is important not only in the arts but in other areas of life as well.

Secondly, teaching through the arts is important because of matters related to meaning. Each of the fields we teach focuses on questions of meaning whether we are studying geography, or history, or mathematics. These are symbol systems that convey certain kinds of meaning that are related to the subject they address. Mathematics deals with matters of magnitude and their relationships. History deals with our understanding of the past. Physics deals with matter and motion. Biology deals with the course of life and how it develops. And the arts deal with how things feel and what they can become through the imagination. Enabling youngsters to become literate in the arts is really promoting the kinds of meanings that they can recover, not only from those things we call "works of art," but also qualities of life that we find outside of museums and art galleries. The way in which a wall looks when the sunlight hits it. The reflections in a street after the rain. The expressive character of people moving down a staircase. All of these are subject to artistic perception. Art is a very enriching source of meaning. (Interview)

By infusing art into the curriculum, teachers give students multiple opportunities to develop and perfect methods of expression. Furthermore, by drawing upon the arts, teachers expose students to complex processes not based upon specific rules or procedures. Consequently, students must develop the cognitive ability to judge quality, or "rightness of fit" (Goodman, 1978). To judge rightness of fit, students must pay attention to patterns and configurations and whole items or work products rather than discrete elements. These complex tasks help

students develop sophisticated cognitive skills. Students use these well-developed cognitive skills to learn across the curriculum, and they also use them in their daily lives outside of school.

Research in Houston Annenberg schools reveals that art teachers involve themselves deeply in school-wide activities. In fact, a significant number of art teachers serve as their schools' Annenberg coordinators. Art teachers are seen as important faculty members, not just as ancillary staff. Traditionally, art teachers have worked mainly with other art teachers. With implementation of Annenberg reforms such as Critical Friends Groups, art teachers now work closely with teachers from across the disciplinary spectrum. The following examples illustrate how teachers infuse art into their instruction.

At Cochrane Elementary, a fourth- and fifth-grade magnet campus, art is a primary focus along with mathematics and science. Since administrators believe art should be fully integrated into the curriculum, they created a position for a "Learning Through the Arts" Coordinator. This art teacher works directly with classroom teachers to embed art into subject specific lessons. The coordinator explains the process:

I am an art teacher and I meet with the math teachers, for example, to talk about the objectives they plan to cover in the next week or so. Then we brainstorm a lesson that directly integrates art into their objectives. After we've prepared a lesson, we teach it together in the classroom. It's really powerful for the students because the knowledge of the math teacher is influenced by the knowledge of the art teacher.

I've worked with the language arts teachers on lessons about prediction, cause, and effect. In these lessons students use different watercolor paints and techniques to illustrate differences in language.

In science class we've made fossil models out of clay. We've also made buildings with clay to demonstrate physical change. Students see how the clay changes from soft at the beginning to a different color and hardness after it is glazed and fired. They learn that heat expands the chemicals to produce particular colors. And we've done math lessons where we viewed art masterpieces and looked for lines, shapes, angles, and direction. (Interview)

A third-grade teacher in a dual language school was originally trained as a graphic artist. After receiving an advanced degree, she began a teaching career. This

teacher says she has incorporated art into her classroom since the beginning:

I've always incorporated art in my classroom because I believe art is a universal language. I teach students who are learning to speak English or Spanish that they can also communicate through art. I love to incorporate art in everything because it gives the students a sense of concreteness. They need this concreteness to transfer skills they have with one language to the skills they are learning in a different language. Whatever I do in my classroom, I try to do it in such a way that both groups of students understand the concept and therefore learn. (Interview)

A sixth-grade language arts teacher regularly incorporates art into her lessons. This teacher developed a comprehensive rubric based on the Middle Years International Baccalaureate Program. Included in the rubric is an objective for students to be able to demonstrate a critical awareness of differing media of communication. This criterion focuses students on understanding and interpreting visual languages, images, messages, and meanings. Furthermore, the teacher requires students to produce visual products to demonstrate another way of communicating.

In one lesson, students produced chalk drawings of images evoked by listening to Edgar Allen Poe stories. The purpose of the drawing assignment was for students to illustrate portions of the text by imaging what the narrator was seeing. Students created captions for their artwork using relevant text from the story. The walls of this language arts classroom are filled with student artwork from previous lessons. This teacher uses art to engage students in reading and writing by incorporating their auditory, visual, kinesthetic, and cognitive abilities.

A high school art teacher agrees that art is important for many reasons. He explains:

We all know art is so important for personal reasons...as a reflection of the soul...and for humanity. But I think art is also an avenue for people to communicate, especially on cultural levels. People can speak through art about who they are. I think that's a strong message. (Interview)

This art teacher had never collaborated with other faculty outside the art department before his school became involved in Annenberg. His participation in Critical Friends Groups has shown him that teacher collaboration can help him be a better art teacher.

Collaboration never really happened until Annenberg came along. In our Critical Friends Group we have a range of disciplines—science, history, art. It's such a great source of information. Instead of having one pair of eyes looking at your teaching or your students' work, you have five or six different pairs of eyes from different disciplines. It brings a whole new perspective. For 22 years I thought I knew everything there was about teaching art. But I found out with Critical Friends that is absolutely not the case. Now with the increased accountability system, art teachers can no longer sit in a room isolated. We have to have our lessons in TAAS format; we have to have lots of reflection. Getting input from teachers in other disciplines is really helpful. Their experience, their expertise, it makes me a better teacher. (Interview)

These teachers believe art helps students develop their cognitive abilities. Art provides a whole new way of looking at things, as an elementary art teacher explains:

A lot of people don't understand how important art is to a child. They assume that fine arts classes are just about building self-esteem, but they are not. Students carry art around in their eyes, their ears, their hands—every single day. Students create portfolios in their head of their experiences. Knowing the arts, for a child, is a life-long way of seeing things and being able to work with different subjects. For instance, if you're going to be an engineer, you're going to be better and stronger in your subject if you can relate to how things are created. If you're going to be a scientist, you have to have the ability to see and understand what you are seeing. If you have the creative visual literacy to interpret what is in front of you, you are going to be more dynamic. It's a whole different approach to education. (Interview)

Integrated Curriculum Instruction. Teachers in Annenberg schools collaborate to develop integrated curriculum lessons. With an integrated curriculum, teachers plan lessons using skills and knowledge from more than one subject area. Teachers often organize these lessons around broad themes. These themed lessons cut across subject-matter lines to help students focus upon meaningful application of the topic in the real world.

Research shows that an integrated curriculum approach has six essential components (Lake, 1994):

- 1) Core skills and processes. The curriculum must contain basic skills (reading and mathematics), social skills, and problem solving. Teachers collaborate to identify common goals, objectives, and skills for the lesson.

- 2) Curriculum strands and themes. The curriculum is built upon broad organizing principles and includes content from multiple subject areas. Teachers work together to find appropriate cross-subject content connections.
- 3) Major themes. Each curriculum strand is further divided into major themes such as the environment or diversity.
- 4) Questions. Teachers pose questions to further define major themes and focus activities.
- 5) Unit development. Teachers plan activities for each major theme to help students develop the knowledge and skills to address the overarching questions.
- 6) Evaluation. Teachers design performance assessment strategies around the concepts and activities of the integrated curriculum lesson.

The areas of mathematics, science, language arts, and social studies integrate easily. However, our research in the Houston Annenberg Challenge reveals that teachers also integrate other subjects, such as art with traditional subject areas. Researchers believe that students find an integrated curriculum approach to education meaningful, thus increasing students' motivation and engagement in school. Teachers using this instructional strategy believe they are helping students become life-long learners. Additional research suggests that curriculum integration helps students apply skills, leads to faster information retrieval, develops a broader knowledge base, and encourages depth and breadth in learning (Lake, 1994).

A group of multi-disciplinary teachers at an Annenberg elementary school participated in a year-long on-site graduate course on curriculum integration taught by faculty from a local university. Using James Beane's 1997 book, *Curriculum Integration: Designing the Core of Democratic Freedom*, as the text for the course, faculty guided teachers through the four main dimensions of the process: integration of experiences, social integration, integration of knowledge, and integration of curriculum design. Working in groups, the teachers identified examples of each of the four dimensions in student work and lesson plans. As they became familiar with the process, teachers created schematic diagrams to illustrate holistically the emerging planning techniques. Teachers used their new knowledge to assess the school's curriculum and identified necessary organizational, structural, and programmatic changes.

One elementary school, Cochrane Elementary, has fully integrated art into the school's science, math, and

language arts curricula. Cochrane's administrators and faculty have a well-developed vision of teaching and learning. The campus Annenberg coordinator and art teacher discusses their approach:

The big picture at Cochrane is that we have the ability to integrate all the arts into the four subjects of math, science, language arts, and fine arts. It's not just music or visual arts, either. Students are exposed to the whole picture of how to think creatively. We are the first school in this district—the first in Texas, as far as I know—to use this strategy. We're looking at a different way to teach children how to learn, to be life-long learners, not just TAAS prep kids. The students get exposed to learning through visual, auditory, and kinetic activities. They learn holistically. What we do in Visual Arts is reinforcing what they need to know in Math. For example, it is essential that they understand lines so they can judge angles in Geometry.

In our vision, teachers from all disciplines have to meet, because we have to share our knowledge and our strengths. That way, when the student is with us they get the best of all worlds, not just one focus. We bombard students from all areas on how to think about mathematics, or how to think about science. The creative thinking process that happens in an art form triggers the way we all learn. When we make pictures in our head, it makes everything a lot livelier.

Annenberg has supported us greatly with teacher development. For 25 years I taught, and I never went anywhere. I never, ever was able to share with other educators the ideas that I knew could work. With Annenberg, a whole new doorway was opened for us. We can be a voice, go places, and present what we know works. We can exchange ideas so we can start bending people's minds.

Typically, everything comes from the top down. Education comes from the university, as professors tell us how to develop a program. Or the Board of Education tells us what to do. But what we really need to do comes from us, from our home school, from the ground up. Here at Cochrane, we create our own curriculum; we design our own programs. We look at the needs of our students, and every year we re-evaluate what we are doing. The children come first. (Interview)

In another example, a seventh-grade history teacher created an integrated curriculum lesson that included exploration of energy, math, American politics and economics, and Middle Eastern history and politics. The teacher asked students to research the usage and cost of gasoline and oil in the United States during their lifetime. The students then compared their analysis with similar

information from Middle Eastern countries, graphed changes in the oil and gasoline industries, and labeled significant historical and political events of the time. Students subsequently engaged in lively discussion about their findings and the effects of the fluctuations on the energy industry and on their families. Not only did this teacher enable history to become more “real” to the students, she showed them how it was relevant to their lives today.

One Annenberg high school was created in 1995 with an integrated curriculum design as its instructional core. The school’s founders conceptualized the design as a three-dimensional model composed of three domains, each with a set of expected outcome areas, as outlined in Figure 12.

Each of the 18 outcome areas shown in Figure 12 is defined by a set of proficiencies related to a set of measurable objectives. Students master curriculum objectives that are aligned with rubrics. Mastery level is considered to be 80% and above in conventional scoring terms.

Effective integrated curriculum designs are not static. Faculty continually review and revise curriculum. For example, during the past year, administrators and teachers at this high school used Annenberg funding to support on-site consultation from Fred Newmann and Bruce King, scholars from the University of Wisconsin–Madison. These experts guided faculty to develop more challenging and authentically intellectual student assignments. Specifically, faculty concentrated on incorporating three assessment dimensions into the curriculum: construction of knowledge, disciplined inquiry, and value of achievement beyond school. These three assessment dimensions are described below.

- 1) Construction of knowledge. Students produce forms of cognitive work found in the adult world such as original conversation and writing, repairing and building physical objects, and performing artistically. Students reproducing prior knowledge do not demonstrate authentic achievement.
- 2) Disciplined Inquiry. Students critically examine prior knowledge and develop new paradigms or ways of understanding. Students strive for in-depth understanding by examining complex social and technical problems. Students communicate their ideas and findings verbally, symbolically, visually, and in writing.

Figure 12: Domains of Integrated Curriculum Design

1. Academic Foundations
<ul style="list-style-type: none"> ◆ English/language arts ◆ math ◆ social studies ◆ science ◆ foreign language ◆ career education ◆ health and physical education ◆ creative and performing arts
2. Essential Learner Behaviors
<ul style="list-style-type: none"> ◆ problem solving ◆ communication ◆ self-discipline and concern for the environment ◆ citizenship and concern for the environment ◆ and wellness and aesthetic appreciation
3. Workplace Tools
<ul style="list-style-type: none"> ◆ systems ◆ technology ◆ information ◆ resources ◆ interpersonal skills

3) Value Beyond School. Student work products reflect aesthetic, utilitarian, or personal value. Students exhibit intellectual accomplishments by communicating ideas, producing products, or otherwise having an impact on others beyond simply demonstrating competence. (School document)

In another example, teachers from schools in one Lamplighter Learning Community collaborated to form a Curriculum Alignment Team (CAT) to analyze the curriculum across the entire feeder pattern set of schools, from elementary to high school. Since the elementary schools “feed” into the middle schools and the middle schools “feed” into the high school, teachers believe collaboration across schools will contribute to greater curriculum continuity for students from kindergarten through grade 12. The CAT meets four times a year to discuss curriculum coherence and redundancy. A middle school science teacher explains the value of the CAT:

In the two years that we've had CAT meetings I've gotten to know elementary and high school science teachers. Now that we know each other we can put our heads together to learn what each is doing and how we can help each other. We always used to say, "These middle school kids should know this topic. They don't know it because those elementary teachers didn't teach it to them!" Then the high school teachers blame the middle school teachers and so on. Well, since we started meeting as a group, we've cleared the air of that kind of talk. (Raven Middle School Case Analysis)

Teachers in this CAT are using the state curriculum standards (Texas Essential Knowledge and Skills) to guide their work. As they continue working together, the teachers prioritize topics for discussion. For instance, in one meeting teachers discussed whether it was more important to develop a coordinated list of vocabulary words or to focus on broader issues such as conceptual knowledge needed at each grade level.

Learning Environments

According to the new science of learning, teachers using effective instructional strategies represent only half of the learning process. For students to truly learn with understanding, they must engage actively with rich resource material in authentic, culturally relevant environments. Research also shows that students benefit from developing collaboration skills that allow them to work effectively with each other, serving alternately as learners and as mentors.

Our research in Houston Annenberg schools reveals that students are learning with deep understanding by participating in all these types of learning environments. Students are *collaborating* as they learn; students engage in *active, in-depth learning*; and students are connecting prior knowledge to new knowledge as their teachers *contextualize* instruction. Often students are seen engaging in all three learning processes simultaneously. We discuss each of these learning strategies in the following sections.

Collaborative Learning. Teachers in Annenberg schools use collaborative and cooperative learning strategies to engage students. Both of these instructional strategies involve students working together in small groups of two to six. Although both techniques have similar characteristics, they are not exactly the same. Some educators believe that one difference between the two is the expected outcome of the group's work. These educators see cooperative learning as a set of processes used by a group of students to achieve a specific goal or to develop a particular end product. Educators define

collaborative learning as a more open-ended process in which small groups of students discover or create outcomes not previously determined (Panitz, 1996).

Research shows that effective cooperative learning has five basic elements, as shown in Figure 13.

Figure 13: Elements of Effective Cooperative Learning

- ◆ **Positive interdependence.** Students have the dual responsibility for personally learning the curriculum content and for helping ensure that all other group members learn the content as well.
- ◆ **Face-to-face interaction.** Group members encourage and facilitate each other's learning by giving each other effective assistance, needed information or materials, and feedback on individual conclusions and reasoning.
- ◆ **Individual accountability and personal responsibility.** Each group member has individual accountability for doing a fair share of the work, along with personal responsibility for ensuring that the group achieves its goals.
- ◆ **Interpersonal and small-group skills.** To work effectively in cooperative groups, students must understand and be able to use social skills. They must know how to develop trust, how to communicate accurately and clearly, how to support each other, and how to resolve conflict constructively.
- ◆ **Group processing.** Members of effective cooperative groups must reflect upon their group's performance. In this, members consider what actions were helpful or unhelpful and make decisions about needed changes within the group.
(Johnson & Johnson, 1991)

Teachers in Annenberg schools understand the social nature of learning. In other words, they believe students benefit from working cooperatively in groups. Teachers—studying the works of Piaget (1926) and Vygotsky (1978)—recognize that students learn more effectively by collaborating than by working individually in competitive settings. Not only do students have an opportunity to share what they know with each other, research shows students learning collaboratively engage more fully in the educational process, have higher academic achievement levels, and develop higher level thinking skills. Furthermore, as students deepen their intellectual understanding by explaining concepts and processes to their peers, they strengthen their self-confidence.

Students in Annenberg schools collaborate as they learn. Students in participating schools are not likely to be found in long, straight rows facing a teacher who is sitting behind a desk in front of the room. Instead, students are likely to be working in collaborative groups of four to six. Collaborative groups of students can be found in elementary, middle, and high schools, as students at all levels learn the value of teamwork.

Teachers in Annenberg schools use many cooperative learning strategies. One popular strategy is called the "jigsaw" technique. In this strategy, teachers work with small groups of five or six students. This process changes the teacher's role from being the sole classroom expert to being one among many (student) experts. Teachers use the jigsaw technique to minimize student competition and encourage group work. In this strategy, students treat each other as resources and participate as active, interdependent learners. Students learn that cooperation is a skill and that they can work together without sacrificing excellence. Although this technique was originally developed for teachers to use with children who speak English as a second language, research has shown that it is a highly effective teaching strategy with all children (Aronson & Patnoe, 1997).

A number of elementary schools have used Annenberg funding to train teachers in the Tribes program (Gibbs, 2001). Tribes is a school-wide strategy to reinforce desirable social skills, collaboration, and multiple learning styles. Children learn the four Tribes principles—attentive listening, mutual respect, no put-downs, and right to pass—and (according to teachers and parents) freely invoke them in class, on the playground, and at home. Teachers use Tribes strategies to help students get to know each other at the beginning of the school year, to establish a culture of cooperation and community, and to resolve conflicts. Additionally, teachers incorporate the Tribes strategies in academic group work and problem solving activities. Teachers note that students work together to solve problems before asking the teacher for help. Teachers' use of these cooperative learning strategies ensures that students listen to each other, that all are included in classroom activities, and that each child is recognized as an important member of the group. The program provides a "common language" for the campus by promoting shared values and norms. Teachers report that the program has provided a method for keeping children focused, and has improved students' behavior and transitions within and between classrooms.

In an Annenberg middle school, students work collaboratively on history and science projects. In addition to working on a community project commemorating

neighborhood World War II veterans (see Raven Middle School, in the Family and Community section), students at this middle school collaborate to solve problems at the school. A group of sixth graders is raising money to renovate the school auditorium. The students created a PowerPoint presentation showing the poor condition of the auditorium and their proposed renovations. They presented the project to parents and other community members as they requested donations. Fundraising efforts have been modestly successful, and now the students are soliciting bids for a new sound system.

High school students work collaboratively in small groups in science and math classes. At one high school, students used a local environmental problem in a public waterway as the focus of a group science project. In another high school, students study geometry by working in small groups. By encouraging students to collaborate, teachers expand the number of instructors from typically one (themselves) to potentially 25 (the number of students in the class).

At Annenberg schools teachers collaborate across and within grade levels, and students collaborate with peers in their classrooms and with younger students by serving as mentors. Through collaboration, teachers and students have increased communication, enhanced learning, and enriched the educational environment. By collaborating, teachers and students have significantly reduced isolation within and among schools and isolation from the community, thereby addressing one of the national Annenberg imperatives.

Active, In-Depth Learning. Active, in-depth learning promotes genuine understanding by engaging students in "doing the work of writers, scientists, mathematicians, musicians, sculptors, and critics" (Darling-Hammond, 1997, pp. 107-108). Teachers and students approach their work seriously and use high-quality performance criteria as their achievement standards. Researchers have developed a concept called authentic pedagogy to describe instruction based on active learning strategies. Teachers using authentic pedagogy focus students on active learning in real-world contexts. Teachers ask students to use higher order thinking skills, consider alternatives, and employ curriculum content knowledge. Students develop work products using multiple forms of media including verbal and written forms, and present their work to audiences beyond the school (Newmann, Marks, & Gamoran, 1995).

