

Oklahoma A+ Schools:
What the Research Tells Us
2002 – 2007

A Five Volume Research Report



Oklahoma A+ Schools®

Volume Three: Quantitative Measures

Nancy H. Barry, Ph.D.

Volume 3 of 5

Published by:
Oklahoma A+ Schools® /
University of Central Oklahoma
January 2010

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Oklahoma A+ Schools®

Research Report: 2002 – 2007

Volume Three: Quantitative Measures

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PREFACE

Unlike many school reform programs which traditionally look to research and evaluation as an afterthought, comprehensive, university-based research has been a central component of the Oklahoma A+ process since its inception. In order to provide in-depth and meaningful insight into the A+ story, both qualitative and quantitative data were collected in an extensive, longitudinal research project spanning six years and including Principal Investigators from three different Oklahoma universities (the University of Central Oklahoma, the University of Oklahoma, and Oklahoma State University), as well as numerous graduate research assistants, scholars, and consultants from across the nation.

This volume provides detailed descriptions of research methods and procedures, results, and implications associated with quantitative data collected over a 6-year period. Quantitative data sources discussed in this chapter provide insight into the perspectives of various stakeholders in the A+ process including students (school statistics, including standardized test scores; and the My Class Activities student survey), teachers (Teacher Opinion Survey), A+ staff development providers (OK A+ Faculty/Fellow Survey), and the community (The Arts Education Perception Survey).

Since this research study employed a descriptive, rather than experimental design, it is not appropriate to infer causal relationships from these data. However, when these descriptive findings are considered in light of the literature on best educational practice, and complemented by parallel observations drawn from the extensive qualitative component of this study, a powerful portrait of distinct trends among and between schools, administrators, teachers, students and other stakeholders in the Oklahoma A+ Schools® emerges.

While to a certain degree, each volume of this Report is designed to “stand alone,” the reader is cautioned that these quantitative data provide only one perspective on a very large and very complex picture. The reader is urged to consider the entire multi-volume Report in order to gain a more complete and accurate understanding of the complex processes, personalities, and situations that comprise the Oklahoma A+ Schools® network.



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Introduction

Oklahoma A+ Schools® is a network of 52 schools across the state (according to a listing obtained from <http://www.aplusok.org/schools/> on June 12, 2009). This innovative program promotes a comprehensive, integrated approach to teaching and learning, based upon the idea of a whole-school curriculum and developed through an on-going process of collaborative, practitioner-led professional development. Schools participating in the Oklahoma A+ Network combine interdisciplinary teaching and regular arts instruction for all students including dance, drama, literary arts, music, and visual arts. Oklahoma A+ Schools® is based upon the North Carolina A+ Schools Program, an initiative of the Kenan Institute for the Arts (North Carolina Education and Law Project, 1996).

The three defining components of Oklahoma A+ Schools® are **professional development, networking, and research**. Eight Essential Commitments provide the framework for an on-going process that develops in unique ways within each participating school. Those essentials include *Curriculum, Multiple Intelligences, Experiential Learning, Enriched Assessment, Arts, Collaboration, Infrastructure, and Climate*.

Looking back across six years of research development and data collection, it becomes evident that this research *process* has evolved in ways that are parallel to the A+ philosophy. The focus of A+ has always been upon *the child*—improving schools for the children of Oklahoma. It was appropriate and logical, therefore, that initial data collection (2002-03) included student test scores and demographic data, and that by the second year of implementation (2003-04) the research team had added a survey of students' school-related attitudes (the *My Class Activities* survey) to its ever-expanding arsenal of data collection tools.

Also central to the A+ philosophy is the notion of practitioner-driven professional development (as illustrated by the minimum level of at least 85% faculty buy-in required for schools to be eligible to apply to join the A+ network). The centrality of the individual teacher is also reflected in the research team's interest in collecting data to better understand the attitudes and experiences of teachers as they participate in A+. During the first year of A+ implementation, the teacher's perspective was investigated through qualitative techniques including interviews and classroom observations. However, the research team acknowledged that quantitative data were also needed to understand the teacher's perspective and began systematically developing a teacher survey (*Teacher Opinion Survey*) during fall 2002 which was first administered during the 2003 Summer Institutes and Workshops.

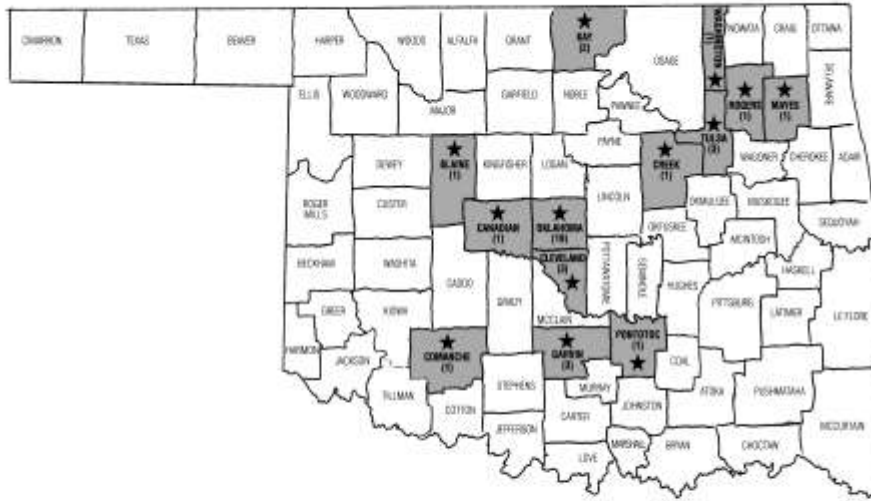
This research process has mirrored the A+ philosophy by beginning with students and teachers as the focal point and gradually expanding outward to include other important stakeholders such as A+ professional development providers and the community. An open-ended survey (*A+ Faculty/Fellows Survey*) was developed during the 2005-06 academic year and was first administered to A+ Faculty and Fellows during spring 2006 to collect information about their opinions of, and experiences with A+. During the 2005-06 academic year *The Arts Education Perception Survey* (TAEPS) (Barry, Garrett, & Clinton, 2005) was used to poll legislators, business people, parents, teachers, school administrators, and school board members in A+ Schools and other schools across the state about their views of the arts in education.

The data collection tools described above, taken together, provide descriptive insight into the A+ story. The following sections of this volume offer detailed descriptions of methods, procedures, results, and implications gleaned from each data set.

Demographic Data

During the five years that the main data collection for this research project was underway, the network of A+ Schools across the state of Oklahoma expanded from 14 schools during the 2002-03 academic year to 39 schools participating during 2006-07 (see Appendix for teacher and student enrollment data for participating schools).

Oklahoma A+ Schools®



BLAINE COUNTY
Geary Elementary

CANADIAN COUNTY
Central Elementary

CLEVELAND COUNTY
Jefferson Elementary
Madison Elementary
Monroe Elementary

COMANCHE COUNTY
Flower Mound Elementary

CREEK COUNTY
Freedom Elementary

GARVIN COUNTY
Jackson Elementary
Jefferson Elementary
Lee Elementary

KAY COUNTY
Garfield Elementary
Washington Elementary

MAYES COUNTY
Roosevelt Elementary

OKLAHOMA COUNTY
Briarwood Elementary
Britton Elementary
Cleveland Elementary
Del City Elementary
Harding Fine Arts Center
Linwood Elementary
Madison Elementary
Mark Twain Elementary
Merry School
Millwood Arts Academy
Millwood Pre-K – 6th
Nichols Hills Elementary
Putnam City Academy

OKLAHOMA COUNTY
Putnam Heights Academy
Quail Creek Elementary
Russell Dougherty Elementary
Sequoiah Elementary
Van Buren Elementary
Western Village Academy

PONTOTOC COUNTY
Glenwood Early
Childhood Center

ROGERS COUNTY
Oologah Lower Elementary

TULSA COUNTY
Deborah Brown
Community School
Crimes Elementary
Grissom Elementary

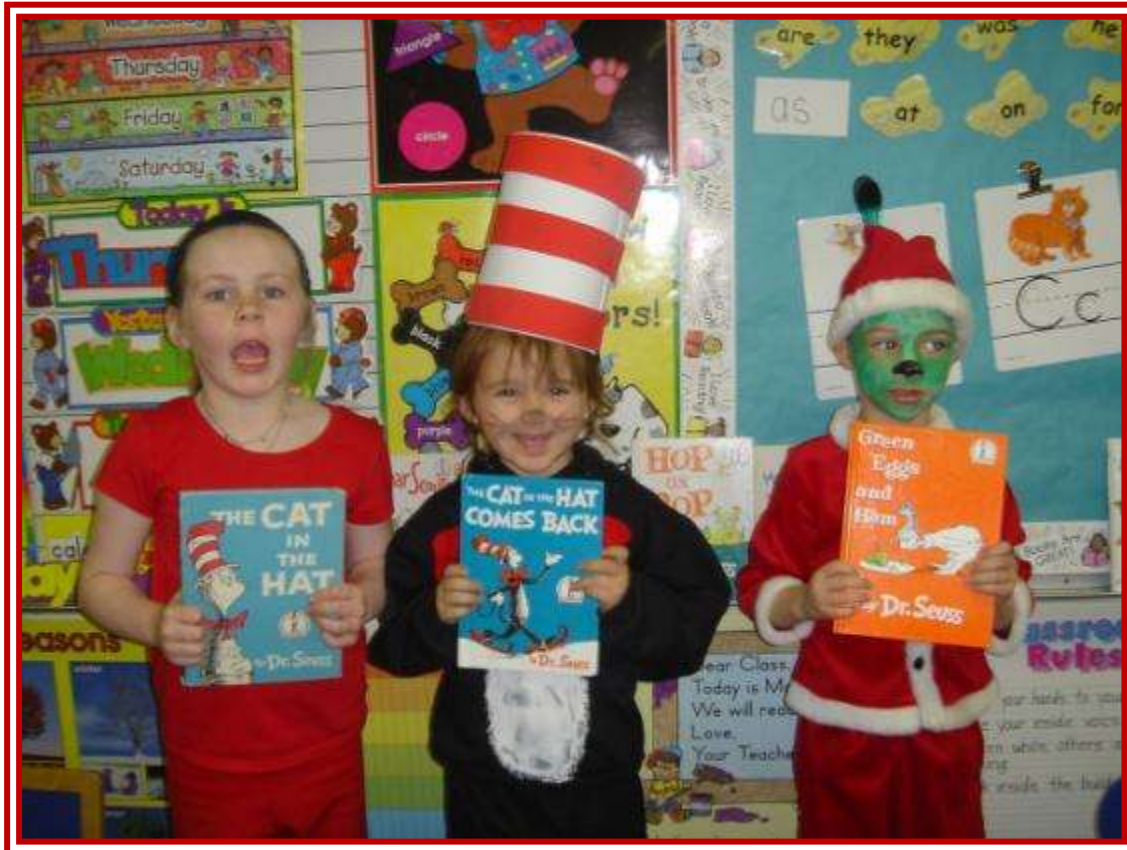
WASHINGTON COUNTY
Wilson Elementary

August 2006

Table 1 Number of Participants in OK A+ Schools*

	2002-03 Cohort (N=14 schools)	2003-04 Cohort (N=5 schools)	2004-05 Cohort (N=3 schools)	2005-06 Cohort (N=9 schools)	2006-07 Cohort (N=8 schools)	TOTAL SCHOOLS (N=39 schools)
Students	4656	2301	1020	2082	2577	12,636
Teachers	319	151	59	147	198	874
Para-professionals	83	37	9	25	48	202

*Based on 2006-07 data obtained from Oklahoma A+ Schools®



Investigating the Student’s Perspective

The Oklahoma A+ Schools® website states that A+ helps “*communities create the schools we need to prepare the children we love for continued leadership in the 21st century*” ([OklahomaA+Schools](#)). This statement illustrates the importance of the individual student within the A+ mission. Since caring about students is central to the Oklahoma A+ Schools® philosophy, student attitudes about their learning experiences were a major consideration for this research study. Class observations and student interviews are one important data source the research team used to help understand the A+ process from the individual student’s perspective (see Volume 4 of this Report for a detailed discussion of observation and interview data). This kind of data provided in-depth glimpses of individual stories, but the research team also believed it was important to attempt to capture the “big picture” as well by surveying large numbers of students within and across different Oklahoma A+ schools.



The Student's Perspective: Related Research

Educational research has shown strong relationships between students' attitudes and their school performance. Students who perceive their classrooms to be engaging, task oriented, and challenging are more likely to be successful than those who do not (Waxman & Huan, 1996). A recent three-year study of 520 children in Grades 3-5 revealed a significant relationship between children's perceptions of their classroom and academic and social outcomes as measured by teacher and child-report questionnaires and standardized test scores (Brock, Nishida, Chiong, Grimm, & Rimm-Kaufman, 2008). Research also shows that the educational experiences students have in the classroom have significant impact upon students' motivation and other school-related attitudes. A 2008 study of 2,468 fifth graders from 37 public elementary schools (Koth, Bradshaw, & Leaf, 2008) revealed that several classroom-level factors (i.e., teacher characteristics, class size, and concentration of students with behavior problems) were significant predictors of student perceptions of school climate.

Not surprisingly, the teacher holds a key role in developing student attitudes. Researchers have found positive relationships between teacher practices and child perceptions and outcomes over time (Brock et al., 2008). Effective teachers are actively involved throughout the learning process. Before the lesson, the successful teacher engages in careful planning to provide appropriate choices for learning; during the lesson, the teacher guides students throughout the learning process; and after the lesson the teacher assesses student learning and lesson effectiveness (Katz & Assor, 2007). Jones (2008) studied 594 students randomly assigned to experimental conditions involving a highly-supportive, moderately-supportive, or non-supportive teacher following a stressful situation. Students working with

highly supportive teachers had significantly greater satisfaction and motivation to learn in comparison with students paired with moderately supportive or non-supportive teachers.

In terms of student perceptions and preferences for classroom environment, a one-size-fits-all model may not be ideal. While certain general trends regarding student perceptions and their motivation and achievement are evident in the research literature, one should also consider the important role of individual student differences within the instructional equation. A study of 208 British sixth grade students found significant relationships between students' perceptions of and preferences for the learning environment and individual student motivational tendencies (Tapola & Niemivirta, 2008). Similar findings were obtained from an action research project studying the effects of differentiated instruction upon the motivation of third, fifth, and eighth grade students (Danzi, Kelly, & Rana, 2008). This study found that instruction based upon *multiple intelligences* contributed to fewer student distractions and decreased off-task behaviors.

My Class Activities Survey (MCA)

In order to obtain a broader, quantitative perspective on students' school-related attitudes, the research team selected the *My Class Activities* (MCA) survey (Gentry & Gable, 2001). Two broad research questions were addressed:

1. What are students' in A+ schools attitudes about their in-class activities regarding their level of interest, perceived degree of challenge, choice of activities, and enjoyment?
2. Are there any differences in students' attitudes across different school settings?

After conducting an extensive review of the literature on student survey instruments for measuring classroom climate (see Appendix), investigators selected the MCA survey because research has shown it to be a valid and reliable tool for measuring students' perceptions of their classroom activities (Gentry & Gable, 2001a). The MCA consists of 31 statements which comprise four subscales representing *interest*, *challenge*, *choice*, and *enjoyment*.

The *My Class Activities* survey was administered to students in Grades 2-8 in Oklahoma A+ Schools® during the 2003-04 (1495 students), 2004-05 (1230 students), 2005-06 (1473 students), and 2006-07 (1844 students) academic years. Researchers visited each school to administer the surveys to those students whose parents returned signed consent forms. Surveys were administered by a member of the research team or a graduate research assistant to students by grade level in group settings. Administration procedures began with a discussion of the survey and an explanation of the response format. Students were then invited to ask questions. Each survey item was read aloud to students in Grades 2 and 3. Students in Grade 4 or higher were instructed to complete the survey at their own pace. All students were given the opportunity to ask questions throughout the survey administration process.

The number of male/female students was well balanced across all four years of survey administration, with a slightly larger proportion of females. The grade level of respondents ranged from Grades 2 to 8 with the majority of respondents in Grades 3, 4, and 5 (see Table 2).

**Table 2 My Class Activities Student Survey
2003-04, 2004-05, 2005-06, and 2006-07 Data**

Sex	2004	2005	2006	2007	Grade Level	2004 N	2004%	2005 N	2005 %	2006 N	2006 %	2007 N	2007 %
Female	52%	53%	53%	53%*	Grade 2			37	3.0				
Male	48%	47%	47%	46%*	Grade 3	467	31.2	355	28.9	487	33.1	557	30.2
					Grade 4	478	32.0	394	32.0	430	29.1	529	28.7
					Grade 5	452	30.2	373	30.3	457	31.0	541	29.3
					Grade 6					36	2.4	153	8.3
					Grade 7					23	1.6	13	.7
					Grade 8					23	1.6	17	.9
					Other	8	0.6	2	0.2				
					Not marked	90	6.0	69	5.6	17	1.2	34	1.8
					Total Students	1495	100%	1230	100%	1473	100%	1844	100%

**Some students (1%) did not indicate their gender on the survey.*

MCA Results

Reliability statistics (Cronbach's Alpha) indicated acceptable instrument consistency (ranging from .59 to .91) across all four years of MCA survey administration. Highest reliability was found for the *Interest* and *Enjoyment* scales. Reliability alphas for the *Challenge* and *Choice* scales were lower but were still within acceptable levels to support the validity of the survey instrument (see Table 3).

Comparison of student responses across the four years of MCA survey administration indicates very similar response trends. Over this four-year period, students in OK A+ Schools consistently reported *very favorable attitudes* regarding their school experiences. Oklahoma A+ students indicated that they found their schoolwork *Enjoyable* (mean = 3.91, 7 item scale), *Interesting* (mean = 3.64, 8 item scale), and *Challenging* (mean = 3.58, 9 item scale). The response continuum was based on a scale of 1 = *Never* to 5 = *Always* and was averaged across all four years.

Students reported somewhat lower ratings for the cluster of items relating to *Choice* (mean = 2.94, 7 item scale) in learning activities. These results could be expected given the prescribed curriculum within the state and the emphasis upon both state and federally-mandated testing that were in place during the time this research was conducted.

**Table 3 My Class Activities Student Survey
2003-04, 2004-2005, 2005-2006, and 2006-07 Scale Reliability Data**

	Scale 1: Interest				Scale 2: Challenge				Scale 3: Choice				Scale 4: Enjoyment			
	2004	2005	2006	2007	2004	2005	2006	2007	2004	2005	2006	2007	2004	2005	2006	2007
Number of Defining Statements for Scale	8	8	8	8	9	9	9	9	7	7	7	7	7	7	7	7
Reliability of Scale (alpha)*	.82	.80	.80	.82	.61	.63	.59	.66	.63	.66	.67	.64	.90	.89	.90	.91
Scale Mean	29.6	29.3	28.6	28.7	32.6	32.4	32.0	32.0	21.4	20.5	20.0	20.3	28.0	28.0	27.0	26.6
Standard Deviation	5.78	5.74	5.60	5.77	5.02	5.15	4.92	5.23	4.97	5.19	5.11	4.95	6.28	6.07	6.48	6.64
Item Mean**	3.71	3.67	3.57	3.59	3.62	3.61	3.55	3.55	3.06	2.93	2.86	2.91	4.00	4.00	3.86	3.79
<p><i>“My Class Activities” student survey used with permission of its author, Marcia Gentry, Minnesota State University</i></p>																
<p><i>*Reliability of the scale increases the closer alpha = 1.0</i></p> <p><i>**Item means are based on this scale: 1=never; 2=seldom; 3=sometimes; 4=often; 5=always</i></p>																

Analysis of individual survey items also revealed substantial consistency in students' responses across all four administrations of the MCA. Survey items rated highest by students related to feeling challenged to do their best work, having fun while learning, having to engage in thinking and problem solving, looking forward to their classes, liking projects, and feeling that their work can make a difference (see Table 4 below).

Table 4 Highest Ranked MCA Items

MCA Survey Item	2003-04 Mean	2004-05 Mean	2005-06 Mean	2006-07 Mean
15. I am challenged to do my best	4.39	4.40	4.34	4.36
26. I have fun in my class	4.08	4.08	3.94	3.89
27. The teacher makes learning fun	4.08	4.05	3.93	3.93
10. I have to think to solve problems in my class	4.04	4.02	4.00	4.01
25. I look forward to my class	4.02	4.04	3.88	3.74
31. I like the projects I work on in my class	4.01	4.02	3.89	3.87
13. My work can make a difference	3.90	3.99	3.89	3.96

There is considerable debate among educators about whether students' evaluations of their classroom and teacher are valid. Certainly, one might argue that students would report higher ratings for teaching practices that they perceive as "easy." These MCA results, however, are consistent with other research indicating that student ratings are largely determined by the quality of teaching (Remedios & Lieberman, 2008). Consistently high ratings for items pertaining to *challenge* as well as *interest* and *enjoyment* support the notion that students value an instructional environment that is stimulating, productive, and engaging.

While students across all participating OK A+® schools reported generally positive attitudes about learning activities in their schools, it is important to note this study revealed consistent and statistically significant differences in student attitudes across different school settings. A one-way MANOVA was calculated on the student survey data, examining the effect of school affiliation upon each student's average response to the items on each MCA scale. A significant main effect was found for the data. This trend was consistent across each of the four years that the survey was administered. Follow-up univariate ANOVAs indicated that mean scores for all four scales differed significantly according to a student's school affiliation.

In order to interpret these statistically significant ANOVA results, a database was generated showing average student responses to the MCA sorted by school. This allowed the researchers to compare across different schools (see Appendix for MANOVA and ANOVA statistics). Qualitative data (including the nature of comments about A+ from principal, teacher, and student interviews, and the extent to which the Eight Essentials were evident across multiple observations of classroom instruction) revealed that A+ schools were functioning along a continuum of school change. These ranged from *informative* in which A+ was largely viewed as an optional add-on program to *transformative* in which A+ was embedded in school policy and day-to-day instructional practice (see Volume 5 of this series). This analysis process revealed a relationship between this observed continuum and students' MCA responses. Students' attitudes were significantly higher in schools functioning at a more *transformative* level in comparison to schools functioning at an *informative* level.

Results of this data analysis (when considered in light of parallel qualitative observations) suggest that, while all responses were generally positive, student attitudes varied according to the climate and level of A+ buy-in evident across different school settings.

Students' MCA responses in schools in which teachers and the principal generally viewed A+ as an add-on were consistently lower than students in schools in which teachers and principals (both in their stated beliefs and through observed practices) viewed A+ as a more fully integrated part of the schools' philosophy and practice. These findings are consistent with observations from other research studies, indicating that students' school-related attitudes (and their subsequent academic motivation and performance) are affected by school climate (e.g., Griffith, 2000; Haynes, Emmons, & Ben-Avie, 1997; Koth, Bradshaw, & Leaf, 2008; Tapola & Niemivirta, 2008). The results of this series of MCA surveys are supported by other studies demonstrating that children thrive in a school environment that celebrates the individual child as a member of a classroom *community of learners* who are consistently challenged and engaged in meaningful learning activities (e.g., Osterman, 2000; Van der Oord, & Van Rossem, 2002; Solomon, Battistich, Kim, & Watson, 1996).

These observations are consistent with the literature on best practice which indicates positive relationships between students' school-related attitudes and a hands-on, student-centered curriculum (e.g., Brock, Nishida, Chiong, Grimm, & Rimm-Kaufnam, 2008). Research indicates that students' attitudes and their subsequent improvement in academic



achievement are associated with learning environments that emphasize the arts (Rogers, 2008; Swann-Hudkins, 2002) and multiple intelligence activities (Belcher & Macari, 1999; Buschick, Shipton, Winner, & Wise, 2007).

Implications from the My Class Activities Survey

The *My Class Activities* survey revealed that students in schools participating in the Oklahoma A+ Schools® Network held positive attitudes about their classroom activities. These students consistently reported their work was *challenging, interesting, and enjoyable*. It is interesting to note the individual survey item consistently receiving the highest rating across all survey administrations was “I am challenged to do my best.”

While the research design of this survey is descriptive and was not a causal model, these survey results certainly give rise to questions about what teaching practices may have contributed to such overwhelmingly positive student attitudes about their classroom activities. The research literature pinpoints a number of important factors associated with improving student attitudes and motivation:

1. Planning instruction across *all* of the intelligences
2. Including cooperative learning experiences
3. Individualizing instruction to meet the needs and interests of all learners
4. Providing active teacher support for students within and beyond the classroom

The research literature supports the efficacy of the above examples, which are embedded within the A+ philosophy and are variably present across the Oklahoma A+ Schools®. Results of the MCA surveys provide insight into A+ students’ school-related attitudes and some interesting between-school differences. Based upon these results, student

attitudes appear to grow more positive as schools move toward a more *transformative* model of engagement with A+ schools. These students believe they can make a difference. They view their schools as welcoming and happy places where they are expected to work hard and think hard.



Oklahoma State Department of Education School Performance Data

Oklahoma State Department of Education data were used to develop a profile of Oklahoma A+ Schools'® community characteristics, student demographics, attendance rates, parental participation, and students' academic achievement. These data were also analyzed to compare A+ schools with state and district averages, and to explore possible differences among different A+ schools. The two main data sources used were the *School Report Card*, and the *Academic Performance Index (API)*.

School Report Cards

The *School Report Card* is published by the Oklahoma Office of Accountability. The Office of Accountability was created in 1990 by Oklahoma House Bill 1017 and is governed by

the Education Oversight Board with the Governor’s Secretary of Education serving as the Chief Executive officer. This office administers two programs, the Oklahoma Educational Indicators Program and the Oklahoma School Performance Review Program. The Oklahoma Educational Indicators Program serves “as a clearinghouse for education data” (Oklahoma Office of Accountability, 2008).

School Report Cards provide three general types of data: community characteristics, school educational process, and student performance. While these types of statistics provide a useful overview of what is happening within a particular community and school, it is important to understand the limitations of this type of quantitative snapshot:

Remember, when evaluating education, no single score or ratio can measure the academic soundness of a state, district, school, or student. The various factors that contribute to the educational process must be evaluated while taking into consideration their interrelationship. This is a difficult, but important task. (Oklahoma Office of Accountability, 2008)

Community Characteristics

Oklahoma A+ Schools® serve a diverse student population. Percentages of Black, Asian, and Hispanic students in A+ Schools have been consistently higher than the state average.

Table 5 Oklahoma A+ School and State Average Ethnic Percentages (from OK School Report Cards*)

Year	% Caucasian		% Black		% Asian		% Hispanic		% Native American	
	A+	State	A+	State	A+	State	A+	State	A+	State
2002-03	54.2	62	19.7	11	2.3	2	13.7	7	10.5	18
2003-04	52.6	61	19.65	11	2.3	2	15.5	8	9.95	18
2004-05	50.9	60	19.75	11	2.4	2	16.1	8	10.6	19
2005-06	51.52	59	21.04	11	2.24	2	15.44	9	9.76	19
2006-07	50.03	58.6	20.68	10.8	2.81	1.8	15.87	9.5	10.55	19.3

**Note. Some A+ Schools (e.g., early learning centers, private schools.) are not included in the Oklahoma State Department of Education’s School Report Card data.*

One of the goals of the Oklahoma A+ Schools® network is to meet the needs of *all* students. The data show that A+ has consistently served a higher percentage of economically disadvantaged students (based upon percentages of students qualifying for free or reduced lunch) in comparison to state averages.

Table 6 Oklahoma A+ School and State Average Percentage of Students Receiving Free or Reduced Lunch

Year	A+ Free/Reduced Lunch %	OK State Free/Reduced Lunch %
2002-03	60.80	52.00
2003-04	61.65	54.00
2004-05	61.95	55.00
2005-06	60.76	56.00
2006-07	62.13	56.00

Preparation, Motivation and Parental Support

School Report Card data indicate relatively high rates of parental involvement (i.e., percentage of parents attending at least one parent/teacher conference, average number of volunteer hours per student) and relatively low absentee (average number of days absent per student) and suspension rates (reported as ratio of suspensions of 10 days or less for every X number of students. For example, a score of 50 in this column would indicate there was one suspension for every 50 students (see Tables 7-11).