Active learning lessons are realistic and culturally relevant. Teachers provide students with information and tools so that the students can experiment and explore using

scientific or other inquiry processes. Active learning that leads students to develop deep levels of understanding requires students to evaluate, analyze, and synthesize their own research. Students are further required to produce their findings as arguments, ideas, and performances as formal work products (Darling-Hammond, 1997).

Many Annenberg schools extend learning beyond the classroom. Students in reforming schools actively engage in hands-on learning projects. Elementary and middle schools take advantage of Houston's moderate climate to create outdoor learning environments on their campuses. Science teachers in elementary schools have created wetland areas for students to engage in hands-on lessons and projects. Elementary art teachers have collaborated with faculty and parents to build a series of outdoor settings focusing on specific cultures. Middle school teachers have helped students turn outdoor patios into atriums and butterfly gardens where classes can meet.

Middle and high school students benefit from engaging in community service projects, thus continuing to learn while contributing to the community. K-12 students all benefit from visits to Houston's many art museums and other cultural and civic events. High school students attend lectures by world famous speakers such as Susan Eisenhower (granddaughter of Dwight), Sergei Khrushchev (son of Nikita), and Burton Gerber (former CIA agent during the Cold War). These lectures—sponsored by the Houston World Affairs Council—offer opportunities for students to meet world leaders face-to-face. Through active, experiential learning opportunities such as these, students discover that learning takes place continuously, not just in conventional classrooms. Moreover, students realize that classroom instruction is relevant to their lives outside of school.

One elementary school, Los Altos Elementary, has created an outdoor environmental science lab. A variety of corporate and university sponsors provided funding for the lab, and Annenberg funds ongoing professional development for the lead science teacher. The science teacher works with all children at the K-5 school. In a recent lesson on building natural habitats, she taught a combined group of kindergarten and second-grade students. First, students walked through the wetland area and discussed the worms, fish, frogs, birds, and turtles that might be living there. The teacher and students pointed out any creatures they found. During the remainder of the lesson, the children collaboratively built suitable habitats for worms, fish, tadpoles, and snails. At the lesson's conclusion, the teacher worked with the students to develop plans for the ongoing care of the creatures in their

new habitats. Through the environmental center, students were able to practice scientific procedures, including observing, collecting and organizing, classifying, inferring, and applying. In this setting, the teacher reinforced science content knowledge while allowing children to actively experiment with hands-on activities.

Fourth- and fifth-grade students at Cochrane Elementary have begun to create a series of outdoor learning environments in a project called Grounds for Learning. The project, which has seven phases to be implemented over several years, currently includes a Japanese Garden of Silence, a Hispanic Plaza of Knowledge, and an Insect Sanctuary. Art, math, and science teachers work in partnership with the students to develop a master plan for the project. Students use their math and science skills to plan the design and construction of each setting. Community experts advise the group to ensure that the settings are symbolically and functionally authentic. Parents, teachers, administrators, and other community volunteers collaborate to build each phase. Students benefit from the Grounds for Learning project in multiple ways. For example, one year they may help design and build a garden and then use the space the following year for a performance, a class, or a place for quiet reflection.

Contextualized Learning. When teachers build upon students' pre-existing knowledge, they are consciously using students' prior knowledge, skills, beliefs, language, and culture as a starting place for instruction. By building upon pre-existing knowledge, teachers contextualize students' learning. Teachers use familiar materials and illustrations to introduce students to new knowledge and to validate students' experiences as meaningful.

A seventh-grade language arts teacher uses his own Hispanic background as a way to connect his mainly Hispanic students to reading and writing. He and a local Latino writer, Alvaro Saar-Rios, write poems and stories about their own experiences growing up and read their work to the young boys. They encourage the boys to write about their own experiences, not only to develop their skills but also as a way to engage the boys in school. The boys write in their journals and read their work to each other. Some boys have read their work in public settings, such as local bookstores. This teacher describes the goal of the writing project and illustrates one boy's engagement:

The goal with Latino boys is to draw them into the school community. The boys who participate in the Latino Boys Writing Group are those kids who sit back in the classroom, the ones who kind of fade into the

background if you don't engage them. They are not necessarily on a sports team or in a club or the chosen leaders. But these kids are part of our school population. They're valuable. So we invite them to the Latino Boys Writing Group to connect them with the school setting, to make them a part of the school. I'll call the parents if I have any questions or concerns. They have my number, and they'll call me at home sometimes.

Mario is an eighth grader now, and he's very involved with our writing group. But last year when the bell rang at 8:00 in the morning for student advisory, well, Mario wouldn't get here at 8:00; he would get here at 8:30 because he didn't figure advisory was important. He'd come with "bed head"—his hair all messed up—maybe he'd just woken up, wearing the same clothes he wore yesterday, the same uniform, all dirty.

Then he started coming to our writing group. He's a really bright student, and he loves to write. He started keeping a writer's notebook, but he would lose his notebook, and someone would find it and turn it in to me or to the other English teacher. Mario would do the work, but he was always thinking of something else. He wants to be a writer, and he writes about many fantastic things. He writes about his neighborhood and his parents; he writes about events in his life. He knows that a poet is not someone who just writes love poems. He wants to write about his life and he wants to share his story because he knows he has a story to tell.

We chose a line from one of Mario's poems as the title of our initial anthology, and he was really embarrassed because he's very modest. His writing consistently has come across very strong, and we have chosen him to read at literary meetings. He was awarded a hundred-dollar gift certificate for his writing. Mario is one of those kids who, if you engage him in school, will participate, will join the school community. I think that if it weren't for the Latino Boys writing club he wouldn't be a part of the school community, he would just come to school and do his own thing and leave and maybe not even come back.

Dual language teaching is another way to contextualize instruction. Dual language teachers support students' use of their native language while they simultaneously help their students learn a second language. A fifth-grade dual language teacher explains how dual language programs empower children:

Dual language is a very empowering program. It empowers the student. It empowers the child. They feel so good that they can go from one language back and forth to the other

with such a natural ability. They can think in one language and when they need a word from the other language, they can use that too. It raises the child's self-esteem. It raises their pride in their culture and themselves and what they can do.

Learning in two languages doesn't slow students down. On the contrary, it gives them a broader base of knowledge from which to make sense of whatever new concept they're learning in either language. It is amazing to see this manifestation in your classroom of children just taking off in two different languages. Research supports what we see in the classroom. There is hardcore data that shows dual language instruction does not hurt the student but enhances the student's ability to learn.

Annenberg teachers also contextualize instruction by encouraging students to examine complex social issues. For example, a middle school teacher trains students to serve as peer leaders in their guided advisory classes. Working with ethnically, economically, and academically diverse students, this teacher devises lessons about prejudice and stereotyping. She describes the lesson:

In this lesson I wanted students to become aware of things they see every day: People being made fun of because they are different, people not being accepted for who they are, prejudice, racism, bigotry, anti-Semitism. I ask the students to work in groups to come up with a basic definition of these different terms describing prejudice. Then I give them a short amount of time to develop a skit to illustrate the word. Using a skit, the students present the information in a visual way. It's much more powerful than just talking about the words.

The students have to use their own ideas about prejudice based on what they've seen, heard, and experienced. After these student leaders become comfortable with the topic and the lesson, then they teach it to the other kids in their advisory class.

It was hard in the beginning to get our student leaders comfortable with the idea of talking about heavy topics. It started off small, talking about little things, things that make you happy and sad, things that are good in your life, things that are frustrating. Eventually, the students begin to bond since they see each other four days a week. But they also see each other in the halls since their lockers are all together. There's constant interaction throughout the school day. It makes them become like a family.

Summary

Annenberg teachers use innovative instructional practices

to help their students develop deep understanding of academic content and social issues. Through arts-infused, dual language, and integrated curriculum instruction, teachers engage in practices supported by the latest research on the science of learning. Furthermore, Annenberg teachers create learning environments that allow students to take more responsibility for their own learning. In these learning environments, students collaborate with each other and participate in in-depth, active learning activities. Additionally, students learn in contextualized environments that allow them to connect their prior knowledge, language, and culture to new subject knowledge and skills. Ultimately, our research in Houston Annenberg schools confirms that this array of teaching and learning strategies is leading students to deeper levels of understanding and is significantly improving their academic achievement.

EFFECTS ON FAMILY AND COMMUNITY

Annenberg schools have created significant links with both parents and the community. For instance, local artists have visited schools to teach students special art classes. Schools develop outreach centers to work with parents and others in the community on issues such as parental adult literacy. In general, schools use Annenberg funds to strengthen their relationships with parents and other members of the community and to focus on educating both families and students.

COMMUNITIES INVOLVED IN LITERACY

A significant influx of new immigrants to Houston makes development of literacy a priority for area schools. Some schools recruit community volunteers to help students lacking literacy skills. For example, one school adopted an intervention program called BEARS (Buddies Engaged in Academic Reading Success). Known the previous school year as the "Help America Read" program, BEARS provides in-school tutoring and individualized instructional attention to first- and second-grade students who are struggling to learn to read.

The school has drawn on Annenberg funds to purchase training materials for the program and the didactic materials used by the tutors. These contributions to the program, in addition to City of Houston and federal Title I funds, have enhanced the instruction students receive during their one-on-one tutoring sessions. Both the training sessions and the didactic materials made significant contributions to the delivery of high-quality

instructional interventions. Judging from frequent observation of the tutors in action and interviews with tutors, teachers, and the director of the program, the interventions were extremely well organized and supported. The BEARS program proved to be a strong⁴ intervention program capable of delivering high-quality, one-on-one reading instruction.

Annenberg funds were used to train 20 tutors for the program. The program's director conducted two extended training sections in mid-October. If after these two training sessions a tutor still did not feel comfortable or adequately prepared, one-on-one training for the tutor was available. A master Reading Recovery teacher, the program director contributed greatly to the many strengths of the tutoring program.

The team of 20 volunteers was made up of local community members and Serve Houston workers⁴. Members of the local community were actively recruited through newsletters and communiqués with local civic and religious organizations. At least two volunteers reported that they learned about the program from the school district's Web page. Although several of the volunteers were retired teachers, most were not. In interviews with the tutors, all of the volunteers reported that the initial training sessions were extremely important, and most stated that the session provided them with intervention strategies that they used throughout the year.

Annenberg funds also purchased training supplies and materials for volunteer literacy training. At the training sessions, each volunteer received a three-ring binder containing not only important information about school policies, but also substantive ideas, strategies, and activities for tutors to try with the children. For example, this information included a list of prompts that a tutor could use if a child struggled to read a passage of text, such as, "Does that make sense? Try it again," and "Is there a part of that word you can read?" The volunteer tutors also received lesson plan outlines and several initiation-type activities. These initiation activities included a "Student Inventory" designed to help the tutors learn more about the children in order to establish a closer rapport with each child.

The training supplies also included multiple copies of the Pinnell and Fountas 1997 book, *Help America Read: A Handbook for Volunteers*. Each volunteer was given a copy of the book and encouraged to read it. In interviews with tutors, several stated that this book not only provided them with useful information and suggested activities, but also helped them feel more comfortable with the idea of tutoring struggling readers. All the tutors seemed to take

⁴ *Serve Houston* is a local chapter of the AmeriCorps Program.

their role extremely seriously. However, they also all seemed to understand that tutoring struggling readers is a complex endeavor involving much more than simply reading with children.

The training required of tutors prior to their initiation into the tutoring program was consistent with suggestions made by the National Research Council in the book *Preventing Reading Difficulties* (Snow, Burns, & Griffin, 1998). The council report's authors maintain that extensive training and expert support of volunteers are integral to a successful supplementary intervention program: "There is an important relationship between skill of the [tutor] and the response of the children to early interventions. Effective intervention programs pay close attention to the preparation and supervision of teachers and tutors" (p. 273). The authors go on to state unequivocally that tutoring programs typically have very little impact on students if the tutors are poorly trained and supervised. The report further suggests that since time spent with poorly trained and supervised tutors takes the place of time spent with the regular classroom teacher, inadequate tutoring programs may actually do more harm than good.

The BEARS tutoring program is loosely organized around the Reading Recovery model (Clay, 1985; Pinnell, Deford, & Lyons, 1988). The intervention strategies presented to the tutors during their training sessions were consistent with those employed by Reading Recovery teachers. A review of the lesson plan outline reveals that many aspects of a 40-minute tutoring session are derived from the Reading Recovery model. Although tutors were never expected to exclusively follow this lesson plan outline during every tutoring session, frequent observation confirmed that most tutors incorporated the basic structure of the lesson plan outline into their work with children.

Each child's twice-weekly tutoring session includes 10 minutes of "Rereading" time, during which tutors ask students to go over previously read books or passages of text. This time is followed by a 10-minute "Word Study" time involving letter and word identification activities. Word Study is followed by an eight-minute "Writing Time," during which the children write words, phrases, and even short stories, focusing on hearing the sounds of words. Each tutoring session concludes with "New Reading," the introduction of a new book and, often, guided support through a reading.

Throughout the year, the director of the BEARS program went to great lengths to ensure that the tutors were employing sound intervention strategies during tutoring

sessions. Her efforts also ensured that the intervention was consistent with the types of instruction delivered in the classroom. In this way, instruction in the tutoring sessions built upon and extended regular classroom instruction. This aspect of the tutoring program is consistent with the National Research Council's recommendation that any supplementary instructional program deliver instruction "in a way that makes connections to the daily experiences that the child has during reading instruction in the classroom" (Snow et al., 1998, p. 236). As the director explicates,

All teachers help the tutors so that the tutors can continue what the teacher is doing in the classroom. We don't just pull them out, take them out, and they don't know what the tutors are doing. Tutors are encouraged to talk to teachers. They also use the day-readers [texts] that are used in the classroom, so the instruction is connected.

The tutors were required to record their interventions on the lesson plan forms after each tutoring session. Recorded information included books read during each tutoring session and the level of the book, and specific words or sounds that gave the child trouble. This lesson plan form allowed the BEARS program director to monitor the tutors' work and effectively support their intervention efforts. This continued and sustained support usually took the form of detailed notes for each tutor suggesting a book or a specific intervention strategy related to issues from the tutor's previous session. Even though the tutors received two days of training, the director realized that this was not sufficient, explaining, "We continue to train constantly, continually." In an interview, she expanded upon this topic:

The tutors leave their finished lesson plans in a file called "completed lessons," and I go back and refer to that file in order to determine what type of help we might be able to give those students further along... When students are really struggling, I'll go in and teach the child while the tutor observes. I assess each particular child's needs and then help the tutors.

First- and second-grade participants in the tutoring program were selected by their classroom teachers. Teachers selected students on the basis of classroom performance and the results of various reading assessments and reading inventories. Teachers administered a beginning-of-the-year assessment of literacy skills using the Developmental Reading Assessment (DRA). Working in vertical teams (kindergarten with first grade, and first with second grade), teachers identified the students most in need of early intervention in reading. However, students receiving

special education services or already placed in the first grade Reading Recovery program were not eligible for the tutoring program. This guideline is consistent with the National Research Council's statement that "although volunteer tutors can provide valuable practice and motivational support for children learning to read, they should not be expected...to instruct children with serious reading problems" (Snow et al., p. 12).

The 20 volunteer tutors served, at one time or other, a total of 49 students. However, 11 of these students left the program, either because they moved or because they began receiving more intense intervention through special education or Reading Recovery programs. Twenty-eight of the children were in first grade (or approximately 20% of the first-grade children), while the remaining 21 were in second grade (or about 16% of the second-grade children.) The BEARS program also serves bilingual education students; two volunteers conducted their tutoring sessions in Spanish.

The teaching supplies purchased with Annenberg funds included pencils, a dry-erase white board and markers, magnetic letters for use with a metallic board (or cookie sheet), glue, scissors, and index cards. The volunteer tutors used these materials to deliver instruction during tutoring sessions.

Overall, the BEARS tutoring program appears to be a model tutoring program. While the program's director deserves considerable credit, this program was undeniably enhanced by the contributions of Annenberg funds. The training sessions proved immensely valuable to the tutors in their work with children, and the didactic support materials provided to tutors enhanced the overall quality of the intervention. While it would be an overstatement to declare that every tutor delivered "exemplary" instruction during every tutoring session, it is not an overstatement to say that more often than not the children in the BEARS program received good-quality, informed, and individualized instruction.

IMPACT OF THE BEARS TUTORING PROGRAM

To determine whether the BEARS in-school tutoring had a statistically significant impact upon the reading progress made by students involved in the program, a statistical analysis of first-grade reading data was conducted utilizing the SPSS software program. Because many second-grade students "topped out," or scored at the highest level, at the beginning of the year in portions of the assessment battery, the data could not provide

statistically valid comparisons between students who attended the BEARS tutoring program and those who did not. For this reason, only first-grade reading assessment data was statistically analyzed. Data in this analysis were generated through teacher administration of the Developmental Reading Assessment (DRA) at the beginning and end of the year. The DRA consists of a battery of three assessments that determine a student's reading level, word identification level, and writing vocabulary level.

To assess reading level, students are presented with "leveled" texts. The reading level is assigned when a student can no longer fluently read a "leveled" passage of text at a 95% accuracy rate. The reading levels range from 0 to 44. The second DRA assessment, the word test, requires students to read a standardized list of words printed on flashcards. The initial words are simple, single-syllable, and phonetically regular, but become progressively more difficult. A level is assigned when the student misses three consecutive words. The word identification levels range from 0 to 20. The final portion of the DRA, the writing vocabulary level, has student write words from a standardized list. The difficulty level of the words increases and a level is assigned when the student misspells three consecutive words.

To statistically analyze the impact of the BEARS program upon first graders' reading abilities, a comparison was made between beginning- and end-of-the-year scores for each first-grade student. For each student, a "gain score" was calculated by subtracting the beginning-of-the-year assessment scores from the end-of-the-year scores for all three portions of the assessment. Then the gain scores of the children who participated in the BEARS tutoring program were compared to the gain scores of the children who did not attend the BEARS tutoring program.

Table 46 demonstrates that the mean gain scores of the students in the BEARS tutoring program closely approximated the gains made by students who did not receive tutoring. In the case of the Word Test, children in the BEARS tutoring program demonstrated larger gain scores than students that did not receive tutoring.

To determine whether or not the difference in mean gains scores on the Word Test portion of the DRA was statistically significant, further statistical analysis was done. A two-tailed t-test applied to the Word Test data determined that the difference was statistically significant at the .05 level⁵. This suggests that the tutoring program

⁵ A two-tailed test for equality of means determined 67 degrees of freedom, and a significance of .002. Equal variances were assumed.

had a positive impact upon the students' word identification skills.

Table 46: Gain Score Comparisons

Assessments	Number of Students ⁶	Mean Gain Score	Standard Deviation
Reading Level:			
No tutoring	50	16.66	.983
Tutoring	19	12.79	4.063
Word Test:			
No tutoring	50	8.98	5.434
Tutoring	19	13.58	4.525
Writing Vocabulary:			
No tutoring	50	32.18	12.569
Tutoring	19	31.16	13.192

NIXON ELEMENTARY

Schools also are available to parents and community members for educational purposes. Using school facilities in the evening for parent and community events is another way schools make an impact on the community and reduce isolation. For example, Nixon Elementary is open in the evenings for a variety of parent and student programs. The school organizes events such as Family Literacy Nights, ESL/Bilingual Family Nights, Pre-K "Make and Takes," "Open Evenings" and Project PRAISE (Parents Recruited for Active Involvement in Students' Education). The "Open Evenings" Program began in the spring of 1999, continued every Monday evening, September through May of the 1999–2000 school year, and operated during the spring semester 2001. Nixon staff members received a stipend to teach and assist on these evenings, and parents who attended received books and other instructional materials. Parents and students participated in classes in art, computers, crochet, pottery, physical fitness, reading, math skills, and library checkout. According to staff members:

This has broken down the isolation between the school and the community. Parents now see the school as a place where they belong. The school is perceived as a resource for parents and not just a place for kids. Parents feel really comfortable here at our school because they are exposed to so much, and have access to so much here. It is like a second home to some of them. (Nixon Elementary Case Analysis)

Nixon staff members believe that evening events help to form partnerships among students, staff, family

and community, partnerships that enrich student achievement.

CLARK/MATTHEWS LEARNING COMMUNITY

One of the learning communities used Annenberg funds to increase outreach efforts with the community. The initial planning grant for Annenberg allowed this learning community to complete a neighborhood needs assessment. This assessment, conducted in eight nearby apartment complexes, sparked the implementation of various parental involvement efforts. Two notable programs were created: an Outreach Center and a job-training center for parents.