Table 7 2002-03 School Report Card Preparation, Motivation, and Parental Support

A+ Entry Year	Parents Attending Conference	Volunteer Hours	Average Days Absent Per Student	Suspension Ratio	Free/Reduced Lunch	Reading Remediation
2002	95.86	8.51	<i>Not Available</i>	61.33	54.29	31.79

Table 8 2003-04 School Report Card Preparation, Motivation, and Parental Support

A+ Entry Year	Parents Attending Conference	Volunteer Hours	Average Days Absent Per Student	Suspension Ratio	Free/Reduced Lunch	Reading Remediation
2002	94.69	9.93	<i>Not Available</i>	50.74	55.00	30.71
2003	90.25	8.48	<i>Not Available</i>	26.83	80.00	29.75

Table 9 2004-05 School Report Card Preparation, Motivation, and Parental Support

A+ Entry Year	Parents Attending Conference	Volunteer Hours	Average Days Absent Per Student	Suspension Ratio	Free/Reduced Lunch	Reading Remediation
2002	92.00	9.18	8.37	52.28	55.57	31.21
2003	94.00	18.10	8.65	26.28	78.00	43.33
2004	88.50	7.25	9.40	66.70	74.50	26.00

Table 10 2005-06 School Report Card Preparation, Motivation, and Parental Support

A+ Entry Year	Parents Attending	Volunteer Hours	Average Days Absent Per	Suspension Ratio	Free/Reduced Lunch	Reading Remediation
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	Conference		Student			
2002	93.46	9.22	8.11	57.50	53.38	32.92
2003	88.33	6.00	8.40	22.43	76.25	46.00
2004	93.00	9.8	9.25	27.20	79.50	49.00
2005	90.00	6.33	6.28	79.53	60.17	35.40

Table 11 2006-07 School Report Card Preparation, Motivation, and Parental Support

A+ Entry Year	Parents Attending Conference	Volunteer Hours	Average Days Absent Per Student	Suspension Ratio	Free/Reduced Lunch	Reading Remediation
2002	94.17	9.19	7.98	74.33	54.62	37.69
2003	83.00	4.80	9.75	18.08	76.00	57.00
2004	92.00	6.90	7.25	44.20	75.50	35.50
2005	92.20	5.92	6.70	57.62	56.00	27.40
2006	95.00	9.48	9.27	28.36	70.83	45.33

Student Performance

Oklahoma Core Curriculum Tests (OCC) scores indicate that students in the majority of Oklahoma A+ Schools® have generally performed at or above state averages (see Tables 12-16). However, when the data are broken down by individual schools, some important between-school differences emerge.

Table 12 2003 School Report Card OCC Scores (2002-03 Academic Year)

A+ Entry Year	OCC Math	OCC Science	OCC Reading	OCC Writing	OCC History	OCC Geo	OCC Arts
State Average	71	81	73	83	70	59	55
2002-03	76.83	80.5	76	76.25	75.58	65.83	69.08

Table 13 2004 School Report Card OCC Scores (2003-04 Academic Year)

A+ Entry Year	OCC Math	OCC Science	OCC Reading	OCC Writing	OCC Social Studies
State Average	79	83	76	55	67
2002-03	86.08	92.46	86.62	73.15	77.46
2003-04	74	79.75	66.5	58.5	56.75

Table 14 2005 School Report Card OCC Scores (2004-05 Academic Year)

A+ Entry Year	Grade 3 Math	Grade 3 Reading	Grade 4 Math	Grade 4 Reading	Grade 5 Math	Grade 5 Reading	Grade 5 US Hist	Grade 5 Science
State Average	77	87	91	82	84	79	69	83
2002-03	81.85	90.85	84.92	88.54	93.83	86.42	82.5	90
2003-04	77.33	80	77.25	85.5	77.5	65.75	54.25	73.25

2004-05	69	100	97	95	90.5	87	77.5	88.5
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Table 15 2006 School Report Card OCC Scores (2005-06 Academic Year)

A+ Entry Year	Grade 3 Math	Grade 3 Reading	Grade 4 Math	Grade 4 Reading	Grade 5 Math	Grade 5 Reading	Grade 5 US Hist	Grade 5 Science	Grade 5 Writing
State Average	78	90	78	90	84	84	69	88	90
2002-03	78.85	93.08	89.25	97.33	89.67	89.5	80.58	90.58	95.25
2003-04	80	83	85.5	91.5	78	86.25	59.5	81.75	89.5
2004-05	70	82.5	94.5	98	93	88.5	76.5	89.5	100
2005-06	83	90.8	95.2	96.2	85	89.75	77.25	92.5	95.25

Table 16 2007 School Report Card OCC Scores (2006-07 Academic Year)

A+Entry Year	Grade 3 Math	Grade 3 Reading	Grade 4 Math	Grade 4 Reading	Grade 5 Math	Grade 5 Reading	Grade 5 US Hist	Grade 5 Science	Grade 5 Writing
State Average	80	91	86	94	88	86	73	87	87
2002-03	83.08	95.8	87.42	96.25	95	94.17	89	93.58	93.75
2003-04	69	78	88	92	81	77.5	64.75	80.5	84
2004-05	85	95	82	92	91.5	98	87	93.5	90
2005-06	85.2	91.2	90	98.4	87.8	84.2	73.8	78.5	92.2
2006-07	88	97.17	77	88.5	84.67	86.67	68.5	84	85.5

Academic Performance Index

The Oklahoma State Department of Education offers the following description of the Academic Performance Index:

The Academic Performance Index (API) measures performance and progress of a school or district based on several factors that contribute to overall educational success. It is a numeric index or score, ranging from 0 to 1500, with 1000 as the 2001-2002 state average. An overall API score, as well as subscores for individual indicators, are assigned to each school and district in Oklahoma.

Statewide targets for performance on reading/language arts and mathematics state tests have been set and will increase incrementally to promote continued improvement of education in our state. Performance targets for additional indicators, including attendance rates and graduation rates, have also been set as goals for schools and districts. (Oklahoma State Department of Education, 2008)

The API is based upon seven indicators mandated by Oklahoma state legislation (Title 70 O.S. 3-150). The indicators are divided into the following three categories:

1. Oklahoma School Testing Program (OSTP). Includes reading/language arts and math results from all state-mandated tests (Grades 3-8) and upon completion of specific high school courses (End-of-Instruction tests).
2. School Completion. Includes attendance, dropout, and graduation rates.
3. Academic Excellence. Includes ACT scores and percent of students participating, Advanced Placement (AP) credit, and college remediation rates in reading and math. Dropout and graduation rates and all indicators in Academic Excellence are used only for high school (Grades 9-12) and K-12 district accountability.

Oklahoma A+ Schools® consistently outperformed their counterparts within their districts and the state on the Academic Performance Index (API). Comparison of Average API

scores for Oklahoma A+ Schools® with their district (all district schools, including A+) and state averages from the 2002-03 through 2006-07 academic years reveals higher scores for A+ schools. Paired Samples T-Tests comparing A+ Oklahoma School averages with their district averages indicated these differences were statistically significant (probability of error less than .05) for 2003, 2005, 2006, and 2007 API data (see Appendix).

Table 17 Average API for A+ Schools, District and Oklahoma State Average

Academic Year	A+ Schools Average*	District Average**	OK State Average**
2002-03	1109 (N = 22)	975	1046
2003-04	1135 (N = 22)	1049	1086
2004-05	1261 (N = 26)	1137	1159
2005-06	1308 (N = 28)	1170	1180
2006-07	1332 (N = 33)	1196	1252

*API Data not available for those A+ Schools not included in state testing (e.g., Private Schools, Early Childhood Centers).

**Oklahoma A+ Schools® were included in calculations of district and state API averages.

The length of time that a school participated in A+ was not shown to be a significant factor in the analysis of API scores. A MANOVA comparing mean API scores according to entry year did not reveal any significant differences on the basis of number of years a school has been involved with the A+ network. This analysis is consistent with qualitative analysis showing that different schools come to A+ at different entry points and that a school’s level of engagement with A+ is not static and does not always progress according to a vertical or

predictable pattern. Rather, a school's engagement with A+ varies along a continuum, ebbing and flowing according to profound real-life events (e.g., changes in administration, teacher turnover, rezoning) that impact the school culture and climate.

Implications of School Performance Data



School performance data reported by the Oklahoma State Department of Education indicate high rates of success for students in Oklahoma A+ Schools® across the span of this longitudinal research project. School Report Card data indicate that students in most A+ schools generally performed at or

above state averages. Academic Performance Index (API) data indicate consistent and statistically significant advantages for A+ students in comparison with state and district averages. These differences between averages for A+ schools and district and state averages are even more striking when one considers that A+ schools have consistently served higher percentages of minority and economically disadvantaged students (free/reduced lunch) in comparison with state averages. These results are supported by the research indicating that a varied and arts-rich curriculum, while beneficial for all students, may be particularly effective for improving motivation and academic performance of disadvantaged and academically at-risk students (Burton, Horowitz & Abeles, 1999; Burton, Horowitz & Abeles, 2000; Psilos, 2002; Smithrim, & Upitis, 2005; Upitis & Smithrim, 2003).

A school-by-school comparison of average scores for both State Report Card and Academic Performance Data revealed consistent differences between schools. When these differences are interpreted in light of qualitative observations reported in a separate volume of this report, a pattern emerges. It appears that those schools demonstrating more complete integration and implementation of the A+ philosophy (as evidenced through student, teacher and principal interviews, and observations of classroom activities) as opposed to those schools in which A+ is viewed more as an add-on also performed consistently higher on school performance measures such as the State Report Card and the API. This observation of between-school differences (drawn from descriptive individual school data and from qualitative analysis) is supported by the literature on school climate (e.g., Anderson, 1982; Koth, Bradshaw, & Leaf, 2008; Walberg, 1968; Welsh, 2000). It is evident from this literature that classroom practices of individual teachers have a profound impact upon student outcomes. However, the tone set by the building principal appears to be the most essential factor in establishing a school climate that is most conducive to student motivation and achievement.

Investigating the Teacher’s Perspective

Teacher Opinion Survey (TOS)

The Oklahoma A+ Schools® program embraces a practitioner-driven philosophy, a collaborative model which places the teacher at the center of instructional planning and delivery. The role of the practitioner is also crucial to A+ professional development through the work of *Faculty* and *Fellows*, teachers and artist teachers who provide professional

development to their colleagues (See the results of a survey of A+ Faculty and Fellows presented later in this volume),

The *Teacher Opinion Survey* (TOS) was developed by the research team during the 2002-03 academic year to document and describe teachers' opinions and attitudes toward the arts in education. Specifically, this survey explored teachers' views about the ways that arts education can impact student attitudes and academic performance, the importance of teaching the arts as a separate discipline, the role of the teacher in arts instruction, and the level of collaboration in their schools. An additional goal of this study was to examine the possibility of any between-school differences in teacher attitudes.

A thorough review of literature was conducted to develop an appropriate instrument to determine the attitudes of teachers toward the arts and arts integration. Potential items from the literature, including existing survey instruments, were extracted and printed on cards, resulting in a pool of approximately 380 items.

Validity

A panel of eight arts educators, teachers, and researchers read the items and sorted the cards into groups of items that were alike in some way (similar to Taba strategies; Schiever, 1993). Over 12 categories were generated and named according to the item similarity (homogeneity) through rewording or eliminating redundancy. During this process, some of these 12 categories were found to identify different aspects of the same broad category and were collapsed. This process ultimately yielded five groups of items pertaining to the broad categories of professional development, the arts and curriculum, arts integration, program involvement, and collaboration. There were 4-14 items in each category, which were printed

and distributed for review to key leaders in the arts integration programs, including A+ Fellows, A+ administration, and researchers.

The edited items, comments, and feedback were integrated into the resultant 48 Likert-type items that comprised the initial version of the Teacher Opinion Survey (TOS). Response options for the TOS items are 1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree. The TOS was distributed and completed by 312 A+ teachers during their first evening session of the 2003 Summer Institutes.

Factor Analysis

Data from the first administration of the TOS were analyzed by exploratory factor analysis to determine the most appropriate scales for future descriptions of teacher attitudes about arts integration in the schools. Results were evaluated for three-, four-, and five-factor solutions using .35 to determine significance for factor loading. The four-factor solution provided the greatest number of items that loaded on one of the factors, a theoretically sound description of the four scales, and relatively strong reliability for each of the four resulting scales: *Positive Impact of the Arts*, *Collaboration*, *Teacher as Artist*, and *Arts as a Separate Discipline*. (See Table 18 for results of the Factor Analysis with the items that define the factor and the factor scores for all of the A+ teachers for the initial June 2003 administration of the TOS.)

After statistical analysis for item reliability and validity, some items were removed, resulting in a 38-item version that was administered during the 2004 Summer Institutes. The research team continued to refine the survey by revising and adding items to the scales, resulting in a 44-item version administered during the 2005 and 2006 Summer Institutes (see Appendix for scale reliability statistics).

The *Teacher Opinion Survey (TOS)* was completed by 312 teachers in 2003, 351 teachers in 2004, 450 A+ teachers in 2005, and 615 teachers in 2006. Teacher opinions about curriculum and instruction remained fairly consistent across the four years this survey was administered. TOS respondents indicated highest levels of agreement with statements about the positive impact of arts upon student outcomes. There was also general agreement with statements about the importance of collaboration in planning and implementing arts integrated curriculum and the role of the teacher as artist. Participants tended to disagree with negative statements about the value of the arts as a separate discipline.

Table 18 Teacher Opinion Survey Scale Item Means and Reliability (Alpha)

	Scale 1: Positive Student Outcomes		Scale 2: Collaboration		Scale 3: Teacher as Artist*		Scale 4: Arts As A Separate Discipline*	
	Scale Mean	Reliability Alpha	Scale Mean	Reliability Alpha	Scale Mean	Reliability Alpha	Scale Mean	Reliability Alpha
2003-04 (N=312)	3.26	.849	2.96	.776	3.08	.605	2.98	.718
2004-05 (N=351)	3.15	.865	2.92	.753	2.98	.741	2.93	.737
2005-06 (N=450)	3.19	.819	2.94	.773	2.84	.747	3.06	.718
2006-07 (N=615)	3.17	.865	2.95	.789	2.88	.713	3.04	.698

Response Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree

*Negatively-worded items in these scales were reverse coded for calculation of means.

Analysis of individual survey items also revealed substantial consistency in teachers’ responses across all four administrations of the TOS. Survey items rated highest by teachers related to being encouraged to be creative at their schools, support for collaboration, and belief in the benefits of integrating the arts into the curriculum (see Table 19).

Table 19 Highest Ranked TOS Items (Scale of 1-4)

TOS Survey Item	2003-04 Mean	2004-05 Mean	2005-06 Mean	2006-07 Mean
Teachers are encouraged to be creative at my school.	3.58	3.61	3.55	3.60
The nature of this program allows for collaboration with others.	3.44	3.51	3.45	3.49
The arts integrated into the total curriculum promote learning across subject boundaries.	3.40	3.32	3.31	3.30
It is logical to teach concepts holistically across all subjects in the curriculum including the arts.	3.40	3.37	3.46	3.36
Arts integration aids in the goal of students loving to learn.	3.39	3.40	3.42	3.38
Students become more self-actualized through the arts.	3.22	3.32	3.34	3.30

Results of this survey are consistent with interview and observational data showing that teachers in A+ schools have generally favorable attitudes about the arts in education, arts integration, and teacher collaboration. However, this study also revealed consistent and statistically significant differences (.000) in teacher attitudes across different school settings. One-way MANOVAs were calculated on the TOS data, examining the effect of school affiliation upon each teacher’s average response to the items on each of the four scales for each year of the survey administration. A significant main effect was found for the data, a consistent trend across each of the four years that the survey was administered. Follow-up univariate ANOVAs indicated that mean scores for two of the scales differed significantly according to a teacher’s school affiliation across all four years of survey administration—the Collaboration

scale (.000 for all four years) and the Arts as a Separate Discipline scale (.000, .001, .037, .002 respectively). Some between-school-differences were also observed for the other two scales, Student Outcomes and Teacher as Artist, but these differences were not statistically significant across all four years (see Appendix).

In order to interpret these statistically significant ANOVA results, a database was generated showing average teacher responses to the TOS sorted by school. This allowed the researchers to compare teachers' responses across different schools (see Appendix for MANOVA and ANOVA statistics).

The two scales that revealed the most consistent statistically significant between-school differences pertained to factors that extend beyond the individual teacher. Collaboration, by definition, is dependent upon interactions with colleagues and is also related to school climate and the principal's leadership. It is also likely that teachers' views of the arts within the curriculum may be influenced by external factors such as interactions with their peers, professional development, and the principal's leadership. On the other hand, teachers' views of themselves as artists and feelings about the positive benefits that students derive from the arts are more likely to stem from more internal, personal beliefs, and therefore are less likely to vary on the basis of school affiliation.

Teacher Opinion Survey: Implications

Responses to the *Teacher Opinion Survey* indicate that teachers in Oklahoma A+ Schools® held favorable attitudes about arts in education, arts integration, and teacher collaboration. Certainly, one might ponder whether participation in A+ fostered these positive attitudes about the arts in education, or whether pre-existing positive attitudes prompted schools

to participate in A+. Determining the cause of these positive attitudes is beyond the scope of this survey. However, when these survey results are considered in light of the parallel qualitative data (see Volume 4: Qualitative Data Analysis), it appears that the answer may be “both.” Interview data revealed that many schools were initially attracted to A+ because of the emphasis upon multiple intelligences and arts integration. However, teacher interviews also revealed that, in those schools with strong principal support, A+ provided an incentive for teachers to break out of their comfort zone, encouraging them to incorporate new approaches to teaching.

Between-school differences obtained from this analysis are consistent with observations from the descriptive and qualitative data, suggesting that teacher attitudes varied according to individual school climate and the level of A+ buy-in that was evident across different school settings. Teachers in those schools that had achieved more comprehensive integration of the A+ way of thinking and doing (based upon observations, interviews, and other data) expressed consistently higher opinions about the value and level of collaboration within their schools in comparison with teachers in schools where A+ is still largely viewed by principals and teachers as merely an add-on program.

These significant between school differences, interpreted in light of qualitative observations from this research project, are consistent with the literature and suggest at least three critical aspects must be in place to achieve a productive and collaborative school climate:

1. A regular dedicated planning time and place for collaboration among all teachers (Drake, 1993; Erickson, Brandes, Mitchell, & Mitchell, 2005);
2. On-going professional development to support teacher growth, reflection, and positive attitudinal change (National Education Association, 2006); and

3. Actively-supportive principal leadership to encourage teacher autonomy and to promote teacher collaboration (Drake, 1993; Erickson, Brandes, Mitchell, & Mitchell, 2005; National Education Association, 2006).



Investigating the A+ Professional Development Provider's Perspective: A+ Faculty/Fellow Survey

Ongoing, practitioner-driven professional development is a cornerstone of the Oklahoma A+ Schools® initiative. A+ *Faculty* and *Fellows*, comprised of teachers and artist-teachers, are the educators that provide this professional development to their teaching colleagues. Potential A+ *Fellows* are identified through referrals. Once prospective participants are identified, they undergo a rigorous application process which includes observations and interviews during which the Oklahoma A+ Program Director and Executive Director evaluate each applicant's qualifications and philosophical fit with Oklahoma A+. The journey toward becoming an Oklahoma A+ *Fellow* begins with an internship period of one or more years during which participants serve as A+ *Faculty*. The role of *Faculty* is to serve as participant observers, attending and assisting with various professional development events.



The literature supports the A+ model of professional development as consistent with best practice. Research indicates that professional development is most effective in bringing about positive change in teacher knowledge and practice when it (a) focuses upon teachers' subject matter content and specific teaching methods, (b) occurs over a sustained time frame, (c) is activity-based and integrated into the real-life daily work of teachers, (d) includes collective participation of teachers' peers, (e) is aligned with local standards, other initiatives to change instructional practice, and teachers' professional goals, and (f) includes diverse opportunities for active learning, including observation, planning, practicing, and presenting (Cohan & Hill, 2000; Garet et al., 2001; National Center for Education Statistics, 2005).

Teachers' professional development may be promoted through collaboration among peers. Glazer and Hannafin (2006) recommended a research-based collaborative apprenticeship model in which teachers learn and implement new teaching skills and strategies through four development phases, beginning with incorporating best practice under the guidance of a mentor and culminating with developing and implementing their own teaching strategies. A study examining how collegial interactions and reflection operated within the professional lives and development of teachers participating in the National Board Certification process revealed that professional development was enhanced in a number of ways (Park, Oliver, Johnson, Graham, & Oppong, 2007):

1. Enhancing reflection on teaching practice
2. Establishing a professional discourse community
3. Raising the standards for teaching performances
4. Facilitating collaboration.

The comprehensive and collaborative approach of the A+ model of professional development is consistent with the National Education Association's (NEA) best practice benchmarks for school workplace conditions. The NEA benchmark for *working relationships among teachers* recommends moving from working in isolation from colleagues toward working collaboratively with colleagues; the benchmark for *professional development* advocates moving from a miscellaneous selection of one-shot workshops toward coherent, job-embedded influence and increasing opportunities for career growth (National Education Association, 2006, p. 3).

Major Objectives

The purpose of the *A+ Faculty/Fellows Survey* was to gain insight into participants' perceptions of the professional development model that is being implemented within the Oklahoma A+ Schools® Network. Research questions included the following:

- What is the role of the OK A+ Faculty and Fellows within the A+ process?
- How does one become an OK A+ Fellow?
- What is the role of A+ Faculty/Fellows in their own schools?
- How does A+ function within participating schools?
- How does the A+ process function in general?

Research Methods

During the 2005-06 academic year, the research team developed a questionnaire to survey *A+ Fellows* and *Faculty* about their views regarding their role within the A+ school-reform process, how A+ functions within participating schools, and the A+ process in general (Barry, Raiber, Dell, Jackson, & Duke, 2006). A pool of survey items was developed through a

process of soliciting both written and verbal comments from A+ *Fellows* and *Faculty* and A+ Coordinators (school-based A+ representatives) during retreats and workshops. Face validity was established through an extensive process of submitting preliminary versions of the survey to review by a panel of experienced educators and researchers as well as A+ administration. Due to the unique target population, it was not possible to conduct a pilot survey.

Data Sources

The Oklahoma A+ Schools® *Faculty/Fellows Survey* consisted of two parts. Part I requested background information including A+ affiliation, certification and education, current school affiliation, and employment status. Part II consisted of 20 open-ended items, calling upon respondents to provide reflective written responses regarding their experiences with A+. Demographic (categorical) data were entered into a database and SPSS was employed to calculate descriptive statistics (frequencies and percentages). Participants' responses to open-ended survey questions were transcribed and coded to protect confidentiality. Transcripts were submitted to the research team for independent review, followed by group discussion to eventually reach consensus concerning codings and emerging themes.

The *Faculty/Fellows Survey* was administered during Spring Retreats (a three-day residential workshop and collaborative planning time) in 2006 and 2007. Informed consent cover letters and surveys were distributed during the first day of the retreat, and a slotted box was provided to facilitate confidential survey return.

Faculty/Fellows Survey Results

Forty-seven of the 65 active Faculty/Fellows in 2006 (72%) completed the survey, and 50 of the 65 active Faculty/Fellows (77%) in 2007 completed the survey. (Note: Four Fellows

were on leave during 2007.) The returned surveys represented both *Fellows* (77% in 2006, 78% in 2007) and *Faculty* (23% in 2006, 22% in 2007). The most frequently reported way of first learning about A+ was from a “school administrator” (49%/36%). Other responses were quite varied with small numbers of participants indicating that they first learned about A+ from a teaching colleague (13%/20%), A+ meeting or workshop (13%/18%), or from an A+ Faculty/Fellow (11%/14%). Participants also indicated that none first learned about A+ through “Public media (newspaper article or TV program).”

The majority of survey respondents indicated that they held a traditional Teaching Certificate, although some reported having Alternative Certification, and a few did not report any type of teaching certification. Most had completed a Bachelor’s degree and almost half had completed a graduate degree. The majority indicated they were certified in all areas in which they were currently teaching (66%/58%) and they were employed as full-time (100% FTE) teachers (87%/ 84%) (see Table 20).

Table 20 Certification, Education and Professional Background

Item	Number		Percentage	
	2006	2007	2006	2007
<u>Teaching Certification</u>				
Traditional	32	40	68.1%	80%
Alternative	5	5	10.6%	10%
<u>National Board Certification</u>				
In Progress	4	2	8.5%	4%
Completed	9	10	19.1%	20%
<u>Degrees Completed</u>				
Bachelors in Education	23	22	48.9%	44%
Bachelors (Other)	14	10	29.8%	20%
Bachelors in Ed and Other	4	3	8.5%	6%
Masters in Education	12	11	25.5%	22%
Masters (Other)	6	10	12.8%	20%
Masters in Ed and Other	3	2	6.4%	4%
Doctorate in Education	1	2	2.1%	4%
Doctorate in Other	1	1	2.1%	2%

These educators represented a broad range of teaching areas:

Table 21 A+ Faculty/Fellow Teaching Areas

Teaching Area	2006		2007	
	Number	%	Number	%
Artist in Residence	3	6.4	2	4
Administrator	2	4.3	2	4
N-K Teacher	8	17.0	8	16
1-3 Teacher	13	27.7	14	28
4-6 Teacher	13	27.7	15	30
Middle School Teacher	6	12.8	6	12
High School Teacher	7	14.9	12	24
Special Ed Teacher	2	4.3	0	0
Art Teacher	5	10.6	6	12
Dance Teacher	4	8.5	3	6
Drama Teacher	3	6.4	0	0
Music Teacher	6	12.8	7	14

Note. Responses total more than 100% because some respondents indicated more than one teaching area

Part II of the *Faculty Fellows Survey* consisted of open-ended items designed to gain more in-depth information about Faculty and Fellow's views of A+. Analysis of these items provides insight from the unique perspective of these practitioners and professional development providers. While this qualitative data represent somewhat of a departure from quantitative data reported throughout this volume, this type of detailed feedback was needed to achieve a greater understanding of the complex roles and attitudes of the Faculty and Fellows working within the A+ process.



What is the role of the OK A+ Faculty and Fellows within the A+ process?

A+ Faculty and Fellows function in a variety of ways within the Network and among those who are in-service teachers, within their own schools:

A resource and a learner! I highly value the experiences within my own school as well as when I visit or facilitate workshops in other schools. Developing workshops always stretches me and I learn as much from participants as we go through the A+ process together. (OK A+ Fellow, 2006)

Statements regarding the role of Fellows within the schools were consistent across the 2006 and 2007 survey administrations, with respondents expressing keen interest in serving as a “knowledgeable facilitator” (OK A+ Faculty, 2007) to help bring about meaningful school change:

As a teacher in an A+ school, my role is to adhere to the 8 essentials within my classroom. To teach to the individual child and to help teachers around me to do the same. (OK A+ Fellow, 2007)

How Does One Become an OK A+ Fellow?

As one OK+ Faculty member noted, “The A+ philosophy is one that can reach and affect the lives of each and every child” (OK A+ Faculty, 2007). Moving from A+ Faculty to A+ Fellow is a complex role-development process that begins with a commitment to improving education in Oklahoma through active participation in the OK A+ Network. Survey respondents consistently cited the compatibility of A+ within their own teaching philosophy and a deeply-held belief in the importance of providing the best education possible for every child as their reasons for wanting to become an A+ Fellow.