The Outreach Center started last year through the combined efforts of a former VISTA volunteer and the Parent Educator at Clark Elementary. The basic goal of the center is "to build community." This description is deliberately broad, designed to meet needs as they arise. The Center director, who sees herself as a facilitator, encourages volunteers to get involved. For example, the registrar at Clark said she would like to come once a week during the summer and read stories to the younger children. The Center director told the registrar that she would make flyers, advertise the program, get snacks, and set up the room. Programs at the Outreach Center are numerous and varied, frequently changing or developing to meet evolving needs.

One primary program is the after-school homework drop-in center that the Center director runs with the help of one of the residents of the apartment complex. Together they supervise children, help them with their homework, give them an after-school snack, and provide care and even a dose of "tough love" when necessary. Many of these children go home after school to empty apartments. The Center director works closely with the school on this program. Since the Center is actually located in the clubhouse of the apartments, she hopes that it will become an entry point for parents and community members who might feel uncomfortable going to the school building.

The Center director also coordinates speakers from various social service providers, such as teen pregnancy prevention, law enforcement, and drug awareness programs. The Center also houses an ESL program, Sunday worship services, and a summer food program sponsored by the City of Houston. In addition, the Center director has started a monthly residents' meeting to voice concerns about the property and to take appropriate action. She sees this as a starting point—if residents feel

⁶ Students assigned to special education and students who did not have both beginning- and end-of-the-year assessment data due to mobility or absence were excluded from this statistical analysis.

successful in implementing change where they live, they may feel more comfortable visiting the school and expressing themselves in that arena.

This year it was clear that many children were unable to participate in the after-school program sponsored by 21st Century. The director of Outreach Center reached this conclusion after interacting with the children and their families. At the beginning of the school year, the only after-school program at Clark was for third- and fourth-grade students. Some of these students were unable to attend the program because they were "latch-key" children responsible for younger brothers and sisters.

The school responded by creating a special program for the younger siblings of the 21st Century after-school participants. These first- and second-grade students complete their homework in a supervised setting, and then they participate in other activities such as arts and crafts. Once the school program began, attendance dropped at the Center-run after-school program, confirming that the program had indeed clearly identified a community need. The Outreach Center is now planning a summer program, which will include a city-sponsored free lunch program while school is not in session.

The Outreach Center is an interesting case because the initial Annenberg needs assessment helped to enable the partnership between the school and the outreach center. The Annenberg influence stemmed less from initial funding than from the Annenberg reform's emphasis on community collaboration. Since Clark is a Lamplighter school, however, the lack of available funds prevents the outreach center from reaching its full potential.

The job-training center is housed at Clark and offers guided computer classes taught by a computer student from a local college. The sessions began in February and are offered on Tuesday and Thursday evenings from 6 to 8 p.m. On average, eight parents attend each class. The program currently provides beginning instruction in Word, Excel, PowerPoint, and Access, with plans to expand and offer Web design and more intermediate and advanced topics. The job-training center is open from 8 a.m. to 5 p.m. during the week for parents who wish to use self-paced CD-ROM tutorials.

This job-training center caught the attention of school board members. The school board invited the Clark/Matthews Learning Community to make a presentation at the May board meeting about parental involvement programs, including the job-training center and Outreach Center. This is the first time in its 10 years of operation that Clark has been invited to make any kind of presentation.

Board members were interested in both programs and the possibility of replicating them at other campuses.

COCHRANE ELEMENTARY

Cochrane Elementary also uses its community as a resource in order to introduce students to a variety of enriching experiences. Cochrane students have the opportunity to learn teamwork and build relationships not only with other students, but also with wonderful role models, their teachers, and experts in their community. Educators at Cochrane strive to build a bridge between the school and the community through its Grounds for Learning Project. There is still much work to be done with the community, but Cochrane has made great efforts this year to meet the needs of a diverse culture by giving students a variety of meaningful, high-quality experiences relevant to the world in which they live.

The Annenberg Challenge has helped create active partnerships between teachers and universities and local museums. What better place for students to study their culture and heritage—and life—than among people within their own community? The students can collaborate with and share the experiences of experts in the field of art. They can also involve their parents and guardians. The inclusion of community role models has become a valuable asset to Cochrane Elementary.

Part of Cochrane's Grounds for Learning Project was a narrative and art-making project. Supported in part by the Houston Annenberg Challenge, the Kraft Foundation and a museum partnership, the narrative and art-making project focused on the past, present and future of Cochrane Elementary. A mural painted during the 1999–2000 school year represents the "present," and the "past" will be portrayed in two quilts, one of which will be included in a national traveling art exhibition. To set the project in motion, many community members visited the school and shared their experiences growing up in the Cochrane neighborhood. Students listened intently for common themes in these oral histories. Then, through words and pictures, they began to depict the cultural history of the school's neighborhood. The narrative history/quilt project, like so many activities at Cochrane, is a long-term endeavor—students from different years and classes will contribute uniquely designed quilt pieces.

The Grounds for Learning project also included two outdoor learning spaces maintained by students with teacher guidance, The Japanese Garden of Silence and The Insect Sanctuary.

During 2000–2001, the Grounds for Learning Project added The Hispanic Plaza of Knowledge, a student project

celebrating Hispanic contributions to local history and culture. During the spring students worked very hard collaborating, mapping and planning murals in the style of traditional Mexican muralist Diego Rivera. Students took field trips to the Alamo and a Spanish mission, and the architectural influence of both historical sites is evident in the students' images, which they felt represented the Hispanic influence at their school. Mariachis and student dancers from a nearby school provided authentic entertainment at the opening of this enduring learning space.

Cochrane Elementary is very fortunate to have a strong partnership with the mayor's initiative for after-school activities. The school received a grant that supports school activities beginning immediately after the bell rings at 2:40 p.m. Cochrane is not just alive with activity during the school day—it is also a vibrant, secure place for many students after school. Students look forward to basketball, tutoring, piano, dance, football, or art. If students are interested in participating in these activities, they contact the sponsoring teacher to have their name added to a list. School buses provide transportation home for students when activities end at 4:30 p.m., Monday through Thursday.

The sports program within the after-school initiative is a huge success. The school developed a partnership with the local sports association, which benefited in turn from increased student participation. Football is very popular in the fall, basketball in the spring. This year Cochrane had 13 intramural basketball teams, an increase in number over last year. Teachers serve as coaches. Cochrane's students love working with their teachers in this different arena. Competition and team spirit are high. Teams play against each other within the school and also compete with other teams within the local sports association network. The students know that they have to maintain good grades and exhibit proper conduct in order to participate. Team sports have been particularly well received by parents and the community. Parents, siblings, and other friends and family members make a solid effort to attend the basketball games and see Cochrane students in action. In doing so, they heal past distrust among the Cochrane community of the school system.

The second-largest component of the after-school initiative is its tutoring program. Teachers within each community share responsibility for helping those students who are falling behind academically in language arts and math. Students participate in a variety of enjoyable learning activities. On one occasion, students rotated through three different centers, spending 20 minutes at each. One center concentrated on word problems by

having the students play "Frogger." Students drew a card that outlined a problem. When they solved it correctly, they could move their marker forward using the dice. The second center used the Frogger game with computation problems. The last center, reportedly the most fun, was called "Bowling." The teacher wrote several multiplication problems on the blackboard. Students had to solve them correctly before they could roll the bowling ball and knock down pins. This game generated much excitement in the classroom. Students were keen to hear the timer so they could take their turn at bowling. All the center activities were very motivational to the students, and they actually forgot that they were engaged in remedial learning.

Specialized activities like art, piano, and dance form part of the after-school program during certain times of the year and on specific weekdays. Not all activities are offered four days a week, which makes the fine arts programs even more special to participating students. The art classes were very well attended in the fall. The demand was so great that the teacher had to limit the numbers of students due to the lack of space. The piano and dance activities were also very inviting to students.

SUNNYVALE MIDDLE SCHOOL

Sunnyvale Middle School created significant programs to improve its relationship with the community and to foster community involvement in the children's education. One of the main methods Sunnyvale uses to personalize its learning environment is an "in-residence" program. Funded by the Annenberg Challenge grant, this program brings in professionals from various fields to work one-on-one with the students. These hands-on activities open up the school's community to include scientists, authors, mathematicians, artists, and other experts who offer the students real-world experiences.

In this type of authentic/problem-based learning environment, students develop a deeper understanding of context, as well as a refined sense of their own ability to contribute to specific fields. Once students develop a personal interest in a given field, they can pursue their individual curiosities and explore their unique talents.

This past year, the school's social studies department took advantage of the in-residence program in an original way. Students studied local history using the dual themes of bringing history to life and building community. Forty students participated in and videotaped a community symposium entitled "The History of Acres Homes Through the Eyes of its Leaders and Youth." The students then scripted and recorded questions that will be used in a video documentary of Ms. Ruby Reed, the first female African American principal in the district. Since Ms. Reed

was too frail to travel back and forth to the school, the social studies department, using video technology, created a "virtual in-residence" program.

The Annenberg-funded in-residence program was also highly successful within the fine arts departments. Since fine arts courses are elective—unlike the required set of academic courses—students seem to find hands-on activities and interactions with adults in their artistic field of choice especially captivating. Adult artists work with students enrolled in courses such as piano, strings, visual arts, dance, and theater. On numerous occasions, students and artists were observed working on unfinished projects well beyond the end of the school day. Upon completion, these murals, sculptures, and functional art objects were often proudly displayed throughout the corridors of the building.

One of the most fascinating visiting artists—for students and teachers alike—was Ms. Reese, a visual folk artist whose work is displayed in a permanent collection at the Smithsonian Institute. Ms. Reese shared her secret of how to make chairs out of recycled paper that can support the weight of an adult. The students created outrageous, stylized "sitting devices," each more fantastical than the next, and each expressing a distinctive artistic vision. One-on-one interaction between students and artists creates a learning space in which the students can ask questions, receive individual instruction, and observe the artists' own techniques. The positive effects of these interactions are strikingly evident. The students have created many amazing pieces. A male student sought us out to show us his creation, a beautiful glazed mask. When we complimented his skill, he gleefully agreed with our assessment of his talent. Throughout the year, as his mask won awards at district competitions, he proudly kept us posted on his accomplishments. His confidence, pride, and excitement are just one example of how personalization is working at Sunnyvale.

Another highly successful program at Sunnyvale reaches individual students, as well as expanding the school's community. The SNAPP program ("Students Needing a Pat and a Push") is a mentoring program organized by Sunnyvale's community liaison. Two days a week after school, students struggling academically or personally pair up with staff and community volunteers. These volunteers tutor the students in individual subjects and support the students' personal educational goals. Community volunteers come from all walks of life, and include school faculty, stay-at-home parents, university students, and local business professionals. Their time and interest in the personal achievement of struggling students is often the hit of individual attention that students need

to overcome personal and academic challenges. A university student who mentored a group of young boys struggling with math noted that several of the students' math grades/scores had increased; she felt that this was not so much a change in ability as a change in attitude. The students recognized that she was taking the time to take an interest in them, and they knew that week after week, she would be back to check on and encourage them. No excuses! A student herself, she was a model of what they could achieve.

To address the isolation between the school and the community, Sunnyvale created a full-time position and hired a member of the community as a "liaison." As a staff member and school representative, the liaison worked in a small office on campus. He developed and planned parent and community activities, met with both parents and faculty, and worked to open the lines of communication between the two. The liaison's main goal was to create activities that provided educational opportunities for parents as well as a supportive base for student learning. In addition, partnerships with members of the community supported student learning and strengthened the community's positive relationship with the school. Although it was anticipated that the school district would take over the funding of this position from the Houston Annenberg Challenge, this was not the case. As a result, the liaison will continue on a part-time, contractual basis during 2001–2002, underwritten by Annenberg funds.

This past year the liaison organized several successful events. The Sunnyvale Fall Festival included a book walk, games, refreshments, a clown, and a Harry Potter pumpkin decorating contest between the students of Sunnyvale and the elementary and high schools in its feeder pattern. Started three years ago, the event is supported by Annenberg funds, with the goal of opening up the school to the community and initiating incoming elementary students. Attendance was up again this year, and all attendees interviewed gave positive feedback on the event.

A new springtime event that generated much interest and participation was Sunnyvale's community cleanup day. Students, staff, and community members came together for a massive cleanup effort and a free chili-dog dinner. Everyone worked together to beautify the area, scouring the neighborhoods surrounding the school for trash, creating new landscaping at the school's entrance, and working to buff and shine the school itself. Immediately afterwards, Sunnyvale's dance and ROTC step-team students gave their annual public performance. This event was nothing less than a smashing success. The

smiles on the faces of parents and students alike showed the pride and joy they felt that day as members of the Sunnyvale community.

One of the liaison's most successful programs is free computer and Internet training instruction for community members, two evenings a week and on Saturday mornings. These open sessions allow the community access to Sunnyvale's state-of-the-art technology. A faculty member provides participants instruction and practice tailored to their individual needs. Several parents and community members have faithfully attended the courses, and word of mouth and community advertising by the liaison are expected to increase attendance. By increasing the technological savvy of parents and community members, the school hopes to raise their awareness of the vital role of technology in education and society. This should increase the likelihood that parents will make technology available in the home or at least encourage their children to master such resources.

Measures of success are largely qualitative with respect to this program—and they are overwhelmingly positive. Steady attendance and positive comments from both attendees and the instructor indicate that this program is fulfilling its intended purpose. At present, over half of the students at Sunnyvale do not have access to a computer in the home. However, several adults who attended the courses indicated on end-of-course surveys that they had already purchased or intended to purchase a home computer as a result of the skills they had gained in the course.

Other programs coordinated by the liaison include the SNAPP program, parent involvement days, parent seminars, a parent library, parent/student math and reading nights, a grandparents club, and parent and teacher "Cultural Conversations" groups. An at-risk readers program brings the *Houston Chronicle* free of charge into the homes of struggling readers, and the local public library sponsors cultural events and rewards students for pleasure reading. These projects provide an opportunity for families to become involved in the activities of the school and to meet with one another to learn about and discuss issues related to parenting and their children's education.

According to the liaison, some of the parent-centered programs have been more successful than others. Certain undertakings, such as the parent library and grandparents club, were scaled back when they did not generate the anticipated level of interest. Other programs, such as parent seminars and parent/student math and reading

discontinued. The liaison explained that there were several factors contributing to low attendance. Sunnyvale's reputation as a troubled school still lingers in some pockets of the community. In addition, the demographics of the area are undergoing a shift from African American to Hispanic, and from two-parent homes to single-parent families or to children being cared for by their grandparents. These shifts, he reflects, seem to have further complicated the issue. Furthermore, since Sunnyvale is a magnet school that serves the entire district, its students may not live nearby. A spirit of togetherness is difficult to generate among such a scattered and diverse group. Finally, the liaison notes, with so many school and non-school related activities taking place in the area, it is hard to find event dates that do not conflict with other community or school programs.

There are, of course, some parents who are extremely involved. For example, a father who works in the aviation industry has helped a group of boys build and launch their own rockets after school and on weekends. Parent participation in organizations such as the PTO has increased dramatically, from 3% to 19%. Certain specific school events, such as open house nights and fine arts performances, have continued to see increased attendance. Generally speaking, most of the student-centered activities have generated support and success. When it comes to the daily life of the school, however, parents and community members are not as deeply involved or supportive as they could be, and rarely set foot on campus. Some of the parties interviewed attribute this to an unfortunate "attitude prevalent among many adults" that as children grow older, the parent's role in and around the school becomes less central (e.g., elementary schools tend to have more parent participation than middle schools, which have more than high schools.)

Parental involvement is just as crucial as ever for Sunnyvale's young teenage students, and a more consistent parental presence could only improve communication between parents and teachers, and thereby increase instructional effectiveness. Informal conversations with parents indicate that, although they claim commitment and shared purpose with the educational goals of the school, few have sought out any sort of detailed information on these issues in general, or with respect to their individual child. Some comment that they have been discouraged from entering the campus during the school day. However, administrators seeking more parental involvement are baffled by such comments.

Programs initiated by the liaison this past year offered both information and support to parents. However, parents did not respond en masse to several of these efforts. As the

contracted facilitator, the liaison's greatest challenge will be to discover more effective ways to encourage and sustain the voluntary and involved participation among parents and other community members that will lead to an atmosphere of "shared responsibility." One indicator of the need for continued progress was a small number of after-the-fact, accusatory confrontations initiated by parents and directed at staff. While these confrontations were infrequent, they were observed on campus throughout the year. This could be dismissed as a "sign of the times"—family structure has deteriorated and parents dodge accountability while asking teachers and administrators to "wear too many hats." However, such occurrences must be given due consideration, especially in the context of a school that is working so hard to increase parental involvement. There is still work to be done to raise parental interest and to fully incorporate parents into the "community of learners" on a more involved and consistent basis.

RAVEN MIDDLE SCHOOL

Raven Middle School has developed several important community partnerships that benefit students. The school has played an active role in the development of the Center for Professional Development and Technology at the University of Houston–Downtown. This teacher training facility places several pre-service teachers in classrooms at Raven for their student teaching experience. Raven partners with Rice University on technology projects such as an in-house video library for teachers. The school hosted one of the first Chuck Norris Kick the Drugs out of America programs—several hundred Raven students have been trained in karate and participate in black belt competitions and ceremonies on campus. Raven also has a dynamic fine arts program that includes band, choir, art, drama, Mariachi, and photography. The Mariachi program, instituted by a Latino principal, operates in conjunction with Multicultural Education and Counseling through the Arts (MECA). MECA coordinated the wall mural projects that brighten the hallways of the school.

Raven's principal instituted a Public Relations committee to oversee school climate and culture, and created a monthly school calendar and newsletters (both in Spanish and English) that are mailed to students' homes and to community members. Raven's community-based project involving area WWII veterans was featured in the *Houston Chronicle* "This Week" section and the local Heights newspaper.

According to the principal, "Raven Middle School is the best-kept secret in Houston ISD." The principal shared the innovative reforms unfolding at her school with a news reporter from KUH 88.7FM, a local radio station,

explaining that Raven is "expanding outside of the walls of the traditional classroom and trying out new teaching methodologies that would not just add to the existing school curriculum, but enhance the state objectives." The reporter spent the morning filming the Critical Friends evaluation process, and aired a broadcast later that afternoon. The Critical Friends visit put Raven Middle School on the community map. It was a very positive experience for a fledging school preparing to fly beyond expectation. However, Raven still enjoys little community or parental support.

LONGVIEW HIGH SCHOOL

Other programs of the Annenberg reforms build the lifeworld of students at Longview High School. Advisory period, held weekly during the year, continues to benefit from curricula developed via the Anti-Defamation League's anti-racism training and activities, as well as other topics relevant to students' lives. The EAST Center builds community by giving all students access to technology and offering computer classes to parents and community members. Longview seniors can volunteer to complete a Capstone Project. For this project, students select a research topic, develop a paper, deliver an oral presentation, and complete a portfolio to document their work. The Capstone program, though still small, provides a powerful, authentic learning experience for seniors who choose to produce these well-designed exhibitions of learning. Camp SOAR, a summer camp for elementary and middle school students, has earned rave reviews. Camp SOAR is an enjoyable place to visit, filled with boisterous, happy children. Most school reform projects have both supporters and detractors. However, Camp SOAR appears to have no detractors. Its importance and success has generated considerable support from community institutions such as the parks department and small businesses around the school. People often say that if just a single reform project outlives the Annenberg funding, this will be the one. It is a complex program that reaches out to the community by providing summer play and learning for children aged eight to eleven. Camp SOAR also provides opportunities for Longview students to obtain good jobs, to mentor younger children, and to be mentored themselves by Longview faculty. Informal relationships grow between school staff, present and future students and families. This year, the program served an increased number of students, and it remained free of charge, serving all families, regardless of income level.

EFFECTS ON SYSTEMIC CHANGE

INTRODUCTION

The Houston Annenberg Challenge continues to develop an infrastructure to introduce and sustain school reform in the Houston metropolitan area. Annenberg Challenge leaders use different strategies to accomplish systemic change. For example, they use specific training programs such as Critical Friends, they have engaged in partnerships with higher education institutions, and they have connected with school districts to improve high schools through proposals to restructure schools.