A+ is fun and exciting. I want to do anything I can to help as many students as possible to achieve and be successful in fun and exciting new ways. (OK A+ Faculty, 2007)

New A+ Faculty are expected to spend their first year *process observing*, developing a greater understanding of A+, while examining their own strengths and weaknesses and continuing to grow professionally. They are allowed to find their own comfort level while working as a professional development team with new schools joining the A+ network. The structure of the program pairs the novice Faculty with more-experienced Fellows in a collaborative relationship that provides opportunities for both to grow. The Faculty member takes on new ideas and experiences, and the Fellow is also infused with a fresh perspective and greater enthusiasm, all within a climate of perceived *safety* that facilitates exploration, reflection, and personal growth:

Faculty is a learning year—either from the perspective of process observer or from presenting with support of a fellow. (A+ Fellow, 2007)

Faculty/Fellows expressed a variety of opinions regarding the process of Faculty role development. Some Faculty members found the process to be uncomfortable and without direction: “Confusion—didn't know what to expect, bewilderment, fascination” (OK A+ Faculty, 2007). Others, however, relished having the freedom to choose to take on responsibilities that were within their current comfort level:

Crazy time! Many new ideas, concepts, and terminology to learn! You become more aware of the “good” things you do and how much more you can learn. (OK A+ Fellow, 2007)

The A+ model encourages Faculty to *process observe*, seek out advice from their team members, and grow in their knowledge of the A+ process while discovering their own areas of expertise and leadership skills. This model also allows Faculty members to develop their own knowledge set as they process observe with their team. Many felt that the model allowed individuals to find their own entry point into A+. However, some Fellows, looking back upon their time as Faculty, believed that the process was somewhat “messy” at times due to its open-ended nature. Further, many felt that the process had become more democratic than in the past. Several indicated that effectiveness of the process depends upon the entire team (Fellows and Directors) to mentor Faculty members and encourage their growth throughout the process. The teaching roles that they take on early in the process focus more on procedural issues than new content, thereby providing new Faculty members with ways in which to develop their peer teaching skills in a safe and protected environment. Although many were not certain that they were “ready,” they were moved forward (some said they were “pushed”) and rose to the occasion:

I love how A+ is set up as a network of teachers, artists, resources to collaborate and help to guide you through the process. It felt safe to be on a team and to know they wouldn't let me fail. (OK A+ Faculty, 2007)

What Is the Role of A+ Faculty/Fellows in Their Own Schools?

The presence of A+ Faculty/Fellows on a school staff generally provides an additional line of support as a school engages in this school reform process. These educators often described themselves as *encouragers* and *role models* for the other teachers in their schools.

Schools with A+ Faculty/Fellows on their faculty enjoy an additional, direct line of communication with A+ as well as the ready, in-house availability of an A+ resource person.

Sets the tone at school, encourages team work, supports enrichment, recognizes teacher efforts. (OK A+ Faculty, 2007)

In some situations in which schools have experienced changes in administration and/or large faculty turnover, the enduring presence of A+ Fellows may have provided an important source of stability, and in some cases, even served as a catalyst to help their colleagues persist and move forward with the A+ initiative. Since A+ Faculty represent a *fresh from the classroom* entry point, their role on a school staff may be an important link in terms of communication between teachers working in A+ schools and A+ staff and administration:

A+ Faculty act as a bridge between teachers who are not A+ Faculty/Fellows and A+ Fellows. They are new to A+ schools and so their questions reflect what non-A+ Faculty/Fellows want to know, while at the same time the A+ Faculty constantly gain new insight into the A+ Mission and Method. They remind A+ Fellows how inspiring and confusing the A+ Philosophy can be. A+ Faculty keep A+ Fellows relevant to our incoming and maturing A+ schools. They challenge us while connecting us to the needs of incoming schools. (OK A+ Faculty, 2006)

How does A+ function within participating schools?

Qualitative data (see Volume 5) indicate that the A+ process seems to develop within schools along a continuum. At the lowest functional level, teachers view A+ as an *add-on*, an

additional activity that is easily jettisoned when time or resources are in short supply. In contrast, at the highest level of functioning, teachers hold a more comprehensive view of A+ as completely integrated—not some particular activity that they “do,” but as a philosophical perspective that permeates their thinking about teaching. Educators responding in the 2007 survey administration seemed particularly aware of these differences among schools, noting that the impact that A+ has on schools “depends on the level of implementation at the school” (OK A+ Fellow, 2007) and that “to some it is freedom to be creative” and “to others it is extra work” (OK A+ Faculty, 2007).

A+ Faculty and Fellows reported that within those schools with strong administrative leadership and buy in, A+ functions as both an incentive and an energizer. When A+ is no longer viewed as an add-on, teachers’ emerging understanding of A+ begins to permeate every aspect of the school in increasingly seamless and subtle ways. Accordingly, “A+ is woven into the fabric of every day experiences” (OK A+ Faculty/Fellow, 2006).

Not surprisingly, Faculty and Fellows reported that the main incentive for embracing A+ is the belief that this process improves the quality of education with direct and tangible benefits for the children of Oklahoma:

A+ essentials, used correctly, guarantee an enriched environment full of creativity and thought processing. It requires thinking out of the box, using multiple intelligences, while thinking with a higher level. (OK A+ Faculty/Fellow, 2006)

The consensus among these educators was that, when schools buy-in to A+ as a way of thinking as well as doing, A+ serves as an effective process for bringing about meaningful school change in lasting and profound ways:

If utilized, A+ completely changes a classroom. I have seen teachers who have gone from only paper/pencil work to using experiential learning. The impact was amazing. (OK A+ Fellow, 2007).

How Does the A+ Process Function in General?

Faculty/Fellow Survey responses revealed a generally high level of commitment to A+ and belief in the benefits of participation in the OK A+ Network for developing best practice within Oklahoma schools:

The network allows me to work with other teachers, artists, specialists and administrators to develop and teach practices that address the strengths and needs of every child. (OK A+ Fellow, 2006)

However, some respondents also expressed concerns that things were moving forward too quickly, with many indicating a desire for building in more time to reflect and re-evaluate some aspects of the program:

I believe in A+, but even after several years, I do not understand the commitment to give so much, so quickly. Are we growing so fast that we are forgetting to stop and just look for a year or two at what has been done, where we need to go, how to improve and what specific things are needed to keep the schools with sustainable growth in, and ourselves understanding of A+? (A+ Fellow, 2006)

The rapid growth of the program paired with increasing diversity among participating schools prompted some concerns among Faculty and Fellows. The 39 schools participating during the 2006-07 academic year represented pre-school through secondary grade levels and included

public schools, charter schools, and a private faith-based school. This expanded to 43 schools in 2007-08:

I think that we as a network are aware of the need for adaptability (high school) and/or sensitivity (Muslim school) called for to address specific age and cultural needs. (OK A+ Fellow, 2007)

While excited about the growth of A+, Faculty and Fellows responding to the 2006 administration also expressed concern for meeting the needs of such a vast and diverse constituency, expressing interest in having more

1. specific professional development focused on the diversity of the Oklahoma A+ Schools® network;
2. additional professional development for *Faculty* and *Fellow's* growth;
3. focused professional development to meet the needs of secondary schools;
4. processing time to reflect and evaluate; and
5. artists and other resource persons available to provide professional development focused upon specific content areas

Responses from the 2007 survey administration echoed statements from 2006. Additional needs expressed in 2007 included interest in more training and materials for working with special needs students and providing parent education.

As the A+ Network expands, it appears that Faculty and Fellows are becoming more aware of their own limitations in terms of being able to serve the complex and diverse needs of A+ schools across the state. The 2007 surveys revealed an increased interest in looking outside A+ for some types of expertise. *“We need to reach out to other non A+ presenters at time to*

truly meet schools' needs," stated one Fellow, *"such as presentations on motivation or dealing with students in poverty, etc."* (OK A+ Fellow, 2007.)



Implications from the Faculty/ Fellows Survey

This survey provides some insight into participants' perceptions of a peer-driven, teacher-centered professional development model that is in place within the Oklahoma A+ Schools® Network. The peer-trainers in this study (*A+ Faculty* and *Fellows*) believed that A+ provides an effective model of professional development that positively impacts the lives of children through actively supporting and improving the skills and practice of their teacher colleagues. This network “promotes an atmosphere among faculty members and student teachers, encourages parents to appreciate the uniqueness of their child, and keeps students curious and ready to learn new things.” (OK A+ Faculty, 2007)

However, they also viewed their roles in A+ as part of a dynamic process, a process that often challenged them to stretch outside of their comfort zones. Respondents acknowledged their own need for additional professional development, particularly in regard to certain specialized skills and content areas. Many participants also stated a desire to build more time for their own reflection into the process.



Results of this study are consistent with other research demonstrating that professional development models which are collaborative, teacher-centered, longitudinal, and activity-based are likely to have more impact upon teachers' attitudes and professional orientations than traditional workshop approaches (e.g., Cohan & Hill, 2000; Garet et al., 2001; National Center for Education Statistics, 2005; National Education Association, 2006).

Investigating the Community Perspective: The Arts Education Perception Survey (TAEPS)



The Arts Education Perception Survey (TAEPS) was developed through the Oklahoma Center for Arts Education within the College of Arts, Media & Design on the campus of the University of Central Oklahoma (Barry, Garrett, & Clinton, 2005). The survey was used to poll legislators, business people, parents, teachers, school administrators, and school board members from a large randomly-selected sample of schools and their surrounding communities

across the state of Oklahoma on their attitudes about the arts in education. In addition to the state-wide administration of TAEPS, during the 2005-06 academic year, the A+ research team decided to administer a modified form of TAEPS (including an additional section on the Eight Essentials) to people associated with A+ schools. This provided an opportunity to compare responses from A+ schools with a large statewide sample of randomly-selected schools.

ARTS IN EDUCATION: AN OVERVIEW

Providing arts education is one of the Eight Essential Commitments of the Oklahoma A+ Schools®. The role of the arts as an *essential* component of a complete education is also supported by prominent educational associations and agencies. The Association of American Colleges and Universities (2003) identified the arts as one of the six basic academic subject areas that should be studied in order to succeed in college. The *No Child Left Behind Act* (NCLB) also includes the arts as one of the “core academic subjects” (No Child Left Behind, Title IX, Part A, §. 9101).

A vast amount of research supports the value of including the arts within the curriculum. Studies of music, visual arts, dance, and theatre demonstrate a positive relationship between arts education and other (i.e., non-arts) academic and/or social student outcomes.

A number of studies have shown positive links between arts participation and cognitive development (Bihartz, Bruhn & Olson, 2000; Campabello, DeCarlo, O’Neil & Vacek, 2002; Costa-Giami, 1999; Fink, 1976; Keinanen & Winner, 2000; Nelson, 2001). Specific cognitive improvement has been noted across a number of areas including creative and critical thinking (Minton, 2000; Moga, Burger, Hetland, & Winner, 2000), kinesthetic intelligence, multiple intelligences (Mills, 2001), spatial-temporal reasoning (Graziano, Peterson, & Shaw, 1999; Rauscher, Shaw, Levine, Wright, Dennis & Newcomb, 1997; Rauscher & Zupan, 2000) and non-verbal reasoning.

Many studies have focused upon links between arts education and improvement in academic skills (Aaron, 1994; Burton, Horowitz & Abeles, 1999; Burton, Horowitz & Abeles, 2000; Catterall, 1998; Catterall & Waldorf, 1999; Harland, Kinder, Lord, Stott, Schagen, Haynes, Cusworth, White & Paola, 2000; MENC-The National Association for Music

Education, 2002). Improvements have been reported in reading and writing (Butzlaff, 2000; Horn, 1992; Moore & Caldwell, 1993; Rose, 1999; Wolf, 1998), language skills in children with and without learning disabilities, comprehension (Pellegrini & Gaida, 1982), oral communication and verbal skills (Podiozny, 2000), math skills (Graziano, Peterson, & Shaw, 1999), and test scores (Nelson, 2001; Vaugh & Winner, 2000).

Arts education has also been linked to improvements in school-related attitudes and more appropriate student behavior (Barry, 1992; Barry, Taylor & Walls, 1990; Nichols & Honig, 1997; Watson & McEwen, 1994). Reports reveal that when the curriculum is infused with opportunities for children to participate in the arts, there are improvements in students' social/behaviorial skills for all students (MENC-The National Association for Music Education, 2002), including children with behavioral disorders (Mentzer & Boswell, 1995).

Arts education can energize and engage the surrounding community as well as the school environment. Studies have found that through the arts, the community becomes more actively involved with the school (Stockton Rush Bartol Foundation, 2002). A study conducted by the National Endowment for the Arts (2000) reported that over 76% of the United States' adult population indicated they had experienced the arts in some form over the previous 12 months, 39% indicated they had personally created some type of visual art, and 32% indicated they had attended a live event. When Tulsa's Hispanic community was questioned regarding what arts education meant to them, they indicated it meant "instruction for children first and the community at large second" (Curz & Titus-Piersma, 2002, p. 17). The Montana Arts Council (2002) found that communities around the state were attracted to arts events (i.e., performances) when there was a chance to see something special that was of quality, and that they valued the arts and believed the arts benefited the community as a whole.

While the arts have been acknowledged as an important component of a complete education, statistics reveal that availability of arts education within our nation's public schools is not consistent across different arts areas (dance, drama, music, and visual arts) and that arts classes and activities are not available to students in many schools. A study of 640 elementary schools and 686 secondary schools found that 72% offered music, 55% offered visual arts, and only 16% offered drama/theatre. In 1998-99, 77% of the nation's elementary schools sponsored field trips to arts performances and 65% percent sponsored visiting artists, while 51% sponsored after-school activities that included the arts. Of the elementary schools that participated in the study, 67% indicated they had dedicated rooms with special equipment to teach music; 56% had rooms with equipment for visual arts; only 14% offered dance and 13% offered theatre/drama, but had no special rooms and/or equipment set aside for teaching the arts (Carey, Kleiner, Porch, & Farris, 2002).

TAEPS PURPOSE

The purpose of this survey was to examine perceptions of arts education in elementary schools and communities across the state of Oklahoma. Attitudes of educators and community members in the 22 schools participating in the Oklahoma A+ Network during the 2004-05 academic year were compared with a randomly-selected statewide sample of other schools.

The following research questions were addressed:

1. Are the school and community (teachers, administrators, parents, business people, and legislators) aware that their school is an A+ school? If so, what are their perceptions of A+ (e.g., benefits to students, goals, and costs)?

2. What is the community perception of school policies and procedures in relation to the Eight A+ Essentials—arts integration, curriculum, experiential learning, multiple intelligences, enriched assessment, collaboration, infrastructure, and school climate?
3. What types of activities are perceived as “arts education”?
4. What types of arts activities are perceived as most appropriate “during school time”?
5. What types of arts activities are perceived as most appropriate “outside school time”?
6. What are the perceived effects/benefits of arts education?
7. What are the perceptions regarding where, when, and how arts education should be provided?
8. What are the perceptions regarding support and funding for arts education?
9. Which arts areas are regarded as strengths and weaknesses within the school and community?
10. How do teachers and administrators view the arts curriculum within their schools?
11. Do perceptions of arts education differ among state legislators, business leaders, school administrators, educators, and parents?
12. Do perceptions of arts education differ between Oklahoma schools participating in the A+ Network and non-participants?

METHODS AND PROCEDURES

Design

The Arts Education Perception Survey (TAEPS) was developed to measure state legislators’, business leaders’, school administrators’, educators’, and parents’ perceptions of

arts education within the Oklahoma public elementary school system. The initial version of the survey was based upon a thorough review of the literature. Face validity of the survey was established through review by a panel of experienced educators and researchers at the University of Central Oklahoma and the University of Oklahoma. Following the review process, the survey was revised to improve efficiency and accuracy.

Step One—Pilot Study (Arkansas)

An extensive pilot study ($N = 87$) was undertaken to establish validity and reliability of the survey instrument. The pilot study was conducted within the state of Arkansas in order to keep the target population in Oklahoma intact. Representatives from each of the focus groups (i.e., state legislators, business leaders, school administrators, educators and parents) were selected and asked to complete the survey and return it to the study coordinator. Data were analyzed using *Statistical Package for the Social Sciences* (SPSS) software. Using information gained from the pilot study, researchers made additional modifications to improve the validity and reliability of the survey instrument.

Step Two—Main Study (Oklahoma)

The second phase of this study was carried out during the 2004-05 academic year. The survey was administered to a randomly-selected sample representing 15% of the elementary schools across Oklahoma. This sample was stratified to include balanced representation of urban and rural schools. A database of all elementary schools in the state was obtained from the state department of education, schools were coded as urban or rural based upon community demographics, and SPSS statistical software was used to draw a random sample of urban and rural schools for the study. Most principals agreed to participate when contacted; however, in

those instances in which participation was declined, SPSS was used to randomly draw additional schools for the sample.

In addition to the randomly-selected sample, the survey was also administered to legislators, business people, parents, teachers, school administrators, and school board members in schools and surrounding communities of the 22 schools participating in the OK A+ Network during the 2004-05 academic year (see Table 22).

Table 22 OK 2005 TAEPS Response Frequencies

	ALL	A+ Schools	Not A+
TOTAL	12,061*	2,308*	9,753*
Rural	5,253	637	4,616
Urban	6,796	1,661	5,135
Legislators	31	7	24
Business	212	86	126
Parents	10,532	1,921	8,611
Teachers	1,018	239	779
Administrators	115	32	83
School Board	88	13	75

**Note.* TOTAL includes surveys that were returned without a response to the demographic variable. Therefore, the TOTAL is greater than the sum of individual categories on the Table.

Oklahoma Census Data indicate a state population of 3,511,532 in 2003. Assuming that this sample of people associated with Oklahoma A+ schools and non-A+ schools is representative of the state, with a sample size of 12,061 one could generalize back to a

population of 3,511,532 with a confidence interval of .89 at a confidence level of 95% and with a confidence interval of 1.17 at a confidence level of 99%.

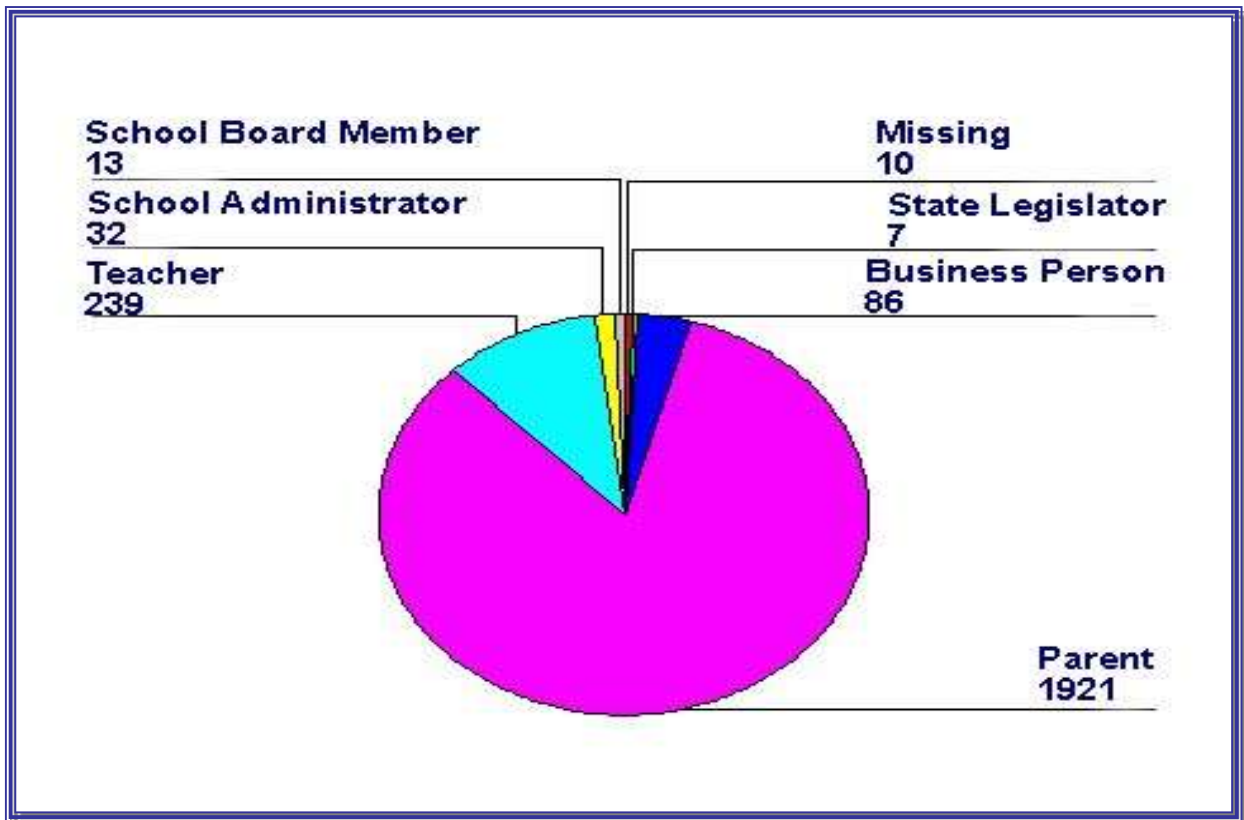
TAEPS RESULTS

Participants

Participants included 12,061 legislators, business people, parents, teachers, school administrators, and school board members (see Figures 1 and 2).

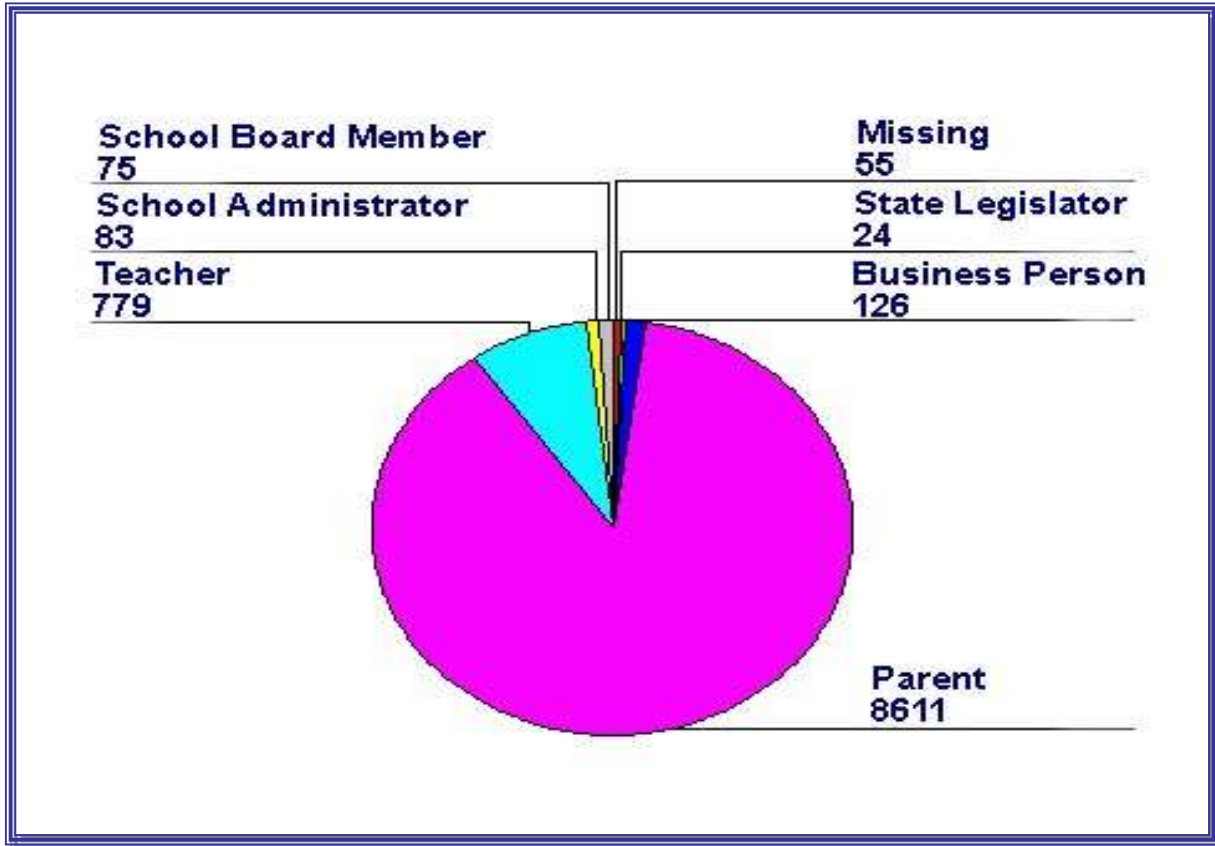
TAEPS Respondents

Figure 1 Oklahoma A+ Schools® (N = 2,308)



TAEPS Respondents

Figure 2 Oklahoma Schools Not Participating in A+ Network (N = 9,753)



Are the school and community (i.e., teachers, administrators, parents, business people, and legislators) aware that their school is an A+ school?

The majority of respondents from A+ schools and communities indicated that they were aware that their school is an A+ School (72%), however less than half (48.2%) reported that they were aware of the A+ Network. Ways that participants became informed about A+ varied, but the most frequently-reported way of learning about A+ was from information provided by the school (see Table 23).

Table 23 How Respondents Learned About A+

	Frequency	Percent of A+ Respondents
Information from School	895	38.8%
Verbal Communication from Teacher or Administrator	438	19.0%
Verbal Communication from Parent	95	4.1%
OETA Program	69	3.0%
Sign Displayed at School	377	16.3%
Verbal Communication from Student	126	5.5%
Newspaper Article	207	9.0%
Other	176	7.6%

Note. Respondents were able to check multiple categories; therefore, the total percentage exceeds 100%.

What is the community perception of school policies and procedures in relation to the Eight A+ Essentials?

Oklahoma A+ Schools® promotes comprehensive, whole-school reform. Eight essential commitments provide the framework for an on-going process that develops in unique ways within each participating school. Those essentials include *Curriculum, Multiple Intelligences, Experiential Learning, Enriched Assessment, Arts, Collaboration, Infrastructure, and Climate*. TAEPS Results indicate high levels of agreement among educators and community members affiliated with A+ Schools with those survey items representing ways that the Eight Essentials are manifested in school policy and practice. According to these data, people in A+ schools and their surrounding communities believed these essential commitments are evident in school policy and practice (see Appendix for individual survey item statistics and a breakdown of responses by role of respondent—state legislator, business person, parent, teacher, school administrator, or school board member).

What types of activities are perceived as “arts education”?

All survey respondents expressed highest levels of agreement that participating in traditional, formal performance-based activities such as “painting or drawing a picture,” “acting in a play,” “singing in choir,” “participating in a musical,” or “playing in a band” represented arts education during school. Lower levels of agreement were reported for informal activities such as “knitting/sewing/quilting,” “learning square dance,” and “putting on a puppet show.”

A+ respondents generally expressed higher levels of agreement for all items concerning which activities constitute “arts education.” However, a MANOVA procedure did not reveal any statistically significant* differences between respondents affiliated with A+ schools and other respondents (see Appendix).

Responses concerning what constitutes arts education after school were more mixed with generally lower levels of agreement from all respondents in comparison with items about arts education during school. A MANOVA procedure did not reveal any statistically significant differences between respondents affiliated with A+ schools and other respondents (see Appendix). There does exist that caveat that performing repeated statistical analysis procedures on the same data set may inflate the possibility of Type I error. However, given the large sample size and the descriptive nature of this study, researchers deemed it appropriate to use the standard $p \leq .05$ as the level of statistical significance.

What are the perceived effects/benefits of arts education?

All survey respondents expressed high levels of agreement with survey items about the beneficial effects of arts education upon students' creativity, social behavior, academics, and skills and attitudes. Highest levels of agreement were reported for items pertaining to the positive impact of the arts upon student creativity.

All respondents tended to disagree with items stating that arts education can be taught by any teacher and should be the parent's responsibility. Respondents generally disagreed with items stating that the state provides adequate funding and adequate supplies for arts education. General disagreement was also expressed for the item "Legislators value arts education" (see Appendix).

Do perceptions of arts education differ between Oklahoma schools participating in the A+ Network and non-participants?

A Manova procedure revealed a number of statistically significant differences between educators' and community members' responses from A+ and non-A+ schools regarding the impact of arts education on students' social behavior, academics, and skills and attitudes. A+ respondents expressed

- consistently higher levels of agreement about the positive student benefits of arts in education;
- significantly lower levels of agreement that arts lessons should be “only taught by a certified arts teacher”;
- higher levels of agreement that arts should be “taught by any teacher”;
- higher agreement that arts should be “mandated in the core curriculum”;
- lower agreement that arts should be “taught as an elective” and “offered only if the student is interested”;
- higher agreement that the arts should be “provided through outside resources”;
- higher agreement with items pertaining to community support for arts education;
- and
- higher agreement that arts instruction should be allotted equal time to other subjects

(see Table 24).