CRITICAL FRIENDS STUDY GROUPS

Critical Friends Study Groups provide an avenue for teachers and administrators to create what researchers call "professional learning communities." In this program, teachers collaborate with each other to deepen their knowledge of academic subject matter and to examine their teaching practices.

In addition, the Houston Annenberg Challenge offers Critical Friends Group training to Houston area schools and universities. This training is not limited to schools that have received direct funding from the initiative. Houston Annenberg provides training for coaches, principals, and Critical Friends Group members. To date approximately 100 metropolitan schools have introduced the Critical Friends program on their campuses. The Houston Annenberg Challenge has trained 300 coaches in both Annenberg-funded and non-Annenberg-funded schools. Teachers and other educators attend New Coaches' Seminars to learn how to form a Critical Friends Group. Principals attend seminars to learn how to support Critical Friends Groups in their schools. Members of Critical Friends Groups attend training sessions during the school year and in the summer to learn how to address individual group needs and to explore a range of topics related to integrating Critical Friends activities with the mission and vision of the schools.

K-5 MATHEMATICS SPECIALIST PROGRAM

Funded by a partnership between the Houston Annenberg Challenge, ExxonMobil, and the Houston Independent School District, the K-5 Mathematics Specialist Program seeks to improve student learning in mathematics by strengthening teachers' grasp of content, their understanding of how children learn, and their abilities to best gather evidence about student learning. Piloted in eight elementary schools in HISD in 2000-2001, the initiative will expand to 13 schools in the district in 2001-2002.

The kindergarten through fifth grade initiative engages mathematics specialists, teachers, administrators, and parents in research-based, nationally recognized professional development. Through this process, teachers teach students how to make sense out of the numbers they see. Together, teachers and specialists create classroom opportunities for all children to acquire math knowledge beyond rote memorization.

Math Specialists complete an intensive professional development course, "Developing Mathematical Ideas," as an introduction to the program. Math Specialists subsequently facilitate training sessions for classroom teachers in the district. Additionally, Math Specialists and other leaders attend ongoing professional development during summers at the Teachers' Institute at Mt. Holyoke College in Massachusetts.

Math Specialists work in classrooms daily, co-teaching mathematics lessons and working individually with children. Additionally, the specialists provide math workshops for teachers, host Family Math Nights, and organize special events such as student math contests.

Additionally, this math initiative engages parents in the process of their children's learning. During such activities as Family Math Night, parents enhance their own math skills. Also, teachers show parents the math lessons and concepts their children are being taught at school. The purpose is to encourage parents to work with their children at home using similar strategies. Schools schedule these activities for single evenings, and sometimes a group of schools may collaborate to offer a series of two or three sessions.

A Community Advisory Committee formed specifically to support this initiative encourages parent participation, as well as participation of the wider community, including representatives of local institutions of higher learning, informal education organizations, and the state education agency. Moreover, the Community Advisory Committee seeks to increase the visibility of the program in order to build a network for public advocacy of a seamless focus, concentration, and connection of mathematics education in public schools in the Houston area. To achieve this goal, the committee supports the expansion of the initiative into additional schools in the HISD and into other districts in the metropolitan Houston area.

Houston's Math Specialists form part of a national network of specialists who study how young children learn math and how teachers can most effectively assess students' understanding of and ability to use mathematical concepts. This math initiative's goal is to raise awareness

among all sectors of the community about national, state, and local standards for mathematics education, and about national organizations that support those goals (e.g., Curriculum and Evaluation Standards for School Mathematics, National Council of Teachers of Mathematics Principles and Standards). This initiative has been implemented in 30 U.S. states and in The Netherlands.

PARTNERSHIP FOR QUALITY EDUCATION

The Houston Annenberg Challenge, four local universities, six school districts, and one community college have joined forces to create a partnership for the purpose of restructuring teacher preparation programs. The goal of the initiative is to create a unified, seamless approach to developing skills and content knowledge for teachers, beginning with their college years and carrying through the first two years of teaching and beyond. This partnership also will create a regional faculty of outstanding educators, business partners, and members of the community; integrate technology into teacher preparation, and involve Content Specialists as equal partners in teacher preparation.

Partner colleges and universities include Houston Community College System, Texas Southern University, University of Houston, University of Houston–Downtown, and the University of St. Thomas. The six participating independent school districts are Aldine, Alief, Houston, Humble, North Forest, and Spring Branch.

During 2000–2001, teams of faculty from the Colleges of Education and Arts and Sciences worked as collaborative teams with representatives from the six partner school districts to revise curricula and courses in the teacher preparation programs of the participating institutions of higher learning. The first redesigned courses will be piloted in the fall of 2001. Professors from the partner colleges and universities will teach the freshman and sophomore courses while modeling the teaching techniques they wish the students to learn.

The Partnership for Quality Education adopted a number of comprehensive goals for the initiative, seeking to:

- ✍ Deepen teacher knowledge of subject areas by closing the gap between theory and practice and by creating learning environments that exemplify the most current and effective teaching and learning practices,
- ✍ Decrease teacher isolation and to increase teacher retention using peer support groups and opportunities for personal and collaborative ongoing professional development,

- ✍ Integrate technology throughout the teacher preparation curriculum so that teachers have the knowledge and skills to effectively use technology as both a teaching and learning tool,
- ✍ Incorporate public schools as active partners in the research and evaluation of educational practices and programs, and
- ✍ Provide a mechanism to support ongoing reform by creating a Regional Faculty and Faculty Academies.

The Partnership for Quality Education clearly intends to create a mechanism for an ongoing—rather than periodic—review and reform of teacher preparation programs. To support this continuous review and revision process, the Partnership for Quality Education is creating a Regional Faculty. The Regional Faculty model provides an organized structure for education, business, and community experts to advise college and university teacher preparation programs and public school restructuring efforts. This effort is supported in part by a \$3.9 million grant from the U.S. Department of Education.

REFORMING SCHOOLS INITIATIVE

As the Houston Annenberg Challenge moved into Phase II of its implementation in early 2000, the organization moved beyond individual participating schools to create programs to initiate systemic change. The Transforming High Schools initiative envisioned a restructuring of metropolitan Houston high schools to enhance learning and to provide students with the skills and knowledge they need for the 21st century. In January 2000, the Houston Annenberg Challenge began a partnership with the Houston Independent School District to develop a pilot program in one HISD high school.

During Spring 2000, a team of parents, faculty, and community members joined Houston Annenberg staff in planning the pilot program for the school. By the end of the school year 2000–2001, the planning team—which now included students—had created an implementation process model, established a set of project goals, defined organizing principles, identified areas of needed improvement, and shared lessons learned.

This collaborative of school insiders and external human resources from education and business focused on three essential cornerstones: Re-structuring, Re-organizing, and Re-culturing. The planners believe that Re-structuring of teaching and learning practices and of existing policies and procedures is necessary to create an environment able to sustain a learning organization. The second concept of Re-organizing affects the entire organizational structure of the school. Schools redefine the roles of faculty and

administrators, the size and purpose of functions in the school, and measures of performance. Finally, Re-culturing the school involves re-examining beliefs, values, and assumptions of all members of the school community. This provides the schools with a common set of values based on supporting success for all students.

At the same time the work at the high school was taking place, the Carnegie Corporation of New York invited the Houston Independent School District to apply for a grant to restructure all secondary schools in the district. Since the aim of both initiatives was the same, the pilot project at the Houston high school became the pilot project for the Carnegie Corporation grant. From the experience at this school, Houston Annenberg Challenge staff created a planning document for the remaining 23 high schools in HISD to use to prepare their individual Carnegie grant proposals.

SCHOOLS FOR A NEW SOCIETY: RETHINKING HIGH SCHOOLS

The Houston Annenberg Challenge and the Houston Independent School District formed a partnership to improve the district's 24 comprehensive high schools. With funding from the Carnegie Corporation for planning, schools are engaging in the first phase of the initiative—developing plans to manage and implement changes within the schools, including creating smaller units on each campus. In the second phase of the initiative schools will formally apply for implementation grants from the Carnegie Corporation.

In August 2001, the Steering Committee submitted to the Carnegie Corporation a proposal for Phase II funding of this high school initiative. This proposal details a formal plan of action and a blueprint for changing HISD high schools. To prepare the proposal, the Steering Committee met with principals, teachers, students, parents, and representatives from the community and area businesses to identify the necessary skills and knowledge needed for high school graduates to compete in the 21st-century workforce and to pursue their higher education. Additionally, the Steering Committee held extensive focus groups with members of institutions of higher education, businesses, and educational service organizations to determine how to develop the necessary knowledge and skills.

Ultimately, the Committee produced a document entitled the Graduate Profile. According to this document, all high school graduates must be effective communicators, proficient problem solvers, independent workers/thinkers, cooperative team members, efficient

knowledgeable about global issues.

During the planning phase, community action teams of parents, students, teachers, administrators, and educational service organizations prioritized potential barriers to implementation. These teams identified five key priorities for schools' consideration during implementation:

- ✍ Linking students to a personal adult advocate who could discuss personal or school-related issues,
- ✍ Ensuring that courses are related to real-world applications,
- ✍ Opening opportunities for students to demonstrate what they know,
- ✍ Integrating meaningful and ongoing technology usage into professional development, and
- ✍ Creating networks of support for the schools from the district, the school board, and recent graduates.

PASSPORT TO SUCCESS

The Houston Annenberg Challenge designed an after-school program called Passport to Success that is intended to provide an outstanding opportunity to improve academic performance of participating children in the Houston metropolitan area. From 3 to 5 p.m. each school day, children will participate in activities ranging from homework and computer labs to art projects, journal writing, and leisure reading. This program is being piloted at eight elementary and middle schools located in Houston and North Forest Independent School Districts. Funding for this pilot initiative comes from the Annenberg Foundation and the United Way of the Texas Gulf Coast.

The Passport to Success initiative provides an enriched learning environment, not simply an extension of the school day. Goals of this program include helping students develop intrinsic motivation to complete assignments and helping them develop habits needed to become life-long learners. Each participating campus customizes the program to meet specific needs; however, each site must include at least one of the following program components: pre-assessment, homework lab, literacy lab, computer lab, team-building activities, art, journal writing, mentor e-mail, leisure reading, and microsociety. The program also includes monthly field trips, twice-a-year whole family retreats, and parent classes.

Along with financial support, the Houston Annenberg Challenge provides informational resources to program coordinators to help strengthen teachers' knowledge of curriculum and cultures. The Houston Annenberg Challenge also provides technical assistance to program coordinators, helping them restructure work settings to

include more time for planning, professional development, and teacher networking.

LEADERSHIP ACADEMY

In the summer of 2000, the Houston Annenberg Challenge implemented the Leadership Academy, a two-year program for principals. Modeled after the Harvard Graduate School of Education Principals' Center, the Leadership Academy gives working principals from the metropolitan Houston area an opportunity to create personal professional development plans and to develop leadership skills.

During 2000–2001, 23 elementary, middle, and high school principals from three Houston area school districts committed to the two-year intensive process. In the first year of the Leadership Academy, the principal "fellows" attended a series of intensive institutes with nationally recognized speakers on leadership skills and issues in school reform, revolving around the Annenberg philosophy of whole-school reform. The fellows participated in an assessment of their leadership qualities by the Texas Assessment Center and developed personal professional development plans. They also attended monthly meetings facilitated by principal coaches and other leadership experts to examine principles of leadership, change, knowledge management, and technology. By the completion of the Leadership Academy, each fellow is expected to meet the state of Texas Principal Certification Standards.

Each participant completed an end-of-year exhibition for the group, sharing professional goals and demonstrating evidence of personal growth. In the second year of the Leadership Academy, fellows will attend monthly meetings and other activities with members of the "Class of 2000" to continue learning and to provide peer support. Approximately 30 new fellows will be named this summer for the "Class of 2001."

FAMILY LITERACY

Research suggests that home literacy, which takes advantage of everyday activities to develop the skills children need to become successful readers, is key to preparing them for school. As part of its Phase II efforts, the Houston Annenberg Challenge is working with the Neuhaus Education Center to create Family Literacy Programs at four elementary schools in Houston ISD. Funded in part by a \$300,000 grant from the Cullen Foundation, the programs seek to improve student achievement by involving the entire family in literacy-based activities.

The program is being piloted at four elementary schools. A school-based coordinator and a team of four teachers are being trained in a specially developed curriculum. A minimum of 10 families will participate in the initial program, which will meet two days a week for at least four hours. To encourage participation, while parents and older children attend the program, a childcare provider trained in family literacy activities can care for younger siblings.

CONCLUSION

When we analyze the history of reform in the United States, we are often disappointed with the results of attempts to redefine public schools. Since the 1960s, fads have come and gone, seldom altering the essence of public education. Programs and activities are imported into schools and classrooms. As soon as the school leader goes, all the reform effort goes away as well. The reason for this is that teachers barely have a say in those types of decisions and consequently "adapt" the reforms superficially. Simply put, those reforms do not stick in public school classrooms.

Fortunately, the Houston Annenberg Challenge theory of action begins with the teacher. The Houston Annenberg theory of action aims to include all stakeholders in the decision-making process to achieve consensus about educating poor children, children of color, and children who first learn a language other than English. We have evidence that at Year Four for funded schools student learning is on the rise. Perhaps more important for those interested in the long-term effects of reform, we have teachers, administrators, students, and families really united to provide excellent education for all children. We also have evidence that teachers have become learners themselves. In fact, our research revealed that approximately 90% of the Houston Annenberg funds are spent on professional development; much of this professional development has dramatically impacted teachers' practices. This evidence provides hope for the future of schools in the Houston metropolitan area. We are looking forward to the third year of this evaluation to understand the sustainable changes impacted by this reform effort.

RECOMMENDATIONS

1) Administrators should embed the concept of continuous learning into the school's vision and culture. Building upon a "culture of inquiry" (see Year One recommendations⁷), administrators should create a vision for systemic approach to school improvement that explicitly connects teachers' professional development and classroom practice to student academic achievement. Administrators should ensure that teachers and other staff have sufficient organizational support to enable them to develop and sustain changes in practice.

2) Professional development focused on improving student outcomes should be systematically developed in all schools. Professional development has made a significant impact on teaching and learning in the case study schools. Thus, we recommend that professional development should be systematically developed in other schools. All professional development should be focused on improving student learning. We recommend that schools use the following guidelines.

- a. Establish a clear statement of purpose and goals explicitly identifying desired student outcomes.
- b. Assess the value of the stated goals.
- c. Determine how goal achievement will be determined and outline strategies for gathering evidence.
- d. Analyze the context in which the professional development is to occur. Context includes the "who, when, where, and why" of the organization, system, or culture in which professional development takes place and incorporates local values, norms, policies, structures, resources, and procedures.
- e. Estimate the program's potential to meet the stated goals (Guskey, 2000).

3) Teachers and administrators should evaluate all professional development activities using participant and student-level data. We recommend that professional development evaluation consider five impact levels: participants' reactions, participants' learning, organizational support and change, participants' use of new knowledge and skills, and student learning outcomes. At each level of impact, evaluation should clearly detail questions to ask and information to gather, as well as identification of what is being measured or assessed and how the evaluation information will be used (Guskey, 2000).

4) The Houston Annenberg Challenge should continue to advocate for high academic achievement standards and expectations for all children. Survey data we collected in Years One and Two revealed a gap between what teachers expected of students and what students and parents expected of students. These data suggest that not all teachers have high expectations for middle and high school students' achievement. Thus, we recommend that the Houston Annenberg Challenge continue to advocate for educating and having high expectations for all students.

⁷ Year One recommendations available online at www.utexas.edu/projects/annenberg/EvaluationReport1.pdf (page 65)

5) Teachers should be provided opportunities to study cultural differences. Because Houston area schools include students from many countries, we recommend that teachers be provided opportunities to study and discuss cultural differences. By understanding multiple cultures, teachers will be able to relate more effectively with students, parents, and the community.

6) Teachers need to develop their knowledge of how children learn by expanding teaching and learning strategies. Our study of Houston Annenberg schools revealed that successful teachers employed a range of learning strategies allowing them to connect with every student. Thus, we recommend that the Houston Annenberg Challenge provide professional development to assist teachers in expanding their repertoire about how students learn.

7) The Houston Annenberg Challenge should consider sponsoring a summer program based on developing multiple learning environments. Our study of schools in the Houston Annenberg Challenge revealed that successful schools use multiple learning environments in addition to the classroom. Thus, we recommend that expert teachers and administrators from Annenberg-funded schools demonstrate design and implementation of expanded learning environments at summer conferences sponsored by the Houston Annenberg Challenge.

8) Schools should focus on the educational needs of English language learners by incorporating proven instructional strategies and standards. Our analysis of student academic achievement revealed that, in general, English language learners lag far behind all other groups in academic achievement. However, our research in case study schools demonstrated that students can achieve at high academic levels when taught by well-trained bilingual teachers who have high expectations and abundant learning resources. Thus, we recommend that teachers and administrators use the latest research on effective practices for language minority students to create natural learning environments based on students' developmental needs. Students benefit from engaging in real world problem-solving, using a new language both verbally and in writing, and experimenting with an array of communication media (Thomas & Collier, 2001).

9) Schools should expand integration of art into the school curriculum. Our research in case study schools revealed that many are using fine art across the school curriculum. Emerging national research suggests that using art helps students develop complex cognitive skills. Furthermore, the arts provide students new

communication opportunities, expand students' aesthetic knowledge, and cultivate individual talents (Eisner, 1998). Thus, we recommend that the Houston Annenberg Challenge create professional development programs featuring experts from the funded schools who can demonstrate how to integrate art into the curriculum.

APPENDICES

Research and Evaluation Study Surveys:

Teacher Survey

Student Survey

Principal Survey

Parent Survey

Parent Survey (Spanish)

External Partners Survey

District Survey

BEST COPY AVAILABLE

Houston Annenberg Challenge (HAC) Research and Evaluation Study

Teacher Survey

Spring 2001

ABOUT THE SURVEY

This survey is being conducted by the Annenberg Research and Evaluation staff of The University of Texas at Austin (UT-A) as part of an evaluation of the Houston Annenberg Challenge (HAC).

Approximately 4500 teachers representing all Houston Annenberg Challenge schools are being surveyed during the Spring of 2001. Central purposes of this study are to learn how teachers view conditions in their schools and classrooms, and to get teachers' advice on how HAC can support their school's reform efforts. A follow-up survey will be conducted in Spring of 2002.

The questionnaire has four areas of interest:

- **Professional Development**
- **School-Parents-Community Relationships**
- **Subject Area**
- **Experiences with Houston Annenberg Challenge (HAC)**

Individuals' answers to the questions will be kept strictly confidential. UT-A research is conducted under stringent University regulations designed to safeguard study participants. Identification codes are used only for follow-up purposes: your name will never appear on a questionnaire. Results of the survey will be reported in summary or statistical form so that individuals cannot be identified.

Time needed to complete the questionnaire is approximately 40 minutes.

Thank you for contributing your time and thoughtful responses to this evaluation. It is important that all teachers participate in the survey, and we think you will find the questions professionally meaningful and interesting.

FOR FURTHER INFORMATION

If you have any questions about the HAC evaluation, please feel free to call us: Pedro Reyes, Evaluation Study Director, or Joy Phillips, Evaluation Project Manager, (512) 475-8577.

Or mail us at: Houston Annenberg Challenge Research and Evaluation Project, College of Education, SZB 310, The University of Texas at Austin, Austin TX 78712.

MARKING INSTRUCTIONS

- Use number 2 pencil only.
- Make dark marks that fill the oval completely.

- Erase cleanly any mark you wish to change.
- Make no stray marks.

CORRECT MARK ●



INCORRECT MARKS ✗ ⊗ ⊖ ⊙

DEMOGRAPHICS

Position Title:
 Teacher
 Principal
 Central/District Office staff
 Other _____

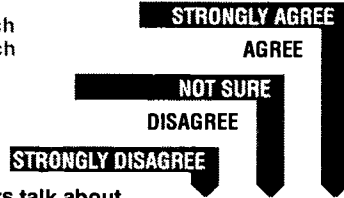
Gender:
 Female
 Male

Teaching/Administrative Experience: (in years)
 0-2 3-5 6-10 >10

Race/Ethnicity:
 American Indian Black White
 Asian Hispanic Other _____

Professional Development

1. Please mark the extent to which you agree or disagree with each of the following.



Overall, my professional development experiences this year:

Have changed the way teachers talk about students in this school. (1 2 3 4 5)

Have included opportunities to think carefully about, try, and evaluate new ideas. (1 2 3 4 5)

Have deepened my understanding of subject matter. (1 2 3 4 5)

Have helped me understand my students. (1 2 3 4 5)

Have been sustained and coherently focused. (1 2 3 4 5)

Have included opportunities to work with colleagues in my school. (1 2 3 4 5)

Have led me to make changes in my teaching. (1 2 3 4 5)

Have advocated practices I do not believe in. (1 2 3 4 5)

Have been self-directed. (1 2 3 4 5)

Have been isolated with no follow-up. (1 2 3 4 5)

Have addressed the needs of the students in my classroom. (1 2 3 4 5)

Furthermore, school-wide professional development activities: Have included opportunities to work productively with teachers from other schools. (1 2 3 4 5)

Have shifted approaches to teaching in this school. (1 2 3 4 5)

Have helped my school's staff work together. (1 2 3 4 5)

2. When you have engaged in professional development activities, how often have the following been addressed.



The goals of this school. (1 2 3 4)

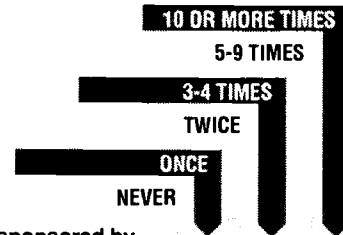
Development of new curriculum. (1 2 3 4)

Managing classroom behavior. (1 2 3 4)

Helping students learn best. (1 2 3 4)

Helping teachers learn how to teach effectively. (1 2 3 4)

3. This year how often have you:



Attended workshops or courses sponsored by HAC (exclude required in-services). (1 2 3 4 5 6)

Taken courses at a college or university relative to improving your school. (1 2 3 4 5 6)

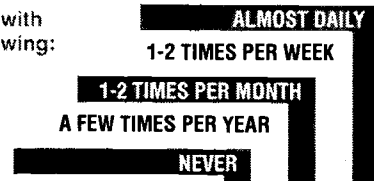
Participated in a network with other teachers outside your school. (1 2 3 4 5 6)

Discussed curriculum and instruction matters with an outside professional group or organization. (1 2 3 4 5 6)

Attended professional development activities organized by your school (include meetings that focus on improving your teaching). (1 2 3 4 5 6)

This question concerns how teachers interact with each other in your school.

4. Please indicate the frequency with which you do each of the following:



Share ideas on teaching with other teachers. (1 2 3 4 5)

Observe another teacher teaching. (1 2 3 4 5)

Teach with a colleague. (1 2 3 4 5)

Discuss with other teachers what you/they learned at a workshop or conference. (1 2 3 4 5)

Share and discuss student work with other teachers. (1 2 3 4 5)

Discuss particular lessons that were not very successful. (1 2 3 4 5)

Discuss beliefs about teaching and learning. (1 2 3 4 5)

Discuss how to help students having problems. (1 2 3 4 5)

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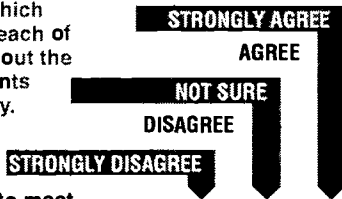
School-Parents-Community Relationships



5. The parents of my students:

- Volunteer to help in the classroom. (1) (2) (3) (4)
- Help raise funds for the school. (1) (2) (3) (4)
- Attend school-wide special events. (1) (2) (3) (4)
- Attend parent/teacher conferences when you requested them. (1) (2) (3) (4)
- Attend school events. (1) (2) (3) (4)
- Attend conferences intended for them. (1) (2) (3) (4)

6. Please mark the extent to which you agree or disagree with each of the following statements about the ways you interact with parents and others in the community.



- I work closely with parents to meet students' needs. (1) (2) (3) (4) (5)
- I try to understand parents' problems and concerns. (1) (2) (3) (4) (5)
- I invite parents to visit classrooms to observe the instructional program. (1) (2) (3) (4) (5)
- I greet parents warmly when they call or visit the school. (1) (2) (3) (4) (5)
- I regularly communicate with parents about how they can help their children learn. (1) (2) (3) (4) (5)
- I work at communicating to parents about support needed to advance the school mission. (1) (2) (3) (4) (5)
- I encourage feedback from parents and the community. (1) (2) (3) (4) (5)
- I feel respected by the parents of my students. (1) (2) (3) (4) (5)

Primary Subject Area Questions

If you are an elementary teacher, answer all the questions below that apply to you.

If you are a middle or high school teacher, we would like you to report on a specific class and subject area that you teach. We call this class your **TARGET CLASS**.

YOUR FIRST CLASS OF THE WEEK IN THAT SUBJECT IS YOUR TARGET CLASS.

Please answer the following questions about your **TARGET CLASS**.

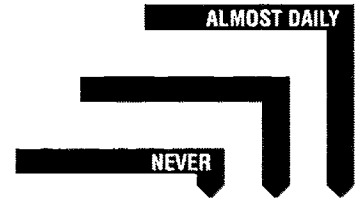
7. What is the grade level of the students in your target class?
- Elementary
 5th
 7th
 9th
 11th
 6th
 8th
 10th
 12th

Primary Subject Area Questions

8. How many students do you have in your target class?

- Less than 20 students
 20 to 30 students
 More than 30 students

9. How often do you use each of the following instructional strategies in your target class?



- Assign projects of at least one week's duration. (1) (2) (3) (4) (5)
 - Have students memorize facts or procedures. (1) (2) (3) (4) (5)
 - Have students explain their reasoning. (1) (2) (3) (4) (5)
 - Relate the subject matter to students' experience and interests. (1) (2) (3) (4) (5)
 - Have students read silently. (1) (2) (3) (4) (5)
 - Have students take turns reading aloud. (1) (2) (3) (4) (5)
 - Have students use library resources. (1) (2) (3) (4) (5)
 - Lecture to the class for more than half a period. (1) (2) (3) (4) (5)
 - Have students work in cooperative groups. (1) (2) (3) (4) (5)
 - Have students complete workbook or textbook exercises in class. (1) (2) (3) (4) (5)
 - Have students brainstorm ideas for written work. (1) (2) (3) (4) (5)
 - Have students discuss and debate ideas for more than half a period. (1) (2) (3) (4) (5)
 - Use highly structured call and response activities. (1) (2) (3) (4) (5)
10. Consider the lessons you have taught in your target class this year. To what extent were the lessons focused on:
- Reviewing content or skills from a previous grade level. (1) (2) (3) (4) (5)
 - Covering basic facts related to a specific topic. (1) (2) (3) (4) (5)
 - Covering concepts related to a specific topic. (1) (2) (3) (4) (5)
 - Studying a topic in depth. (1) (2) (3) (4) (5)
 - Developing reading skills. (1) (2) (3) (4) (5)
 - Developing writing skills. (1) (2) (3) (4) (5)
 - Developing mathematics skills. (1) (2) (3) (4) (5)
 - Incorporating homework into the assignment. (1) (2) (3) (4) (5)

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11. How often do you use the following methods to assess student learning and progress?
- | | | |
|---|--------------|---------------------|
| | NEVER | ALMOST DAILY |
| Student participation in class. | 1 2 3 4 5 | |
| Short writing assignments. | 1 2 3 4 5 | |
| Longer writing assignments. | 1 2 3 4 5 | |
| Student presentations of their work. | 1 2 3 4 5 | |
| Multiple choice, true-false, fill-in-the-blank tests. | 1 2 3 4 5 | |
| Short-answer tests. | 1 2 3 4 5 | |
| Essay tests. | 1 2 3 4 5 | |
| Student work on open-ended problems. | 1 2 3 4 5 | |
| Individual student projects. | 1 2 3 4 5 | |
| Group projects. | 1 2 3 4 5 | |
| TAAS results. | 1 2 3 4 5 | |

12. What proportion of the students in your target class do you expect will:
- | | |
|---|-------------------|
| | ALMOST ALL |
| | ABOUT HALF |
| | SOME |
| | NONE |
| Graduate from high school. | 1 2 3 4 |
| Attend a two-year college. | 1 2 3 4 |
| Attend a four-year college or university. | 1 2 3 4 |

13. Indicate the extent that you and others in your school have been involved in the following activities as part of your school's membership in the Houston Annenberg Challenge (HAC). Then indicate to what extent the activity supported your school's reform efforts.

INVOLVEMENT

- | | | |
|---|---------------------------|-----------------------|
| | I WAS NOT INVOLVED | I WAS INVOLVED |
| Development of school's Annenberg proposal. | 1 2 | |
| Lamplighter Institutes. | 1 2 | |
| Reforming School Summer Institute (RSSI). | 1 2 | |
| Workshop on Theory of Action. | 1 2 | |
| Peer Review training. | 1 2 | |
| School Peer Review reading. | 1 2 | |
| HAC Overview & Expectations. | 1 2 | |
| Critical Friends Coaching process. | 1 2 | |
| Principal Study Group. | 1 2 | |
| Program Advisory Team. | 1 2 | |
| HAC Advisory Committee. | 1 2 | |
| HAC Speaker Series. | 1 2 | |

EXTENT THAT ACTIVITY HELPED SUPPORT SCHOOL'S REFORM EFFORTS

- | | | | | | |
|---|-------------------|--------------------|-----------------|---------------------|---------------------|
| | NOT AT ALL | VERY LITTLE | SOMEWHAT | CONSIDERABLE | A GREAT DEAL |
| Development of school's Annenberg proposal. | 1 2 3 4 5 | | | | |
| Lamplighter Institutes. | 1 2 3 4 5 | | | | |
| Reforming School Summer Institute (RSSI). | 1 2 3 4 5 | | | | |
| Workshop on Theory of Action. | 1 2 3 4 5 | | | | |
| Peer Review training. | 1 2 3 4 5 | | | | |
| School Peer Review reading. | 1 2 3 4 5 | | | | |
| HAC Overview & Expectations. | 1 2 3 4 5 | | | | |
| Critical Friends Coaching process. | 1 2 3 4 5 | | | | |
| Principal Study Group. | 1 2 3 4 5 | | | | |
| Program Advisory Team. | 1 2 3 4 5 | | | | |
| HAC Advisory Committee. | 1 2 3 4 5 | | | | |
| HAC Speaker Series. | 1 2 3 4 5 | | | | |

14. Indicate how much each of the following has **changed** as a result of your school's involvement with HAC.
- | | | | | | |
|--|-------------------------------|----------------------|------------------|----------------------|-------------------------------|
| | SUBSTANTIALLY DECREASE | SOME DECREASE | NO CHANGE | SOME INCREASE | SUBSTANTIALLY INCREASE |
| Teachers in this school: | | | | | |
| Have a voice in school decisions. | 1 2 3 4 5 | | | | |
| Develop consensus on desired student learning outcomes. | 1 2 3 4 5 | | | | |
| Engage in discussion about needed areas for whole school change. | 1 2 3 4 5 | | | | |
| Participate as school leaders. | 1 2 3 4 5 | | | | |
| Have discussions about teaching and learning. | 1 2 3 4 5 | | | | |
| Collaborate with other teachers. | 1 2 3 4 5 | | | | |
| Are interested in learning new teaching approaches. | 1 2 3 4 5 | | | | |
| Use a variety of teaching methods. | 1 2 3 4 5 | | | | |
| Our school: | | | | | |
| Includes teacher aides/classified staff voice in school decision-making. | 1 2 3 4 5 | | | | |
| Includes parents in school decision-making. | 1 2 3 4 5 | | | | |
| Has a better reputation in the community. | 1 2 3 4 5 | | | | |
| Has parents' support for student learning. | 1 2 3 4 5 | | | | |
| Has high academic standards for all students. | 1 2 3 4 5 | | | | |
| Has support of the District for our school's reform goals. | 1 2 3 4 5 | | | | |
| Uses data as a basis for decision making. | 1 2 3 4 5 | | | | |
| Overall, our school has seen a change in the following: | | | | | |
| Student engagement. | 1 2 3 4 5 | | | | |
| Student grades. | 1 2 3 4 5 | | | | |
| Student absenteeism. | 1 2 3 4 5 | | | | |
| Student retention. | 1 2 3 4 5 | | | | |
| Student conduct. | 1 2 3 4 5 | | | | |
| Academic engagement. | 1 2 3 4 5 | | | | |
| Reading test scores. | 1 2 3 4 5 | | | | |
| Math test scores. | 1 2 3 4 5 | | | | |
| TAAS scores. | 1 2 3 4 5 | | | | |
| Other standardized test scores. | 1 2 3 4 5 | | | | |
| Graduation Rates. | 1 2 3 4 5 | | | | |
| Dropout Rates. | 1 2 3 4 5 | | | | |
| Mobility Rates. | 1 2 3 4 5 | | | | |
| Use of resources. | 1 2 3 4 5 | | | | |
| Use of time. | 1 2 3 4 5 | | | | |
| Use of space. | 1 2 3 4 5 | | | | |

Houston Annenberg Challenge (HAC) Research and Evaluation Study

Student Survey

Spring 2001

ABOUT THE SURVEY

We are interested in finding out how you feel about your experiences in school, your classes, and school in general. For this reason, we are asking that you help us get an overall picture of these school experiences and to also help us to identify areas for improvement. Keep in mind that there are no right or wrong answers to the questions. This is not a test.

No one at your school or in your family will see your answers. Your responses will be combined with those of other students, and they will never be identified as yours. **REMEMBER THERE ARE NO RIGHT OR WRONG ANSWERS.**

Thank you for being part of this important survey!

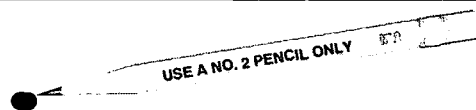
FOR FURTHER INFORMATION

If you have any questions about the HAC evaluation, please feel free to call us: Pedro Reyes, Evaluation Study Director, or Joy Phillips, Evaluation Project Manager, (512) 475-8577.

Or mail us at: Houston Annenberg Challenge Research and Evaluation Project, College of Education, SZB 310, The University of Texas at Austin, Austin TX 78712.

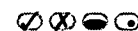
MARKING INSTRUCTIONS

- Use number 2 pencil only.
- Make dark marks that fill the oval completely.
- Erase cleanly any mark you wish to change.
- Make no stray marks.



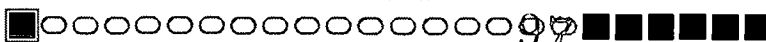
CORRECT MARK ●

INCORRECT MARKS



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SERIAL #

Student Survey

DEMOGRAPHICS

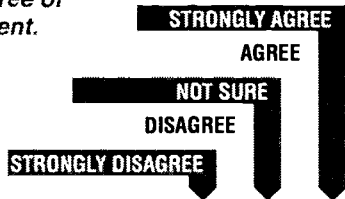
Age: 14 15 16 17 18 Other _____ Gender: Male Female

Number of Brothers or Sisters: 1 2 3 4 5 6 or more

Race/Ethnicity: American Indian Asian Black Hispanic White Other _____

Please indicate whether you are in the: 9th grade 11th grade

In this section, we want for you to tell us about your experiences in school and what can be done to improve things for you and your classmates. For the following set of questions, think about your experiences with **your teachers**. Please use the following scale to indicate how much you agree or disagree with each statement.



My teachers really care about me. 1 2 3 4 5

My teachers care what I think. 1 2 3 4 5

My teachers always try to be fair. 1 2 3 4 5

I feel comfortable with teachers at this school. 1 2 3 4 5

My teachers listen to the ideas of students. 1 2 3 4 5

I would learn more if my teachers would only slow down. 1 2 3 4 5

My teachers let me know what is expected of me. 1 2 3 4 5

My teachers recognize my right to a different opinion. 1 2 3 4 5

Even if I try hard, my teachers never notice. 1 2 3 4 5

My teachers notice if I have trouble learning something. 1 2 3 4 5

My teachers are quick to "lose their cool". 1 2 3 4 5

This next set of questions will ask you about what you think of your school. Please tell us how much you agree or disagree with the following statements.

I usually look forward to school. 1 2 3 4 5

I wish I didn't have to go to school. 1 2 3 4 5

I wish I could go to a different school. 1 2 3 4 5

I'm bored in school. 1 2 3 4 5

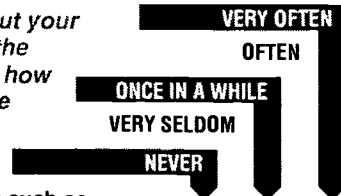
I'm glad to get back to school after summer vacation. 1 2 3 4 5

I feel safe traveling between home and school. 1 2 3 4 5

I feel safe in the hallways and bathrooms of the school. 1 2 3 4 5

I feel safe in my classes. 1 2 3 4 5

We now want you to think about your involvement in school. Using the following scale, please tell us how often during this year you have done the following things:



Attended after-school programs such as after-school tutoring or Saturday school for help with school. 1 2 3 4 5

Participated in school clubs or organizations such as a sports team, student council, cheerleading, drama club, school newspaper, or others. 1 2 3 4 5

Been late for a class. 1 2 3 4 5

Cut or skipped a class. 1 2 3 4 5

Been late for school. 1 2 3 4 5

Cut or skipped school. 1 2 3 4 5

Been absent from school. 1 2 3 4 5

We are also interested in finding out about your educational future.

What do you *hope* you will be doing in the future? (MARK ONLY ONE)

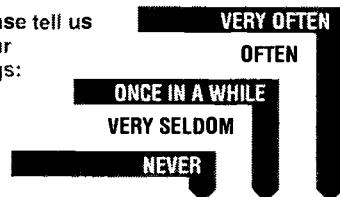
- Leave high school before graduating
- Leave high school and help at home
- Finish education in a GED program
- Graduate from high school and get a job
- Graduate from high school and go on to a two-year or technical school
- Graduate from high school, work, and go to a two-year college
- Graduate from high school, work, and go to a four-year college
- Graduate from high school and go to a four-year college
- Graduate and go into the armed services

Do you think your parents expect you: Yes No

To graduate from high school?

To continue with your education after high school?

Using the following scale, please tell us how often during this year your parents did the following things:



Helped you with your homework. 1 2 3 4 5

Checked to see if you had done your homework. 1 2 3 4 5

Praised you for doing well in school. 1 2 3 4 5

Encouraged you to work hard at school. 1 2 3 4 5

Made sure you got to school on time. 1 2 3 4 5

Talked with you about your assigned homework. 1 2 3 4 5

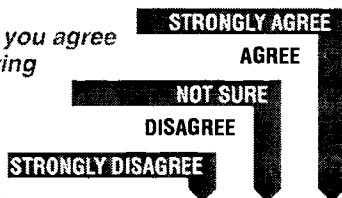
Student Survey

We now want you to turn your attention to a *Math class* you have taken this year as you go into the next section.

Which math course will you be thinking about as you answer the following sections? (MARK ONLY ONE.)

- Trigonometry Algebra General Math
 Calculus Geometry

Please indicate how much you agree or disagree with the following statements about your math class.



- I am certain I can master the skills taught in this class. (1 2 3 4 5)
- I can do even the hardest work in this class if I try. (1 2 3 4 5)
- No matter how hard I try, there is some class work I'll never understand. (1 2 3 4 5)
- I can do better work than I'm doing now. (1 2 3 4 5)
- I am good at math. (1 2 3 4 5)
- I don't try hard in math because I know I won't get a good grade. (1 2 3 4 5)

My math teacher:

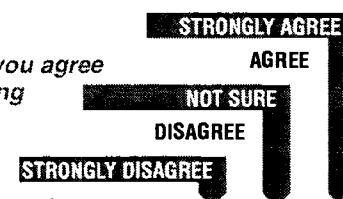
- Encourages me to do extra work when I don't understand something. (1 2 3 4 5)
- Praises my efforts when I work hard. (1 2 3 4 5)
- Expects me to do my best all the time. (1 2 3 4 5)
- Expects me to complete my homework every night. (1 2 3 4 5)
- Cares if I get bad grades in this class. (1 2 3 4 5)
- Cares if I don't do my work in this class. (1 2 3 4 5)
- Believes I can do well in school. (1 2 3 4 5)
- Is willing to give extra help on schoolwork if I need it. (1 2 3 4 5)
- Helps me catch up if I am behind. (1 2 3 4 5)
- Notifies if I have trouble learning something. (1 2 3 4 5)
- Involves students in deciding what work is to be done. (1 2 3 4 5)
- Lets students help decide what the rules will be. (1 2 3 4 5)
- Lets students choose their own problems to work on for this class. (1 2 3 4 5)
- Encourages students to work problems from the textbook or worksheets. (1 2 3 4 5)
- Allows students to work problems with a partner or in a small group. (1 2 3 4 5)
- Uses computers in the classroom. (1 2 3 4 5)
- Uses appropriate audio-visual technology to teach math. (1 2 3 4 5)
- Uses technical equipment (hand held calculators, etc.). (1 2 3 4 5)

This next section we want you to think about an *English class* you have taken this year.