Table 24 Means and Standard Deviations for Effects and Implementation of Arts and Education Items

SURVEY ITEM	A+ SCHOOLS		NON A+ SCHOOLS	
	Mean	Standard Deviation	Mean	Standard Deviation
Creativity				
Positive Effect on Creativity	1.36	.766	1.38	.795
Provides for Self-Expression	1.37	.772	1.38	.780
Social Impact				
*Decreases Violence (.022)	1.83	1.057	1.91	1.071
*Positive Impact on Community (.015)	1.63	.913	1.70	.939
Decreases Substance Abuse	2.10	1.177	2.18	1.177
Academics				
*Teaches Problem Solving (.007)	1.78	1.000	1.86	1.010
Increases Academic Motivation	1.66	.914	1.72	.937
*Positive Impact on Core Subjects (.017)	1.76	.982	1.85	1.011
*Improves Grades (.014)	1.86	1.038	1.95	1.035
*Improves Learning (.024)	1.59	.894	1.64	.910
Student Skills and Attitudes				
*Increases Attention Span (.032)	1.60	.938	1.66	.950
Positive Cultural Impact	1.52	.864	1.54	.862
Who Should Provide Arts Education?				
*Only Taught by Certified Arts Teacher (.000)	2.24	1.232	2.04	1.141
*Should Be Taught by Any Teacher (.000)	3.26	1.342	3.48	1.303

Parent's Responsibility	3.22	1.248	3.26	1.218
Place in the Curriculum				
*Mandated in Core Curriculum (.001)	1.81	1.078	1.93	1.141
Taught as Subject in School	1.69	.970	1.70	.961
Provided in Elementary School	1.53	.892	1.55	.890
When to Offer				
*Taught as Elective (.000)	2.78	1.239	2.65	1.204
*Offered Only if Student Interested (.000)	3.09	1.665	2.94	1.358
*Provided Through Outside Resources (.000)	2.06	1.071	2.21	1.101
Level of Funding and Supplies				
State Provides Sufficient Funding	3.52	1.289	3.58	1.270
Schools Have Adequate Supplies	3.24	1.358	3.31	1.346
Should Have Equal Funding to Core Subjects	1.83	1.072	1.90	1.110
Community Support				
*Educators are Interested in Arts Ed (.000)	2.27	1.064	2.41	1.086
*Legislators Value Arts Education (.011)	3.34	1.195	3.44	1.146
*School Admin Interested in Arts Ed (.000)	2.47	1.101	2.68	1.091
*Employers' Value Arts Ed (.001)	2.72	1.120	2.82	1.102
*Community Participation (.000)	1.95	1.004	2.06	1.011
Time Allotment				
*Equal Needed for Arts Ed (.020)	2.40	1.203	2.50	1.220

Response Scale: 1 = Strongly Agree, 2 = Agree, 3 = Undecided, 4 = Disagree, 5 = Strongly Disagree

* significant difference at $p \leq .05$ (MANOVA results)

Which arts areas are regarded as strengths or weaknesses within the school and community?

All respondents also reported generally high ratings (1 = Very Strong, 5 = Very Weak) for their community's strengths in various arts areas. However, lower ratings were observed for dance and design. A+ faculty rated all items consistently higher than faculty in non-A+ schools. Statistically significant differences were found with A+ faculty rating guest artists, museums, technology applications in the arts, design, visual arts, student plays, community arts organizations, outreach, and other categories higher than non-A+ faculty (see Appendix).

How do educators (teachers and administrators) view the arts curriculum within their schools?

Educators from all schools surveyed indicated generally positive ratings (on a scale of 1 = Excellent to 5 = Poor) for how well their curriculum is reflected in the areas of music and visual arts. Theatre and dance, on the other hand, received lower ratings, with lowest ratings indicated for dance. Teachers and administrators in A+ schools rated all items consistently higher. A MANOVA procedure revealed significantly higher ratings from A+ schools in comparison with non-A+ schools for how well their curriculum is reflected in visual arts.

Responses to a series of items addressing the amount of time arts education in music, dance, theatre, and visual arts are offered (1 = Daily, 2 = Weekly, 3 = Monthly, 4 = Only as required, 5 = None) indicate that music and visual arts are offered more frequently in all schools surveyed than dance and theatre.

However, faculty in A+ schools reported offering more frequent instruction across all four arts areas than faculty in other schools.

Educators reported relatively high levels of comfort with teaching arts education (1 = Very Comfortable, 4 = Not Comfortable) with A+ faculty reporting consistently higher ratings than non-A+ schools (see Table 25).

Table 25 Means and Standard Deviations for Comfort in Teaching Arts and School Strengths and Weaknesses

Note. This section of the survey was completed by Teachers and Administrators only.

	A+ SCHOOLS (n = 243)		NON A+ SCHOOLS (n = 724)	
SURVEY ITEM	Mean	Standard Deviation	Mean	Standard Deviation
COMFORT				
Comfort in Teaching Arts Ed	2.19	.845	2.74	.972
CURRICULUM				
Curriculum Reflects Music	2.32	1.096	2.44	1.255
*Curriculum Reflects Visual Arts (.046)	2.11	1.009	2.84	1.234
Curriculum Reflects Dance	3.58	1.085	4.04	1.097
Curriculum Reflects Drama/Theatre	3.19	1.165	3.74	1.195
STRENGTHS				
*Guest Artists (.037)	2.55	1.237	3.21	1.348
Arts Educators/Teachers	2.35	1.267	2.89	1.411
*Museums (.007)	3.07	1.185	3.56	1.123
Art Shows	2.74	1.222	3.60	1.159
Dance	3.45	1.216	4.07	.994

*Technology (.032) Applications in the Arts	3.14	1.145	3.58	1.135
*Design (.034)	3.55	1.095	3.98	1.043
Theatre	3.42	1.155	3.87	1.093
*Visual Arts (.019)	2.11	1.092	3.04	1.280
Classroom Teachers	1.83	.907	2.49	1.139
Student Performances	2.17	.953	2.77	1.120
*Student Plays (.012)	2.87	1.240	3.19	1.210
Music	1.88	1.018	2.24	1.152
*Community Arts Organizations (.000)	3.02	1.095	3.51	1.131
*Outreach (.017)	2.88	1.180	3.47	1.105
*Other (.033)	2.46	1.198	3.65	1.362
AMOUNT OF TIME				
Music Education Time	2.01	1.167	2.12	1.302
Dance Education Time	3.20	1.338	3.83	1.329
Theatre Education Time	3.30	1.092	3.78	1.071
Visual Arts Education Time	2.06	1.028	2.46	1.136

* significant difference at $p \leq .05$ (MANOVA results)

Implications from TAEPS

Results of this state-wide survey provide insight into 12,061 educators', parents', legislators', and business peoples' views of arts education within their school and community. While most respondents held generally favorable attitudes about the arts in education, there were marked and consistent differences between response trends of educators and community

members associated with Oklahoma A+ Schools® and responses from people associated with non-A+ schools. People associated with A+ schools expressed more positive attitudes about arts education. In comparison with other schools across the state, respondents from A+ schools held a broader view of what constitutes arts education. They expressed stronger belief in the positive social and academic benefits that students derive from participation in the arts, that the arts should be allotted time and financial support equivalent to other academic subjects, and that the arts should be mandated as part of the basic curriculum.

Respondents from A+ schools also reported higher levels of confidence in their own ability to provide arts instruction, and expressed more positive attitudes relating to the idea that *all* teachers should take responsibility for providing arts instruction. Given that an important component of the A+ professional development has focused upon empowering teachers to integrate the arts into their regular instructional practices, these significant differences are not surprising. This finding, however, should not be interpreted to suggest that A+ teachers do not value the role of the arts specialist. It is important to note that, while A+ faculty held more favorable attitudes about the role of the classroom teacher in providing arts instruction, all respondents generally disagreed with items stating that arts education can be taught by any teacher.

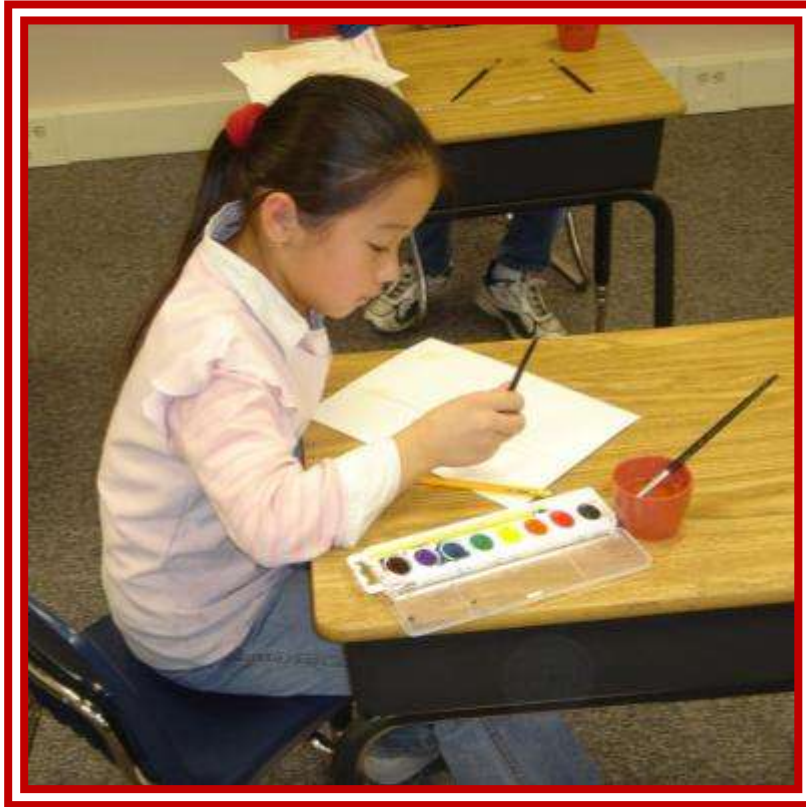
Responses to survey items developed to reflect the Eight Essential Commitments™ indicate educators and community members believe these essentials are manifested in school policy and practice. It is possible that as a result of their participation in A+ professional development activities, school personnel may have been primed to respond positively to items related to these essentials. It is important, therefore, to observe that community members' and parents' responses to these items paralleled those of the teachers. The level of consistency

across different respondents suggests that these characteristics were indeed evident within their schools.

The profile of Oklahoma A+ schools that emerges from this survey suggests that something quite extraordinary is happening in terms of the level of arts instruction within these schools. In contrast with national statistics showing that arts education tends to be inconsistent in schools across the nation and is often completely omitted (Carey, Kleiner, Porch, & Farris, 2002), faculty in A+ schools reported high levels of arts instruction in dance/movement, drama, music, and visual arts.

The more positive perceptions of arts education expressed by respondents affiliated with A+ schools suggest that a more favorable climate for arts education may exist within these schools and their surrounding communities. Additional research is needed to explore the complex social dynamics and possible causes of school personnel and community members' attitudes about the arts in education. While establishing what caused that difference is beyond the scope of this survey, the extensive qualitative component of this research initiative provides some insight into these more complex processes. An important question concerns whether the people affiliated with A+ schools reported more favorable attitudes about the arts in education as a result of the A+ process, or whether these schools elected to participate in A+ because of pre-existing dispositions towards the arts within the school and community. Triangulation of these survey results with the qualitative data suggests that both situations are likely the case. In most schools, A+ has served as both a "carrot" and a "stick." As a "carrot," the A+ philosophy was attractive to schools in which there was already some interest in arts education and/ or arts integration. As a "stick," the Eight Essential Commitments, deeply embedded within the A+ process and reinforced through on-going professional development, encouraged teachers to

stretch beyond their comfort zone, resulting in a more arts-rich and arts supportive school environment (see the other volumes in this Report to learn more about ways that A+ has impacted the climate and culture of schools).



Quantitative Measures: Summary and Conclusions

Those schools choosing to engage in the A+ process of self reflection and growth embark upon a *journey* complete with sharp turns, mountains to climb, and detours that bring them to unexpected places. Occasionally, roadblocks are encountered that may compel them to backtrack and map out a new plan before moving forward. As in any great journey, there are wonderful moments of discovery (those “Ah-Ha” moments). Sometimes there may even be disappointing setbacks that test one’s courage and resolve, but the hearty traveler takes it all in stride and keeps moving toward the destination. This research has also been a journey, with

much discovery and revision along the way. Results from the various quantitative measures presented in this volume represent a research process that has developed over time. The contents of this volume reflect a vast quantity of longitudinal data, collected to provide an overview of attitudes and academic performance of students; and attitudes of teachers, A+ Faculty and Fellows, and school and community members affiliated with A+ schools. The survey data collected by the research team across five years include a combined total of 19,927 responses (see Table 26). Large amounts of data were also obtained from the Oklahoma State Department of Education (i.e., School Report Card and Academic Performance Index). While the exact number of student responses reflected in State Department data is not available, total student enrollment in the A+ schools included in this research project is approximately 12,636 (see Table 1).

Table 26 Total Responses Included in Analysis of Survey Data

Data Source	Total Number of Responses* (combined across years of administration)
My Class Activities Student Survey	6,042
Teacher Opinion Survey	1,728
Faculty / Fellows Survey	96
The Arts Education Perception Survey	12,061
Total Responses Included in Data Analysis	19,927

*Note. This Table reflects total number of responses included in data analysis rather than individual respondents. For example, the same student could have completed the *My Class Activities* survey in Grade 3 in 2004, Grade 4 in 2005, and Grade 5 in 2006.

Perhaps the most succinct way to summarize these research results is to echo the theme of the 2006 Oklahoma A+ Statewide conference. Oklahoma A+ Schools® are “**Not the Average.**”

The most consistent thread across the quantitative measures presented in this chapter is that Oklahoma A+ Schools® are *different* from other schools in the state:

1. They promote a unique and challenging learning environment in which students gain self confidence, enjoy school, and feel empowered by the learning process (based upon *My Class Activities* data)
2. They serve a greater proportion of ethnic minorities (based upon State Report Card data).
3. They serve a greater proportion of economically-disadvantaged students (based upon State Report Card data).
4. Students perform well on standardized tests, generally at or significantly above state and district averages (based upon State Report and API data).
5. Teachers hold more favorable attitudes about arts in education, arts integration, and teacher collaboration (based upon *Teacher Opinion Survey* data).
6. This unique model of professional development reflects research-based best practice (based upon *Faculty/Fellows Survey* data).
7. Peer-trainers (A+ Faculty and Fellows) believe that A+ provides a unique and effective model of professional development that positively impacts the lives of

children through actively supporting and improving the skills and practice of their teacher colleagues.(based upon *Faculty/Fellows Survey* data).