What kind of English class are you taking this year (MARK ONLY ONE.)

- English
 Advanced English
 Reading/Language Arts

Please indicate how much you agree or disagree with the following statements about your English class.



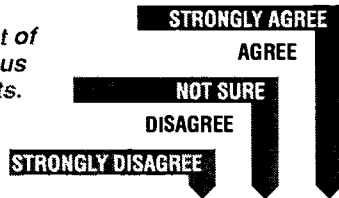
- I am certain I can master the skills taught in this class. (1 2 3 4 5)
- I can do even the hardest work in this class if I try. (1 2 3 4 5)
- No matter how hard I try, there is some class work I'll never understand. (1 2 3 4 5)
- I can do better work than I'm doing now. (1 2 3 4 5)
- I am good at English. (1 2 3 4 5)
- I don't try hard in English because I know I won't get a good grade. (1 2 3 4 5)

My English teacher:

- Encourages me to do extra work when I don't understand something. (1 2 3 4 5)
- Praises my efforts when I work hard. (1 2 3 4 5)
- Expects me to do my best all the time. (1 2 3 4 5)
- Expects me to complete my homework every night. (1 2 3 4 5)
- Cares if I get bad grades in this class. (1 2 3 4 5)
- Cares if I don't do my work in this class. (1 2 3 4 5)
- Believes I can do well in school. (1 2 3 4 5)
- Is willing to give extra help on schoolwork if I need it. (1 2 3 4 5)
- Helps me catch up if I am behind. (1 2 3 4 5)
- Notifies if I have trouble learning something. (1 2 3 4 5)
- Involves students in deciding what work is to be done. (1 2 3 4 5)
- Lets students help decide what the rules will be. (1 2 3 4 5)
- Lets students choose their own topics to work on for this class. (1 2 3 4 5)
- Encourages students to work problems from the textbook or worksheets. (1 2 3 4 5)
- Allows students to work with a partner or in a small group. (1 2 3 4 5)
- Uses computers in the classroom. (1 2 3 4 5)
- Uses appropriate audio-visual technology to teach English. (1 2 3 4 5)

Student Survey

Students are required to take TAAS tests. The next set of questions will ask you to tell us how you feel about these tests.



- I never do well on these tests. (1) (2) (3) (4) (5)

- These tests don't show how much I really know. (1) (2) (3) (4) (5)

- These tests are real easy for me. (1) (2) (3) (4) (5)

- I like taking these tests. (1) (2) (3) (4) (5)

- The harder I try on these tests, the better I do. (1) (2) (3) (4) (5)

- I am working extra hard this year so that I can do well on the TAAS. (1) (2) (3) (4) (5)

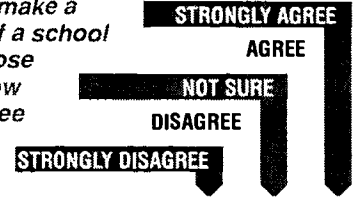
- I get extra help at school to prepare for the TAAS. (1) (2) (3) (4) (5)

- We spend a lot of class time preparing for the TAAS. (1) (2) (3) (4) (5)

- I don't care whether I pass the TAAS or not. (1) (2) (3) (4) (5)

(If you have never moved from one district to another or from one school to another school, please mark the bubble at the right and skip this section.) ▶▶▶ ○

Sometimes parents must make a move during the middle of a school year. Looking back on those moves, please indicate how much you agree or disagree with the following statements:



- My parents never include me in discussions about moving. (1) (2) (3) (4) (5)

- My parents never take my feelings into consideration in deciding whether to move or not. (1) (2) (3) (4) (5)

- I believe that kids must accept whatever parents decide in a move. (1) (2) (3) (4) (5)

- Every time I move, it is difficult for me:
 - to make new friends. (1) (2) (3) (4) (5)
 - to adjust to new teachers. (1) (2) (3) (4) (5)
 - to adjust to different academic standards. (1) (2) (3) (4) (5)
 - to fit in with others in the new school. (1) (2) (3) (4) (5)

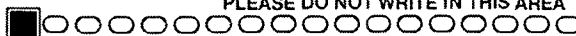
- I believe that every time I must move, my education is disrupted. (1) (2) (3) (4) (5)

- I feel so alone and isolated at school every time I must go to a new school. (1) (2) (3) (4) (5)

- Even when I know that moving is the right thing to do, I really dislike leaving:
 - my school (1) (2) (3) (4) (5)
 - my friends (1) (2) (3) (4) (5)
 - my teachers (1) (2) (3) (4) (5)

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SERIAL #

Houston Annenberg Challenge (HAC) Research and Evaluation Study

Principal Survey

Spring 2001

ABOUT THE SURVEY

This survey is being conducted by the Annenberg Research and Evaluation staff of The University of Texas at Austin (UT-A) as part of an evaluation of the Houston Annenberg Challenge (HAC).

Principals in all Houston Annenberg Challenge schools are being surveyed during the Spring of 2001. Central purposes of the study are to learn how principals view conditions in their schools, and to get principals' advice on how HAC can support their school's reform efforts. A follow-up survey will be conducted in Spring 2002.

Time needed to complete the questionnaire is approximately 40 minutes.

Individuals' answers to the questions will be kept strictly confidential. UT-A research is conducted under stringent University regulations designed to safeguard study participants. Identification codes are used only for follow-up purposes: your name will never appear on a questionnaire. Results of the survey will be reported in summary or statistical form so that individuals cannot be identified.

Thank you for contributing your time and thoughtful responses to this evaluation. It is important that all principals participate in the survey, and we think you will find the questions professionally meaningful and interesting.

FOR FURTHER INFORMATION

If you have any questions about the HAC evaluation, please feel free to call us: Pedro Reyes, Evaluation Study Director, or Joy Phillips, Evaluation Project Manager, (512) 475-8577.

Or mail us at: Houston Annenberg Challenge Research and Evaluation Project, College of Education, SZB 310, The University of Texas at Austin, Austin TX 78712.

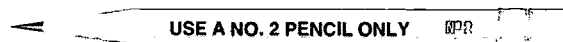
MARKING

INSTRUCTIONS

- Use number 2 pencil only.
- Make dark marks that fill the oval completely.

- Erase cleanly any mark you wish to change.
- Make no stray marks.

CORRECT MARK ●



INCORRECT MARKS ○ ⊗ ⊖ ⊙

DEMOGRAPHICS

Position Title: Teacher Principal Central/District Office staff Other _____

Gender: Female Male

Teaching/Administrative Experience: (in years) 0-2 3-5 6-10 >10

Race/Ethnicity: American Indian Asian Black Hispanic White Other _____

Principal Survey

1. How much influence do teachers have on school policy in each of the areas below?

Specific teaching assignments.	① ② ③ ④
School's schedule (including teacher preparation periods).	① ② ③ ④
Measurement of students' progress.	① ② ③ ④
Hiring new professional personnel.	① ② ③ ④
Appropriation of discretionary school funds.	① ② ③ ④
Books and other instructional materials selected for classrooms.	① ② ③ ④
Hiring a new principal.	① ② ③ ④
Curriculum and instructional program.	① ② ③ ④
Content of in-service programs.	① ② ③ ④
Standards for student learning.	① ② ③ ④
Focus of school reform efforts.	① ② ③ ④

2. Please indicate how strongly you agree or disagree with the statements regarding your district.

The district...:	
Inspires the very best in the job performance of its personnel.	① ② ③ ④ ⑤
Supports local innovation.	① ② ③ ④ ⑤
Holds high expectations for our school.	① ② ③ ④ ⑤
Builds community confidence in our school.	① ② ③ ④ ⑤
Supports my school's change effort.	① ② ③ ④ ⑤
Creates mandates without providing adequate support.	① ② ③ ④ ⑤
Promotes the professional development of teachers.	① ② ③ ④ ⑤
Ensures that student learning is "bottom line" in this school.	① ② ③ ④ ⑤
Commits to high standards for every student.	① ② ③ ④ ⑤
Priorities are consistent with my school's priorities.	① ② ③ ④ ⑤

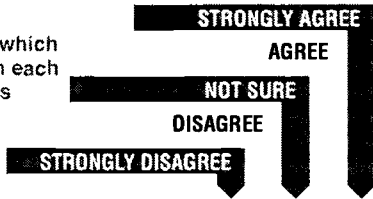
2. Please indicate how strongly you agree or disagree with the statements regarding your district.

The district...:	
Understands my school's reform agenda.	① ② ③ ④ ⑤
Gives schools control over their budgets.	① ② ③ ④ ⑤
Allows schools to make decisions about:	
Educational standards	① ② ③ ④ ⑤
Curriculum	① ② ③ ④ ⑤
Instructions	① ② ③ ④ ⑤
Hiring Teachers	① ② ③ ④ ⑤
Scheduling	① ② ③ ④ ⑤

3. Considering your current job as school principal, how much do you agree or disagree with the statements about yourself.

I...:	
Place high priority on promoting parental involvement.	① ② ③ ④ ⑤
Place high priority on promoting community involvement.	① ② ③ ④ ⑤
Work to create a sense of community.	① ② ③ ④ ⑤
Include parents in decision-making.	① ② ③ ④ ⑤
Rely on a consensus decision-making process.	① ② ③ ④ ⑤
Believe the most important part of my job is to help people work together toward common goals.	① ② ③ ④ ⑤
Make the final decision on all-important matters.	① ② ③ ④ ⑤
Prefer to work with committees.	① ② ③ ④ ⑤
Believe schools benefit from having an array of reform programs.	① ② ③ ④ ⑤
Decide what the program will be offered for in-service.	① ② ③ ④ ⑤
Believe it is important to help teachers develop professionally.	① ② ③ ④ ⑤
Encourage teachers to communicate regularly with other teachers.	① ② ③ ④ ⑤
Encourage teachers to try new methods of instruction.	① ② ③ ④ ⑤
Hold all students to high standards.	① ② ③ ④ ⑤

4. Please mark the extent to which you agree or disagree with each of the following statements about your school.



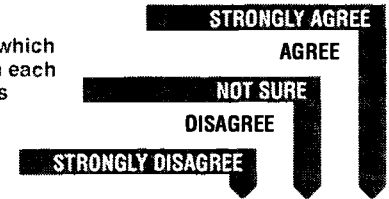
This school...:

- Has well-defined learning expectations for all students. (1) (2) (3) (4) (5)
- Uses consistent standards from classroom to classroom. (1) (2) (3) (4) (5)
- Sets high standards for students' academic performance. (1) (2) (3) (4) (5)
- Examines school performance regularly. (1) (2) (3) (4) (5)
- Evaluates school programs and activities. (1) (2) (3) (4) (5)
- Uses assessment data on student performance to modify school's curriculum. (1) (2) (3) (4) (5)
- Is actively involved in school reform. (1) (2) (3) (4) (5)

Teachers in this school...:

- Are interested in what students do outside of school. (1) (2) (3) (4) (5)
- Listen to students. (1) (2) (3) (4) (5)
- Like students. (1) (2) (3) (4) (5)
- Treat students with respect. (1) (2) (3) (4) (5)
- Continually seek and learn new ideas. (1) (2) (3) (4) (5)
- Incorporate innovative practices. (1) (2) (3) (4) (5)
- Provide intellectually challenging learning environments. (1) (2) (3) (4) (5)
- Use inquiry and reflection. (1) (2) (3) (4) (5)
- Trust each other. (1) (2) (3) (4) (5)
- Feel responsible to help each other to do their best. (1) (2) (3) (4) (5)
- Have sufficient time to work together. (1) (2) (3) (4) (5)
- Actively participate in decision-making. (1) (2) (3) (4) (5)
- Make group decisions effectively. (1) (2) (3) (4) (5)
- Solve problems effectively. (1) (2) (3) (4) (5)
- Deal effectively with conflict. (1) (2) (3) (4) (5)
- Work closely with parents to meet students' needs. (1) (2) (3) (4) (5)
- Understand parents' concerns. (1) (2) (3) (4) (5)
- Invite parents to visit classrooms to observe the instructional program. (1) (2) (3) (4) (5)
- Greet parents warmly when they call or visit the school. (1) (2) (3) (4) (5)
- Regularly communicate with parents about how they can help their children learn. (1) (2) (3) (4) (5)
- Communicate the school's mission to parents. (1) (2) (3) (4) (5)

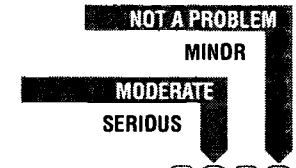
4. Please mark the extent to which you agree or disagree with each of the following statements about your school.



Teachers in this school...:

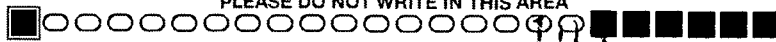
- Seek parental support to fulfill the school's mission. (1) (2) (3) (4) (5)
- Encourage feedback from parents. (1) (2) (3) (4) (5)
- Respect parents. (1) (2) (3) (4) (5)
- Receive respect from parents. (1) (2) (3) (4) (5)

5. To what extent are each of the following concerns in your school.



- Student tardiness. (1) (2) (3) (4)
- Student absenteeism. (1) (2) (3) (4)
- Teacher absenteeism. (1) (2) (3) (4)
- Students cutting class. (1) (2) (3) (4)
- Physical conflicts among students. (1) (2) (3) (4)
- Robbery or theft. (1) (2) (3) (4)
- Vandalism of school property. (1) (2) (3) (4)
- Student pregnancy. (1) (2) (3) (4)
- Student use of alcohol. (1) (2) (3) (4)
- Student drug abuse. (1) (2) (3) (4)
- Student possession of weapons. (1) (2) (3) (4)
- Verbal abuse of teachers. (1) (2) (3) (4)
- Student disrespect for teachers. (1) (2) (3) (4)
- Students dropping out. (1) (2) (3) (4)
- Student apathy. (1) (2) (3) (4)
- Lack of academic challenge. (1) (2) (3) (4)
- Lack of parent involvement. (1) (2) (3) (4)
- Poverty. (1) (2) (3) (4)
- Racial tension. (1) (2) (3) (4)
- Students come to school unprepared to learn. (1) (2) (3) (4)
- Poor nutrition. (1) (2) (3) (4)
- Poor student health. (1) (2) (3) (4)
- Addressing the needs of English language learners. (1) (2) (3) (4)
- TAAS scores. (1) (2) (3) (4)

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6. Indicate to what extent your staff uses the following information to inform school reform efforts.
- | | | |
|--|---|--|
| | SIGNIFICANTLY
MODERATELY
SLIGHTLY
NOT AT ALL | |
| Average student scores on standardized tests. | 1 2 3 4 | |
| Breakdown of test scores for race/ethnic groups. | 1 2 3 4 | |
| Student performances on exhibitions or unstructured tasks. | 1 2 3 4 | |
| Student work samples. | 1 2 3 4 | |
| Student portfolios. | 1 2 3 4 | |
| Student surveys. | 1 2 3 4 | |
| Student focus groups. | 1 2 3 4 | |
| Teacher surveys. | 1 2 3 4 | |
| Parent surveys. | 1 2 3 4 | |
| Records on student mobility and attendance. | 1 2 3 4 | |
| Cumulative records of student performance. | 1 2 3 4 | |

7. Indicate the extent that your school has been involved in the following activities as part of your school's membership in the Houston Annenberg Challenge (HAC). Then indicate to what extent the activity supported your school's reform efforts.
- | | | |
|---|----------------------------------|--|
| | WAS NOT INVOLVED
WAS INVOLVED | |
| INVOLVEMENT | | |
| Development of school's Annenberg proposal. | 1 2 | |
| Lamplighter Institutes. | 1 2 | |
| Reforming School Summer Institute (RSSI). | 1 2 | |
| Workshop on Theory of Action. | 1 2 | |
| Peer Review training. | 1 2 | |
| School Peer Review reading. | 1 2 | |
| HAC Overview & Expectations. | 1 2 | |
| Critical Friends Coaching process. | 1 2 | |
| Principal Study Group. | 1 2 | |
| Program Advisory Team. | 1 2 | |
| HAC Advisory Committee. | 1 2 | |
| HAC Speaker Series. | 1 2 | |

- EXTENT THAT ACTIVITY HELPED SUPPORT SCHOOL'S REFORM EFFORTS**
- | | | |
|---|---|--|
| | A GREAT DEAL
CONSIDERABLE
SOMEWHAT
VERY LITTLE
NOT AT ALL | |
| Development of school's Annenberg proposal. | 1 2 3 4 5 | |
| Lamplighter Institutes. | 1 2 3 4 5 | |
| Reforming School Summer Institute (RSSI). | 1 2 3 4 5 | |
| Workshop on Theory of Action. | 1 2 3 4 5 | |
| Peer Review training. | 1 2 3 4 5 | |
| School Peer Review reading. | 1 2 3 4 5 | |
| HAC Overview & Expectations. | 1 2 3 4 5 | |
| Critical Friends Coaching process. | 1 2 3 4 5 | |
| Principal Study Group. | 1 2 3 4 5 | |
| Program Advisory Team. | 1 2 3 4 5 | |
| HAC Advisory Committee. | 1 2 3 4 5 | |
| HAC Speaker Series. | 1 2 3 4 5 | |

8. Indicate how much each of the following has changed as a result of your school's involvement with HAC.
- | | | |
|---|---|--|
| | SUBSTANTIALLY INCREASED
SOME INCREASE
NO CHANGE
SOME DECREASE
SUBSTANTIALLY DECREASED | |
| In terms of teachers....: | | |
| Participation in school decisions. | 1 2 3 4 5 | |
| Consensus on student learning outcomes. | 1 2 3 4 5 | |
| Consensus on needed areas for school change. | 1 2 3 4 5 | |
| Participation as school leader. | 1 2 3 4 5 | |
| Collaboration. | 1 2 3 4 5 | |
| Interest in learning new teaching approaches. | 1 2 3 4 5 | |
| Participation in professional development. | 1 2 3 4 5 | |
| Use of a variety of teaching methods. | 1 2 3 4 5 | |
| Teacher aide participation in school decisions. | 1 2 3 4 5 | |
| Classified staff participation in school decisions. | 1 2 3 4 5 | |
| High academic standards for all students. | 1 2 3 4 5 | |
| Use of data as a basis for decision making. | 1 2 3 4 5 | |
| Staff discussions of teaching and learning. | 1 2 3 4 5 | |
| District's support of our school's reform goals. | 1 2 3 4 5 | |
| School's reputation in the community. | 1 2 3 4 5 | |
| Relationships with parents. | 1 2 3 4 5 | |
| Relationships with community members. | 1 2 3 4 5 | |
| Parent participation in school decisions. | 1 2 3 4 5 | |
| Parent support of student's learning. | 1 2 3 4 5 | |
| Overall our school has seen a change in the following...: | | |
| Student engagement. | 1 2 3 4 5 | |
| Student grades. | 1 2 3 4 5 | |
| Student absenteeism. | 1 2 3 4 5 | |
| Student retention. | 1 2 3 4 5 | |
| Student conduct. | 1 2 3 4 5 | |
| Academic engagement. | 1 2 3 4 5 | |
| Reading test scores. | 1 2 3 4 5 | |
| Math test scores. | 1 2 3 4 5 | |
| TAAS scores. | 1 2 3 4 5 | |
| Other standardized test scores. | 1 2 3 4 5 | |
| Graduation Rates. | 1 2 3 4 5 | |
| Dropout Rates. | 1 2 3 4 5 | |
| Mobility Rates. | 1 2 3 4 5 | |
| Use of resources. | 1 2 3 4 5 | |
| Use of time. | 1 2 3 4 5 | |

Houston Annenberg Challenge (HAC) Research and Evaluation Study

Parent Survey

Spring 2001

ABOUT THE SURVEY

This survey is being conducted by the Annenberg Research and Evaluation staff of The University of Texas at Austin (UT-A) as part of an evaluation of the Houston Annenberg Challenge (HAC).

Parents of students attending schools involved in the Houston Annenberg Challenge are being surveyed during the Spring of 2001. We believe parents are important partners in the success of school reform efforts. The primary purposes of this study are to learn about your views of your child's (or children's) school(s) and your involvement with your child's education.

The questionnaire has two parts:

- **School, Parents, and the Community**
- **You and Your Child**

It will take approximately 20 minutes for you to complete this survey. Of course, additional written comments of any length are welcome.

Your responses to the questions will be kept strictly confidential. We do not have a list of parents' names, so your name cannot be linked with your completed survey. In addition, results from this survey will be reported in summary form so that individual's responses cannot be identified.

Thank you for contributing your time and thoughtful responses to this evaluation. It is important that all parents participate in the survey so that we are able to accurately represent the parents' perspective.

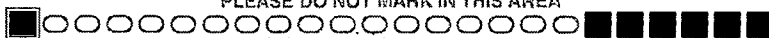
FOR FURTHER INFORMATION

If you have any questions about the HAC evaluation, please feel free to call us: Pedro Reyes, Evaluation Study Director, or Joy Phillips, Evaluation Project Manager, (512) 475-8577.

Or mail us at: Houston Annenberg Challenge Research and Evaluation Project, College of Education, SZB 310, The University of Texas at Austin, Austin TX 78712.

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SERIAL #

105

MARKING INSTRUCTIONS

- Use number 2 pencil only.
- Make dark marks that fill the oval completely.

- Erase cleanly any mark you wish to change.
- Make no stray marks.

CORRECT MARK ●



INCORRECT MARKS

DEMOGRAPHICS

Gender: Male
 Female

Race/Ethnicity: American Indian Asian Black
 Hispanic White Other

School, Parents, and Community

CURRENT STATUS

NOT SURE

UNSATISFACTORY

SATISFACTORY

1. Please rate your child's school in the following:

- The school's relationships with parents. (1 2 3)
- The school's relationship with the community. (1 2 3)
- Teachers relationships with parents. (1 2 3)
- Parent involvement in school activities. (1 2 3)
- The school's reputation...:
with local businesses. (1 2 3)
- with community leaders. (1 2 3)
- with community members. (1 2 3)

2. Please mark the extent to which you agree or disagree with the following statements regarding your school's relationships with parents:

STRONGLY AGREE

AGREE

NOT SURE

DISAGREE

STRONGLY DISAGREE

- Teachers work closely with parents to meet students' needs. (1 2 3 4 5)
- Teachers regularly communicate with parents about how they can help their child learn. (1 2 3 4 5)
- Teachers and parents think of each other as partners in educating children. (1 2 3 4 5)
- Parents have good ideas about how teachers can teach their children. (1 2 3 4 5)
- Teachers work hard to build trusting relationships with parents. (1 2 3 4 5)
- Parents are asked for suggestions regarding school programs. (1 2 3 4 5)
- Teachers use parents' suggestions in the classroom. (1 2 3 4 5)

You, Your Child, and the School

STRONGLY AGREE

AGREE

NOT SURE

DISAGREE

STRONGLY DISAGREE

3. Please mark the extent to which you agree or disagree with the following:

- I often visit the classrooms to observe. (1 2 3 4 5)
- I am greeted warmly when I call or visit the school. (1 2 3 4 5)
- I often help raise funds for our school. (1 2 3 4 5)
- I frequently serve on school committees. (1 2 3 4 5)
- I usually attend parents' night and extracurricular activities. (1 2 3 4 5)
- I frequently talk with teachers about my child's homework. (1 2 3 4 5)
- I generally talk about disciplinary issues with teachers. (1 2 3 4 5)
- I take my child to the library often. (1 2 3 4 5)
- I am satisfied with the parent information programs offered by this school. (1 2 3 4 5)
- I am supportive of this school. (1 2 3 4 5)
- My job interferes with my attending school meetings. (1 2 3 4 5)

4. What is the highest level of schooling completed?

- | FATHER
(or other adult male living with child) | MOTHER
(or other adult female living with child) |
|---|---|
| <input type="radio"/> Grade school | <input type="radio"/> Grade school |
| <input type="radio"/> High school | <input type="radio"/> High school |
| <input type="radio"/> Associate Degree (AA) | <input type="radio"/> Associate Degree (AA) |
| <input type="radio"/> Baccalaureate Degree (BA/BS) | <input type="radio"/> Baccalaureate Degree (BA/BS) |
| <input type="radio"/> Graduate or Professional Degree | <input type="radio"/> Graduate or Professional Degree |

5. Please mark what you hope your child will be doing in the future. Choose only one.

- Leave high school before graduating.
- Leave high school and help at home.
- Finish education in a GED program.
- Graduate from high school and get a job.
- Graduate from high school and go on to a two-year or technical school.
- Graduate from high school, work, and go to a two-year college.
- Graduate from high school, work, and go to a four-year college.
- Graduate from high school and go to a four-year college.
- Graduate and go into the armed services.

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6. Please mark what you expect your child will be doing in the future. Choose only one.
- Leave high school before graduating.
 - Leave high school and help at home.
 - Finish education in a GED program.
 - Graduate from high school and get a job.
 - Graduate from high school and go on to a two-year or technical school.
 - Graduate from high school, work, and go to a two-year college.
 - Graduate from high school, work, and go to a four-year college.
 - Graduate from high school and go to a four-year college.
 - Graduate and go into the armed services.

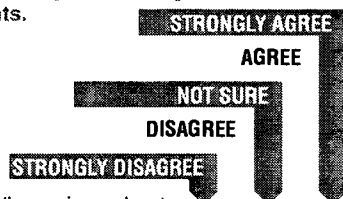
7. How many times have you moved from one school district to another during the last 2 years?
- 0 1 2 3 4 5 6 7 8 9 More than 10

8. How many times have you moved where your child must go from one school to another in the same district?
- 0 1 2 3 4 5 6 7 8 9 More than 10

9. If you move, do you usually wait to make a move until the end of a school semester?
- Yes No

10. If you move, do you usually wait to make a move until the end of a school year?
- Yes No

11. *(If you have never moved from one district to another or from one school to another school, skip this section.):* Sometimes you as parents must make a move during the school year. Please indicate how much you agree or disagree with the following statements.



I include my child/children in discussions about moving. 1 2 3 4 5

I take my child/children's feelings under consideration in deciding whether to move or not. 1 2 3 4 5

I believe that children must accept whatever parents decide is best in a move. 1 2 3 4 5

I believe that every time we move, my child/children's education is disrupted. 1 2 3 4 5

Every time we move, it is difficult for my child/children:
to form new friendships. 1 2 3 4 5

to adjust to new teachers. 1 2 3 4 5

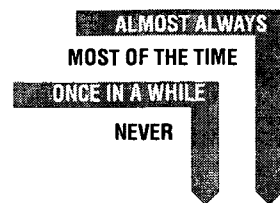
to adjust to different academic standards at different schools. 1 2 3 4 5

to fit in with others in the new school. 1 2 3 4 5

Even when my child/children know that moving is the right thing to do, they really dislike leaving...:
their school. 1 2 3 4 5

their friends. 1 2 3 4 5

their teachers. 1 2 3 4 5



12. During this school year, how often have you:
- Helped with your child's homework. 1 2 3 4

Checked to see if the homework is completed. 1 2 3 4

Praised your child for doing well in school. 1 2 3 4

Encouraged your child to take responsibility for the things he/she has done. 1 2 3 4

Encouraged your child to work hard at school. 1 2 3 4

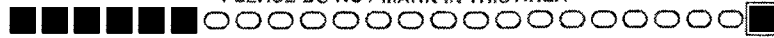
Made sure your child got to school on time. 1 2 3 4

Grounded your child or taken away privileges because he/she was not doing well in school. 1 2 3 4

13. How much time does your child spend doing homework on a typical day?

- My child doesn't get homework.
- 30 minutes
- 1 hour
- 2 hours
- 3 hours
- 4 hours or more

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Houston Annenberg Challenge (HAC)

Estudio de Investigación y Evaluación

Encuesta a los Padres**Primavera 2001**

SOBRE LA ENCUESTA

Esta encuesta está dirigida por el personal del Annenberg Research and Evaluation de la Universidad de Texas en Austin (UT-A) y forma parte de una evaluación del Houston Annenberg Challenge (HAC).

Los padres de los estudiantes que asisten las escuelas envueltas en el Houston Annenberg Challenge participaran en la encuesta durante la primavera del año 2001. Nosotros creemos que los padres son compañeros importantes para que el esfuerzo para mejorar las escuelas tenga éxito. El propósito primario de este estudio es saber sus opiniones sobre las escuelas de sus hijos y su involucramiento en la educación de su hijos.

Este cuestionario incluye dos partes:

- **Las escuelas, los padres y la comunidad**
- **Usted y su hijo**

Le tomará aproximadamente 20 minutos para llenar esta encuesta. Por supuesto, se le invita incluir comentarios por escrito de cualquier tamaño.

Sus respuestas a las preguntas se mantendrán estrictamente confidenciales. No tenemos una lista con los nombres de los padres, así que su nombre no podrá ser comparado con la encuesta. Además, los resultados de esta encuesta serán reportados en forma sumaria para asegurar que las respuestas no puedan ser identificadas.

Gracias por contribuir su tiempo y sus respuestas atentas a esta evaluación. Es importante para nosotros que todos los padres participen en esta encuesta para poder representar sus opiniones más precisamente.

PARA MAS INFORMACIÓN

Si usted tiene cualquier pregunta sobre la encuesta de HAC, por favor sientase libre de llamarnos: Pedro Reyes, Director del Estudio de Evaluación, o Joy Phillips, Administradora del Proyecto de Evaluación, (512) 475-8577.

O corresponda por correo al: Houston Annenberg Challenge Research and Evaluation Project, College of Education, SZB 310, The University of Texas at Austin, Austin TX 78712.

INSTRUCCIONES PARA MARCAR

- Use solamente el lápiz Número 2.
- Llene el óvalo completamente con marcas fuertes y oscuras

- Borre completamente cualquier marca que desee cambiar.
- No haga marcas descarriadas.

MARCA CORRECTA ●

USE SOLAMENTE EL LÁPIZ NÚMERO 2

MARCA INCORRECTA ○ ⊗ ⊘ ⊙

DATOS DEMOGRÁFICOS

Sexo: Masculino
 Femenino

Raza/Etnicidad

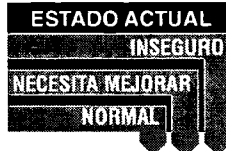
Indígena (Americano)
 Hispano/Latino

Asiático
 Blanco

African Americano
 Otro _____

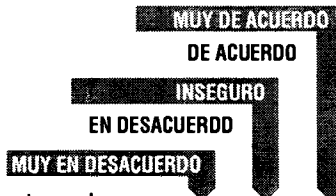
La Escuela, Los Padres y La Comunidad

1. Por favor clasifique a la escuela de su hijo.



- Las relaciones de la escuela con los padres. (1 2 3)
- La relación de la escuela con la comunidad. (1 2 3)
- Las relaciones de los maestros con los padres. (1 2 3)
- El involucramiento de los padres en las actividades de la escuela. (1 2 3)
- La reputación de la escuela...:
con los negociantes locales. (1 2 3)
- con los líderes comunitarios. (1 2 3)
- con miembros de la comunidad. (1 2 3)

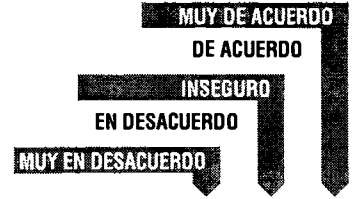
2. Por favor marque hasta que punto esta de acuerdo o en desacuerdo con las siguientes declaraciones con los padres.



- Los maestros trabajan atentamente con los padres para cumplir con las necesidades escolares de los estudiantes. (1 2 3 4 5)
- La escuela se comunica conmigo regularmente sobre como podría ayudar a mi hijo aprender. (1 2 3 4 5)
- Los maestros y padres, ambos, se consideran compañeros en la educación de los niños. (1 2 3 4 5)
- Los padres tienen buenas ideas sobre como los maestros podrían enseñar a sus hijos. (1 2 3 4 5)
- Los maestros trabajan duro para desarrollar relaciones de confianza con los padres. (1 2 3 4 5)
- Se solicitan las opiniones de los padres con respecto a los programas escolares. (1 2 3 4 5)
- Los maestros utilizan las opiniones de los padres en las clases. (1 2 3 4 5)

Usted, Su Hijo y la Escuela

3. Por favor marque hasta que punto está de acuerdo o en desacuerdo con lo siguiente:



- Yo visito a los salones para observar las clases frecuentemente. (1 2 3 4 5)
- Me reciben cordialmente cuando llamo o visito a la escuela. (1 2 3 4 5)
- Yo ayudo recaudar fondos para mi escuela frecuentemente. (1 2 3 4 5)
- Yo participo en comités escolares frecuentemente. (1 2 3 4 5)
- Yo acostumbro asistir las reuniones de los padres y actividades escolares. (1 2 3 4 5)
- Yo hablo con el maestro con respeto a la tarea de mi hijo frecuentemente. (1 2 3 4 5)
- Generalmente, yo hablo con los maestros sobre asuntos disciplinarios. (1 2 3 4 5)
- Yo acostumbro llevar a mi hijo a la biblioteca. (1 2 3 4 5)
- Yo estoy satisfecho con los programas de información que ofrece la escuela a los padres. (1 2 3 4 5)
- Yo apoy a esta escuela. (1 2 3 4 5)
- Mi trabajo me impide asistir a las reuniones de la escuela. (1 2 3 4 5)

4. ¿Cuál es el nivel escolar que ha completado?

- | | |
|---|--|
| PADRE (u otro adulto masculino que vive en el hogar con el niño) | MADRE (u otro adulto femenino que vive en el hogar con el niño) |
| <input type="radio"/> Escuela primaria | <input type="radio"/> Escuela primaria |
| <input type="radio"/> Escuela preparatoria | <input type="radio"/> Escuela preparatoria |
| <input type="radio"/> Título de Socio (AA) | <input type="radio"/> Título de Socio (dos años) (AA) |
| <input type="radio"/> Título de Bachillerato Universitario (BA/BS) | <input type="radio"/> Título de Bachillerato Universitario (BA/BS) |
| <input type="radio"/> Graduado o con Título Profesional | <input type="radio"/> Graduado o con Título Profesional |

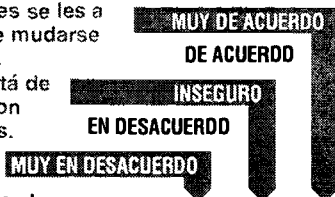
5. Escoga una respuesta indicando lo que espera que su hijo haga en el futuro. Escoga sólo una respuesta.

- Que se salga de la escuela antes de graduar.
- Que se salga de la escuela para ayudar en su hogar.
- Que termine su educación en el programa de GED.
- Que se gradúe del preparatorio (high school) y consiga un trabajo.
- Que se gradúe del preparatorio (high school) y siga en un programa escolar de dos años o escuela técnica.
- Que se gradúe del preparatorio (high school), trabaje y sigue estudiando en un colegio de dos años (junior college).
- Que se gradúe del preparatorio (high school), trabaje y sigue estudiando en un colegio o una universidad de cuatro años.
- Que se gradúe del preparatorio (high school) y asista un colegio o universidad de cuatro años.
- Que se gradúe del preparatorio (high school) y sirva en la fuerza militar.

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6. Escoga una respuesta indicando lo que cree que su hijo haga en el futuro. Escoga sólo una respuesta.
- Que se salga de la escuela antes de graduar.
 - Que se salga de la escuela para ayudar en su hogar.
 - Que termine su educación en el programa de GED.
 - Que se gradúe del preparatorio (high school) y consiga un trabajo.
 - Que se gradúe del preparatorio (high school) y siga en un programa escolar de dos años o escuela técnica.
 - Que se gradúe del preparatorio (high school), trabaje y siga estudiando en un colegio de dos años (junior college).
 - Que se gradúe del preparatorio (high school), trabaje y siga estudiando en un colegio o una universidad de cuatro años.
 - Que se gradúe del preparatorio (high school) y asista un colegio o universidad de cuatro años.
 - Que se gradúe del preparatorio (high school) y sirva en la fuerza militar.
7. ¿Cuántas veces se ha mudado de un distrito escolar a otro durante los últimos 2 años?
- 0 1 2 3 4 5 6 7 8 9 Mas que 10
8. ¿Cuántas veces se ha mudado haciendo necesario que su hijo se mudara de una escuela a otra en el mismo distrito?
- 0 1 2 3 4 5 6 7 8 9 Mas que 10
9. ¿Generalmente, si usted se muda, se espera usted hasta el fin del semestre escolar para mudarse?
- Sí No
10. ¿Generalmente, si usted se muda, se espera usted hasta el fin del año escolar para mudarse?
- Sí No

11. (Si usted nunca se ha mudado de un distrito a otro o de una escuela a otra, puede omitir esta sección.) Hay ocasiones cuando ustedes como padres se les a presentado la necesidad de mudarse a mediados del año escolar. Por favor indique cuanto está de acuerdo o en desacuerdo con las siguientes declaraciones.



Yo incluyo a mi hijo/mis hijos en las discusiones de mudarnos. 1 2 3 4 5

Yo tomo en cuenta los sentimientos de mi hijo/mis hijos y considero lo que les concierne a decidir si nos mudamos o no. 1 2 3 4 5

Yo pienso que mis hijos deben aceptar la decisión de sus padres de mudarse. 1 2 3 4 5

Yo pienso que cada vez que nos mudamos esto interrumpe la educación de mi hijo/mis hijos. 1 2 3 4 5

Cada vez que nos mudamos, es difícil para mi hijo/mis hijos:

formar nuevas amistades. 1 2 3 4 5

adaptarse a los maestros nuevos. 1 2 3 4 5

adaptarse a las normas nuevas académicas. 1 2 3 4 5

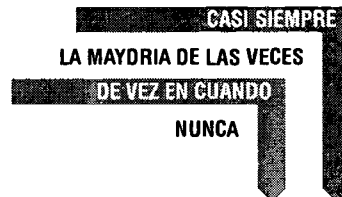
adaptarse con otros en la escuela nueva 1 2 3 4 5

Aún cuando mi hijo/mis hijos sabe/saben que la decisión de mudarnos es lo mejor, a el/ellos no le/les gusta dejar...:

su escuela. 1 2 3 4 5

sus amigos. 1 2 3 4 5

sus maestros. 1 2 3 4 5



12. Durante este año escolar, cuantes veces ha:

¿Ayudado a su hijo con la tarea? 1 2 3 4

¿Comprobado que su hijo ha terminado la tarea? 1 2 3 4

¿Alabado a su hijo cuando ha sacado buenas notas en la escuela? 1 2 3 4

¿Animado a su hijo tomar la responsabilidad por las cosas que ha hecho? 1 2 3 4

¿Animado a su hijo cuando ha trabajado duro en la escuela? 1 2 3 4

¿Asegurado que su hijo llegue a tiempo a la escuela? 1 2 3 4

¿Castigado a su hijo o quitado privilegios cuando no ha sacado buenas notas en la escuela? 1 2 3 4

13. ¿En un día típico, cuanto tiempo toma su hijo para hacer su tarea?

Mi hijo no trae tarea

30 minutos

1 hora

2 horas

3 horas

4 horas o mas

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Houston Annenberg Challenge (HAC) Research and Evaluation Study

External Partners Survey

Spring 2001

ABOUT THE SURVEY

This survey is being conducted by the Annenberg Research and Evaluation staff of The University of Texas at Austin (UT-A) as part of an evaluation of the Houston Annenberg Challenge (HAC).

External partners with schools involved in the Houston Annenberg Challenge are being surveyed during the Spring 2001. We believe business and other community members play a critical role in the success of school reform efforts. The primary purpose of the study is to learn about your experiences with the Houston Annenberg Challenge. A follow-up survey will be conducted in Spring 2002.

Your responses to this survey will be kept strictly confidential. Your name cannot be linked with your completed survey. In addition, results of the survey will be reported in summary form so that individuals cannot be identified.

Thank you for contributing your time and thoughtful responses to this evaluation. It is important that external partners participate in the survey so that we are able to accurately represent their perspective.

It will take approximately 20 minutes to complete this survey.

FOR FURTHER INFORMATION

If you have any questions about the HAC evaluation, please feel free to call us: Pedro Reyes, Evaluation Study Director, or Joy Phillips, Evaluation Project Manager, (512) 475-8577.

Or mail us at: Houston Annenberg Challenge Research and Evaluation Project, College of Education, SZB 310, The University of Texas at Austin, Austin TX 78712.

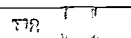
MARKING INSTRUCTIONS

- Use number 2 pencil only.
- Erase cleanly any mark you wish to change.
- Make dark marks that fill the oval completely.
- Make no stray marks.

CORRECT MARK ●



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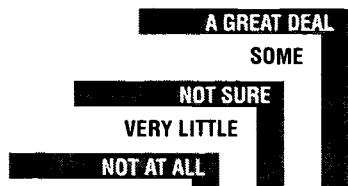
INCORRECT MARKS



EXTERNAL PARTNERS IMPACT ON THE LARGER COMMUNITY

YOUR ORGANIZATION'S INVOLVEMENT WITH THE HOUSTON ANNEBERG CHALLENGE

1. To what extent has your organization been involved in the following activities regarding the Houston Annenberg Challenge?



- Discussing ideas for a grant proposal. ① ② ③ ④ ⑤

- Pursuing an exploratory grant. ① ② ③ ④ ⑤

- Receiving funding for an exploratory grant. ① ② ③ ④ ⑤

- Pursuing or are currently pursuing a planning grant. ① ② ③ ④ ⑤

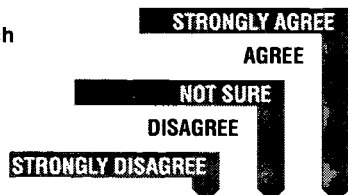
- Receiving funding for a planning grant. ① ② ③ ④ ⑤

- Pursuing an implementation grant. ① ② ③ ④ ⑤

- Receiving funding for an implementation grant. ① ② ③ ④ ⑤

- Implementing aspects of the project. ① ② ③ ④ ⑤

2. Please mark the extent to which you agree or disagree with the following about your school's partnership.



- Our organizations partnership with HAC schools:
Has clear goals. ① ② ③ ④ ⑤

- Coincides with the goals of this organization. ① ② ③ ④ ⑤

- Is central to the work of the school. ① ② ③ ④ ⑤

- Meets regularly to discuss the progress of our efforts. ① ② ③ ④ ⑤

- Has received valuable feedback regarding our HAC project. ① ② ③ ④ ⑤

- Works closely with the Executive Director of the HAC. ① ② ③ ④ ⑤

- Schools within our partnership work closely with one another. ① ② ③ ④ ⑤

- The HAC mission and focus areas are understood by members of our partnership. ① ② ③ ④ ⑤

- Members of our partnership work closely with at least one member of HAC staff. ① ② ③ ④ ⑤

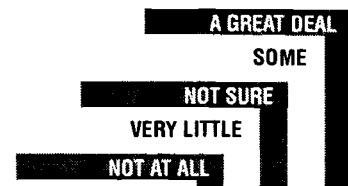
- I am satisfied with our relationship with members of the HAC staff. ① ② ③ ④ ⑤

- I am more enthusiastic about our schools now that I'm involved in this project. ① ② ③ ④ ⑤

3. In your opinion, to what extent have the HAC schools in your partnership improved?

- Not at all
 Not sure
 A great deal
 Very Little
 Some

4. To what extent have the following improved in your partnership school as a result of your partnership(s).



- Parent participation in school. ① ② ③ ④ ⑤

- Business involvement in school. ① ② ③ ④ ⑤

- Church involvement in school. ① ② ③ ④ ⑤

- Communication with community. ① ② ③ ④ ⑤

- Communication with parents. ① ② ③ ④ ⑤

- Collaboration with teachers. ① ② ③ ④ ⑤

- Collaboration with community. ① ② ③ ④ ⑤

- School's reputation in the community. ① ② ③ ④ ⑤

- Community support for student learning. ① ② ③ ④ ⑤

- Overall student achievement. ① ② ③ ④ ⑤

- Business support for student learning. ① ② ③ ④ ⑤

- Academic program expansion. ① ② ③ ④ ⑤

- Professional development opportunities for teachers. ① ② ③ ④ ⑤

- Teacher innovation. ① ② ③ ④ ⑤

- Teacher leadership. ① ② ③ ④ ⑤

- Teacher receptiveness to new ideas. ① ② ③ ④ ⑤

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Houston Annenberg Challenge (HAC) Research and Evaluation Study

District Survey

Spring 2001

ABOUT THE SURVEY

This survey is being conducted by the Annenberg Research and Evaluation staff of The University of Texas at Austin (UT-A) as part of an evaluation of the Houston Annenberg Challenge (HAC).

District members of Houston Annenberg Challenge schools are being surveyed during the Spring of 2001. Central purposes of the study are to learn how district administrators view conditions in their districts and to get advice on how HAC can support reform in the districts. A follow-up survey will be conducted in Spring 2002.

The questionnaire includes two parts: questions about general conditions in your school district and questions about your perspective of the district's response to school reform.

Time needed to complete the questionnaire is approximately 20 minutes.

Individuals' answers to the questions will be kept strictly confidential. UT-A research is conducted under stringent University regulations designed to safeguard study participants. Identification codes are used only for follow-up purposes: your name will never appear on a questionnaire. Results of the survey will be reported in summary or statistical form so that individuals cannot be identified.

Thank you for contributing your time and thoughtful responses to this evaluation. It is important that administrators in all districts involved in HAC participate in the survey, and we think you will find the questions professionally meaningful and interesting.

FOR FURTHER INFORMATION

If you have any questions about the HAC evaluation, please feel free to call us: Pedro Reyes, Evaluation Study Director, or Joy Phillips, Evaluation Project Manager, (512) 475-8577.

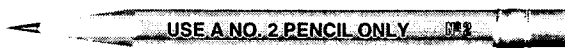
Or mail us at: Houston Annenberg Challenge Research and Evaluation Project, c/o Department of Educational Administration, SZB 310, The University of Texas at Austin, Austin TX 78712.

MARKING INSTRUCTIONS

- Use number 2 pencil only.
- Make dark marks that fill the oval completely.

- Erase cleanly any mark you wish to change.
- Make no stray marks.

CORRECT MARK ●



INCORRECT MARKS ☒ ☓ ☉ ☏

DEMOGRAPHICS

Position Title: Teacher Principal Central/District Office staff Other _____

Gender: Male Female

Teaching/Administrative Experience: (in years) 0-2 3-5 6-10 >10

Race/Ethnicity: American Indian Asian Black Hispanic White Other _____

District Conditions

1. Please indicate how strongly you agree or disagree with each of the following statements regarding how your district works with schools.

STRONGLY AGREE
AGREE
NOT SURE
DISAGREE
STRONGLY DISAGREE

This school district...:

Promotes the professional development of teachers. (1) (2) (3) (4) (5)

Ensures that student learning is the "bottom line" in schools. (1) (2) (3) (4) (5)

Helps schools focus on teaching and learning. (1) (2) (3) (4) (5)

Builds community confidence in our schools. (1) (2) (3) (4) (5)

Is committed to high standards for every student. (1) (2) (3) (4) (5)

Are consistent with schools' priorities (1) (2) (3) (4) (5)

Fosters communication between schools in the district. (1) (2) (3) (4) (5)

Allows school sites to make decisions...:

About teacher hiring. (1) (2) (3) (4) (5)

About teacher scheduling. (1) (2) (3) (4) (5)

About educational standards. (1) (2) (3) (4) (5)

About curriculum. (1) (2) (3) (4) (5)

About instruction. (1) (2) (3) (4) (5)

Gives schools control about their budget. (1) (2) (3) (4) (5)

Has consistent standards from school to school. (1) (2) (3) (4) (5)

Uses data as a basis for decision-making. (1) (2) (3) (4) (5)

Emphasizes standards at all levels of the system. (1) (2) (3) (4) (5)

2. How much involvement do teachers have in...:

A GREAT DEAL
A MODERATE AMOUNT
VERY LITTLE
NONE

Determining specific professional and teaching assignments. (1) (2) (3) (4)

Determining the schools' schedule. (1) (2) (3) (4)

Determining how students' progress is measured. (1) (2) (3) (4)

Hiring new professional personnel. (1) (2) (3) (4)

Planning how discretionary school funds should be used. (1) (2) (3) (4)

Hiring a new principal. (1) (2) (3) (4)

Establishing the curriculum and instructional program. (1) (2) (3) (4)

Determining the content of in-service programs. (1) (2) (3) (4)

Setting standards for student learning. (1) (2) (3) (4)

Determining the focus of school reform efforts. (1) (2) (3) (4)

3. Please indicate how strongly you agree or disagree with these statements about your district's relationship with parents and community.

STRONGLY AGREE
AGREE
NOT SURE
DISAGREE
STRONGLY DISAGREE

District staff...:

Make an effort to reach out to the community. (1) (2) (3) (4) (5)

Build trusting relationships with parents. (1) (2) (3) (4) (5)

Parents in this district...:

Play an active role in making decisions about the district's academic program. (1) (2) (3) (4) (5)

Are actively involved in evaluating and refining the district's standards. (1) (2) (3) (4) (5)

Are actively involved in charting our district's progress towards meeting its standards. (1) (2) (3) (4) (5)

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PLEASE DO NOT WRITE IN THIS AREA



SERIAL #

District Conditions

STRONGLY AGREE
AGREE
NOT SURE
DISAGREE
STRONGLY DISAGREE

4. To what extent do you agree or disagree with the following statements?
- The school board in this district...:
- Plays a strong role in setting district policy. (1) (2) (3) (4) (5)
- Is supportive of reform efforts in this district. (1) (2) (3) (4) (5)
- Is supportive of reform efforts in this school. (1) (2) (3) (4) (5)
- Promotes inquiry as the basis for reform in this district. (1) (2) (3) (4) (5)
- Promotes inquiry as the basis for reform in this school. (1) (2) (3) (4) (5)
- Are in agreement about academic standards of education. (1) (2) (3) (4) (5)
- Has been a catalyst for reform in this district. (1) (2) (3) (4) (5)

School Reform

5. Now consider your district's approach to school improvement. To what extent do you agree or disagree with each of the following statements?
- This district...:
- Supports local innovation. (1) (2) (3) (4) (5)
- Believes schools benefit from having an array of reform programs. (1) (2) (3) (4) (5)
- Supports whole school change effort. (1) (2) (3) (4) (5)
- Provides all schools the same level of support for reform. (1) (2) (3) (4) (5)
- Has a good understanding of school reform. (1) (2) (3) (4) (5)
- Supports reform efforts on a school by school basis. (1) (2) (3) (4) (5)
- Supports only a few related reform initiatives. (1) (2) (3) (4) (5)
- Supports schools to be leaders of reform in the district. (1) (2) (3) (4) (5)

School Reform

STRONGLY INCREASE
SOME INCREASE
NO CHANGE
SOME DECREASE
STRONGLY DECREASE

6. Indicate how much each of the following has changed in your district in the 1999-2000 school year.
- Interaction between different stakeholder groups (e.g., classified staff, teachers, parents, community, district administration). (1) (2) (3) (4) (5)
- Emphasis on academic standards. (1) (2) (3) (4) (5)
- Use of data as a basis for decision making. (1) (2) (3) (4) (5)
- Communication between the district central office and schools. (1) (2) (3) (4) (5)
- Communication among different departments in the district central office. (1) (2) (3) (4) (5)
- Amount of time that district staff spends at schools. (1) (2) (3) (4) (5)
- School flexibility in implementation of district policies. (1) (2) (3) (4) (5)
- Coordination among district central office departments. (1) (2) (3) (4) (5)
- Use of self-evaluation tools as a strategy for change. (1) (2) (3) (4) (5)
- Use of inquiry to inform academic improvement. (1) (2) (3) (4) (5)
- School participation in district policies. (1) (2) (3) (4) (5)
- Release time provided to school staff for professional development. (1) (2) (3) (4) (5)
- Technical assistance in supporting district initiated school reform. (1) (2) (3) (4) (5)
- Allocation of district budget for staff development. (1) (2) (3) (4) (5)
- District knowledge about individual school's reform efforts. (1) (2) (3) (4) (5)

7. Consider the following ways that HAC might support the development of leadership in your district. How do you rate each on importance? (1 is "not important at all" and 5 is "very important").
- VERY IMPORTANT**
NOT IMPORTANT AT ALL
- Organize Leadership Academies. (1) (2) (3) (4) (5)
- Organize Summer Institutes. (1) (2) (3) (4) (5)
- Provide site-based professional training. (1) (2) (3) (4) (5)
- Provide mentoring programs. (1) (2) (3) (4) (5)

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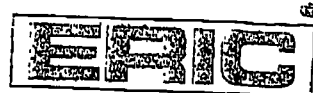
REFERENCES

- Aronson, E., & Patnoe, S. (1997). *The jigsaw classroom: Building cooperation in the classroom* (2nd ed.). New York: Longman.
- Ball, D. L., & Cohen, D. K. (1999). Developing practice, developing practitioners: Toward a practice-based theory of professional development. In L. Darling-Hammond & G. Sikes (Eds.), *Teaching as the learning profession: Handbook of policy and practice*. San Francisco: Jossey-Bass.
- Bransford, J. D., Brown, A. L., & Cocking, R. R. (Eds.). (2000). *How people learn: Brain, mind, experience, and school*. Washington, DC: National Academy Press.
- Campbell, D. T., & Stanley, J. C. (1963). *Experimental and quasi-experimental designs for research*. Chicago: Rand McNally.
- Cervone, B., & McDonald, J. (1999). *Preliminary reflections on the Annenberg Challenge: A working paper drawn from its first projects*. Providence, RI: Annenberg Institute for School Reform.
- Child-Centered Initiative. (1996). *Proposal to the Annenberg Challenge for School Reform*. Houston, TX: author.
- Clay, M. M. (1985). *The early detection of reading difficulties* (3rd ed.). Portsmouth, NH: Heinemann.
- Cohen, D. K., Raudenbush, S. W., & Ball, D. L. (2000). *Resources, instruction, and research: A CTP working paper*. Seattle: University of Washington, Center for the Study of Teaching and Policy.
- Darling-Hammond, L. (1997). *The right to learn: A blueprint for creating schools that work*. San Francisco: Jossey-Bass.
- Dworkin, A. G., Lorence, J., Toenjes, L. A., Hill, A. N., Perez, N., & Thomas, M. (1999). *Elementary school retention and social promotion in Texas: An assessment of students who failed the reading section of the TAAS*. A report prepared for the Texas Education Agency. Houston, TX: University of Houston, Department of Sociology.
- Eisner, E. W. (1998). *The kind of schools we need: Personal essays*. Portsmouth, NH: Heinemann.
- Finn, C. & Petrilli, M. (2000). *The state of state standards*. Washington, DC: Thomas Fordham Foundation.
- Gibbs, J. (2001). *Tribes: A new way of learning and being together*. Windsor, CA: Center Source Systems.
- Goodman, N. (1978). *Ways of worldmaking*. Indianapolis, IN: Hackett.
- Grissmer, D., & Flanagan, A. (1998). *Exploring rapid achievement gains in North Carolina and Texas*. Washington, DC: National Education Goals.
- Guskey, T. R. (2000). *Evaluating professional development*. Thousand Oaks, CA: Corwin Press.
- Houston Annenberg Challenge. (2000). *Transforming public schools*. Houston, TX: author.
- Ingersoll, R. M., Han, M., & Bobbitt, S. (1995). *Teacher supply, teacher qualifications, and teacher turnover: 1990-1991*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics.
- Johnson, D. W. & Johnson, F. (1991). *Joining together: Group theory and group skills* (4th ed.). Englewood Cliffs, NJ: Prentice Hall.
- Kennedy, M. (1992). The problem of improving teacher quality while balancing supply and demand. In E. Boe & D. Gilford (Eds.), *Teacher supply, demand, and quality: Policy issues, models, and data bases* (pp. 65-107). Washington, DC: National Academy Press.
- Klineberg, S. (1996). *1996 Houston area survey*. Houston, TX: Rice University.
- Kohn, A. (1999). *The schools our children deserve: Moving beyond traditional classrooms and "tougher standards."* Boston: Houghton Mifflin.
- Lake, K. (1994). *Integrated curriculum: School improvement research series*. Portland, OR: Northwest Regional Educational Laboratory.
- Lieberman, A. (Ed.). (1988). *Building a professional culture in schools*. New York: Teachers College Press.
- Lieberman, A. (1995). Practices that support teacher development: Transforming conceptions of professional learning. *Phi Delta Kappan*, 76, 642-644.
- Little, J. W. (1993). Teachers' professional development in a climate of educational reform. *Educational Evaluation and Policy Analysis*, 15(2), 129-151.

- Lorence, J., Dworkin, A. G., & Toenjes, L. A. (2000). *Longitudinal analyses of elementary school retention and social promotion in Texas: A second year report*. A report prepared for the Texas Education Agency. Houston, TX: University of Houston, Department of Sociology.
- Lortie, D. C. (1975). *Schoolteacher: A sociological study of teaching*. Chicago: University of Chicago Press.
- McLaughlin, M., Talbert, J. & Bascia, N. (Eds.). (1990). *The contexts of teaching in secondary schools*. New York: Teachers College Press.
- Newmann, F. M., Marks, H. M., & Gamoran, A. (1995, April). *Authentic pedagogy and student performance*. Paper presented at the meeting of the American Educational Research Association, San Francisco.
- Panitz, T. (1996). A definition of collaborative vs. cooperative learning. Retrieved September 2001 from <http://www.1gu.ac.uk/deliberations/collab.learning/panitz2.html>.
- Piaget, J. (1926). *Judgment and reasoning in the child*. New York: Harcourt, Brace, and Co.
- Pinnell, G. S., Deford, D. E., & Lyons, C. A. (1988). *Reading recovery: Early intervention for at-risk first graders*. [Monograph]. Arlington, VA: Educational Research Service.
- Rothstein, R. (2001, April 4). Lessons: A Passover way to teach. *The New York Times*.
- Schön, D. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic Books.
- Schön, D.A., & McDonald, J.P. (1998). *Doing what you mean to do in school reform: Theory of action in the Annenberg Challenge*. Providence, RI: Annenberg Institute for School Reform.
- Shulman, L. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review*, 57(1), 1-22.
- Snow, C. E., Burns, M. S., & Griffin, P. (1998). *Preventing reading difficulties in young children*. Washington, DC: National Research Council.
- Sparks, D. (2000). Foreword. In T.R. Guskey, *Evaluating professional development*. Thousand Oaks, CA: Corwin Press.
- Spillane, J.P. (2000). *District leaders' perceptions of teacher learning: CPRE occasional paper*. Philadelphia: University of Pennsylvania, Consortium for Policy Research in Education.
- Texas Education Agency (2001). Academic excellence indicator system (AEIS). Retrieved August 2001 from <http://www.tea.state.tx.us/perfreport/aeis>
- Thomas, R., & Murray, R. (2000, August 28). Houston in the twenty-first century. Retrieved July 2001 from <http://www.neosoft.com/~sgriffin/houstonhistory/decades/history5w.htm>
- Thomas, W.P., & Collier, V.P. (2001, April). *Reforming schools for English language learners: Achievement gap closure*. Presentation at American Educational Research Association Annual Meeting, Seattle, WA.
- U.S. Census Bureau. (2001). State and county quick facts. Retrieved July 2001 from <http://quickfacts.census.gov/qfd/states/48000.html>
- Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes*. M. Cole, V. John-Teiner, S. Scribner, & E. Souberman (Eds.). Cambridge, MA: Harvard University Press.
- Westheimer, J. (1998). *Among schoolteachers: Community, autonomy, and ideology in teachers' work*. New York: Teachers College Press.
- Yardley. (2001, March 25). Non-Hispanic whites may soon be a minority in Texas: Census shows a shift in Texas population as Latinos increase. *The New York Times*.



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Organization/Address: <i>The University of Texas at Austin George & Sanchez Bld. 310 Austin, TX 78712</i>	Telephone: <i>(512) 232-3636</i>
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