8. They report higher levels of arts instruction in dance/movement, drama, music, and visual arts (based upon TAEPS data).
9. Teachers express stronger belief in the positive social and academic benefits that students derive from participation in the arts, that the arts should be allotted time and financial support equivalent to other academic subjects, and that the arts should be mandated as part of the basic curriculum (based upon TAEPS data).
10. Teachers report higher levels of confidence in their own ability to provide arts instruction, and express more positive attitudes relating to the idea that *all* teachers should take responsibility for providing arts instruction (based upon TAEPS data).
11. The Eight Essential Commitments™ are evident to faculty and to members of the community through school policy and practice (based upon TAEPS data).
12. People in the surrounding community hold more positive attitudes about the school and the curriculum. (based upon TAEPS data).

And, while A+ schools are different from other schools in the state, it is also important to point out that significant differences between A+ schools were observed across the measures in this study. Oklahoma A+ Schools® differ in numerous ways:

1. School size, ranging in size from very small to very large (based upon State Report Card data)
2. Other demographics such as student ethnicity, free/reduced lunch, and percentages (based upon State Report Card data)

3. School location, representing rural, suburban, and urban areas (based upon Oklahoma A+ Schools® data)
4. Student attitudes about school (based upon *My Class Activities* survey data)
5. Students' academic achievement (based upon School Report Card and API data)
6. Teachers' attitudes about school (based upon *Teacher Opinion Survey* and *Faculty/Fellows Survey* data)
7. Teacher levels of self-confidence (based upon *Teacher Opinion Survey* and *Faculty/Fellows Survey* data)
8. Teachers' willingness to break out of their comfort zone and try new approaches (based upon *Teacher Opinion Survey* and *Faculty/Fellows Survey* data)
9. Teachers' attitudes about arts instruction and arts integration (based upon *Teacher Opinion Survey* and *Faculty/Fellows Survey* data)
10. Teachers' attitudes about collaboration (based upon *Teacher Opinion Survey* and *Faculty/Fellows Survey* data)
11. Teachers' attitudes about active, hands-on learning (based upon *Teacher Opinion Survey* and *Faculty/Fellows Survey* data)
12. Instruction time provided for different arts areas (based on TAEPS data)

The between-school differences listed above were consistent across the different quantitative measures described in this chapter. School-by-school comparisons, interpreted in light of qualitative observations (see Volume 5), indicated that these differences were associated with a school's level of engagement with A+. Greater student achievement, more positive student and teacher attitudes, reports of more extensive teacher collaboration, and reports of more arts instruction were observed in those schools that were functioning at a more

comprehensive level of integration of the A+ way of thinking and doing (based upon observations, interviews, and other data) in comparison with schools where A+ was still largely viewed by principals and teachers as merely an add-on program.

These results are consistent with observations from the qualitative component of this research (see the other volumes in this Report), and support the conclusion that a school's engagement with A+ is not static but moves back and forth along a continuum of school change in *transformative, reformative, or informative* ways (see Volume 5). These findings are supported by the literature on school climate (e.g., Anderson, 1982; Koth, Bradshaw, & Leaf, 2008; Walberg, 1968; Welsh, 2000), suggesting that while the individual teacher's instructional practice has the power to influence students' attitudes and academic performance, the leadership of the building principal makes the most profound influence upon the direction that a school takes in its journey toward improvement.

While every effort has been made to ensure that the data and statistical analysis presented in this chapter are valid and reliable, the reader is reminded that quantitative research has its limitations, for example, surveys reflect someone's attitudes or opinions rather than facts, and, while statistics can be good representations of group trends, important individual differences are lost when a large number of responses is averaged. Therefore, it is most appropriate to view the contents of this chapter as a series of snapshots taken throughout the journey but not the complete



panoramic picture. The reader is encouraged to explore the other volumes in this report in order to gain greater insight into the complex world of Oklahoma A+ Schools®.



And the journey continues . . .



As of this writing, the A+ Oklahoma website lists 60 schools affiliated with the network.

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Appendices

*Numbers of Students and Teachers in A+ Schools**

<i>Starting Date</i>	<i>Grade Levels</i>	<i>No. of Students</i>	<i>No. of Teachers</i>	<i>No. of Para-professional</i>
<i>2002-03 A+ Schools Cohort</i>				
Briarwood	K-6th	669	39	2
Cleveland	PreS-5th	306	18	1
Flower Mound	PreK-8th	175	13	6
Freedom	PreK-5th	300	21	5
Garfield	PreK-5th	279	22	4
Grissom	PreK-5th	360	22.5	5
Jackson	1st-3rd	250	24	8
Jefferson Elem.	PreK-5th	335	24	8
Linwood	PreK-5th	258	14.5	6
Mark Twain	PreK-5th	267	20	2
Monroe	PreK-5th	420	36	11
Russell Dougherty	K-5th	243	11	0
Sequoyah	PreK-5th	464	30	7
Western Village	PreK-5th	330	24	18
<i>2002-03 TOTALS</i>		4656	319	83
<i>2003-04 A+ Schools Cohort</i>				
Britton	PreK-5th	369	25	5
Lee	4th-6th	253	19	8
Madison	PreK-5th	516	38	6
Millwood	PreK-6th	833	47	14
Oologah	PreK-2nd	330	22	4
<i>2003-04 TOTALS</i>		2301	151	37
<i>2004-05 A+ Schools Cohort</i>				

Jefferson ELC	PreK-K	167	10	5
Roosevelt	K-6th	413	25	1
Van Buren	PreK-5th	440	24	3
2004-05 TOTALS		1020	59	9
2005-06 A+ Schools Cohort				
Central Elem.	PreK-5th	410	16	7
Deborah Brown	K-4th	180	9	2
Geary	PreK-6th	250	28	7
Harding	9th	150	12	0
Mercy	PreS-8th	119	14	1
Millwood	4th-8th	130	19	0
Putnam City Academy	9th-12th	135	10	0
Quail Creek	PreK-5th	435	26	3
Washington	PreK-5th	273	13	5
2005-06 TOTALS		2082	147	25
2006-07 A+ Schools Cohort				
Del City	PreK-6th	474	28	3
Glenwood	PreK-K	452	32	28
Grimes	PreK-5th	315	21	3
Madison-OKC	K-5th	215	19	2
Millwood Arts Academy	4th-8th	130	19	0
Nichols Hills	K-5th	401	24.4	3
Putnam Heights	PreK-5th	260	24	4
Wilson	K-5th	330	30.5	5
2006-07 Totals		2577	197.9	48
GRAND TOTAL (ALL SCHOOLS)		12,636	874	202

My Class Activities
Multivariate Analysis of Variance (MANOVA) Results
Wilks' Lambda for Between-School Differences

Academic Year	Hypothesis df	Error df	F	Sig.
2006-07	124	6158.69	4.74	.000
2005-06	96	4205.65	2.52	.000
2004-05	64	3329.88	2.65	.000
2003-04	68	4491.70	3.63	.000

Volume Three: Quantitative Measures

My Class Activities
Analysis of Variance (ANOVA) by School

Source	Dependent Variable	Type III Sum of Squares	Df	Mean Square	F	Sig.
School 2007	Interest Scale Mean	84.998	31	2.742	5.752	.000
	Challenge Scale Mean	36.713	31	1.184	3.662	.000
	Choice Scale Mean	79.022	31	2.549	5.647	.000
	Enjoyment Scale Mean	187.969	31	6.064	7.587	.000
School 2006	Interest Scale Mean	25.162	24	1.048	2.229	.001
	Challenge Scale Mean	12.123	24	.505	1.645	.026
	Choice Scale Mean	45.385	24	1.891	3.728	.000
	Enjoyment Scale Mean	55.166	24	2.299	2.771	.000
School 2005	Interest Scale Mean	22.033	16	1.377	2.727	.000
	Challenge Scale Mean	10.633	16	.665	2.117	.006
	Choice Scale Mean	31.824	16	1.989	3.963	.000
	Enjoyment Scale Mean	38.291	16	2.393	3.247	.000
School 2004	Interest Scale Mean	41.795	17	2.459	4.909	.000
	Challenge Scale Mean	13.983	17	.823	2.716	.000
	Choice Scale Mean	41.030	17	2.414	5.032	.000
	Enjoyment Scale Mean	80.414	17	4.730	6.093	.000

MCA 2003-04 Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
1. fits interests	1487	1	5	3.69	.953
2. interest me	1470	1	5	3.60	1.034
3. new ideas	1477	1	5	3.75	1.145
4. interesting topics	1476	1	5	3.74	1.069
5. teacher involves me	1475	1	5	3.97	1.111
6. learning is interesting	1470	1	5	3.71	1.080
7. doing is interesting	1476	1	5	3.69	1.073
8. explore interests	1471	1	5	3.48	1.273
9. challenging activities	1477	1	5	3.47	1.161
10. solve problems	1487	1	5	4.04	1.100
11. challenging materials	1485	1	5	3.60	1.157
12. try new things	1485	1	5	3.87	1.121
13. make difference	1465	1	5	3.90	1.136
14. demanding	1473	1	5	3.20	1.219
15. do my best	1478	1	5	4.39	1.010
16. fits abilities	1471	1	5	3.69	1.088
17. difficult	1466	1	5	2.45	1.234
18. work in group	1468	1	5	3.04	1.266
19. work alone	1468	1	5	3.62	1.271
20. choose partners	1475	1	5	3.05	1.219
21. choose projects	1472	1	5	2.34	1.265
22. choose jobs	1468	1	5	3.33	1.325
23. choose materials	1472	1	5	3.30	1.199
24. choose audience	1460	1	5	2.72	1.397
25. look forward	1476	1	5	4.02	1.206
26. have fun	1473	1	5	4.08	1.135
27. makes learning fun	1470	1	5	4.08	1.175
28. like what I do	1478	1	5	3.84	1.073
29. like working	1475	1	5	3.92	1.186
30. enjoyable activities	1485	1	5	3.97	1.075
31. like projects	1488	1	5	4.01	1.090

MCA 2004-05 Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
1. fits interests	1213	1	5	3.65	.978
2. interest me	1214	1	5	3.61	1.125
3. new ideas	1209	1	5	3.71	1.120
4. interesting topics	1202	1	5	3.70	1.137
5. teacher involves me	1198	1	5	3.87	1.131
6. learning is interesting	1206	1	5	3.75	1.058
7. doing is interesting	1195	1	5	3.67	1.064
8. explore interests	1201	1	5	3.40	1.305
9. challenging activities	1208	1	5	3.27	1.202
10. solve problems	1211	1	5	4.02	1.101
11. challenging materials	1219	1	5	3.63	1.124
12. try new things	1218	1	5	3.79	1.139
13. make difference	1200	1	5	3.99	1.112
14. demanding	1209	1	5	3.11	1.230
15. do my best	1197	1	5	4.40	1.000
16. fits abilities	1207	1	5	3.69	1.135
17. difficult	1203	1	5	2.47	1.262
18. work in group	1208	1	5	2.85	1.239
19. work alone	1199	1	5	3.47	1.336
20. choose partners	1205	1	5	3.00	1.245
21. choose projects	1196	1	5	2.27	1.260
22. choose jobs	1204	1	5	3.06	1.345
23. choose materials	1196	1	5	3.08	1.281
24. choose audience	1205	1	5	2.73	1.424
25. look forward	1201	1	5	4.04	1.201
26. have fun	1204	1	5	4.08	1.130
27. makes learning fun	1202	1	5	4.05	1.172
28. like what I do	1208	1	5	3.86	1.081
29. like working	1203	1	5	3.93	1.144
30. enjoyable activities	1211	1	5	3.96	1.069
31. like projects	1198	1	5	4.02	1.091

MCA 2005-06 Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
1. fits interests	1457	1	5	3.54	.914
2. interest me	1457	1	5	3.45	1.087
3. new ideas	1452	1	5	3.61	1.093
4. interesting topics	1457	1	5	3.63	1.091
5. teacher involves me	1448	1	5	3.79	1.131
6. learning is interesting	1447	1	5	3.68	1.042
7. doing is interesting	1441	1	5	3.59	1.067
8. explore interests	1442	1	5	3.30	1.289
9. challenging activities	1449	1	5	3.23	1.153
10. solve problems	1451	1	5	4.00	1.074
11. challenging materials	1466	1	5	3.45	1.175
12. try new things	1449	1	5	3.84	1.105
13. make difference	1444	1	5	3.89	1.117
14. demanding	1444	1	5	3.06	1.255
15. do my best	1442	1	5	4.34	1.049
16. fits abilities	1442	1	5	3.63	1.090
17. difficult	1438	1	5	2.47	1.175
18. work in group	1452	1	5	2.69	1.251
19. work alone	1432	1	5	3.49	1.360
20. choose partners	1450	1	5	2.94	1.238
21. choose projects	1445	1	5	2.27	1.205
22. choose jobs	1440	1	5	3.06	1.306
23. choose materials	1432	1	5	3.12	1.231
24. choose audience	1435	1	5	2.51	1.290
25. look forward	1445	1	5	3.88	1.247
26. have fun	1454	1	5	3.94	1.171
27. makes learning fun	1445	1	5	3.93	1.227
28. like what I do	1449	1	5	3.76	1.093
29. like working	1444	1	5	3.77	1.188
30. enjoyable activities	1457	1	5	3.82	1.115
31. like projects	1455	1	5	3.89	1.125

MCA 2006-07 Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
1. fits interests	1837	1	5	3.51	.949
2. interest me	1837	1	5	3.54	1.059
3. new ideas	1836	1	5	3.59	1.115
4. interesting topics	1836	1	5	3.67	1.089
5. teacher involves me	1826	1	5	3.78	1.090
6. learning is interesting	1831	1	5	3.64	1.109
7. doing is interesting	1822	1	5	3.61	1.033
8. explore interests	1829	1	5	3.37	1.236
9. challenging activities	1826	1	5	3.24	1.142
10. solve problems	1835	1	5	4.01	1.078
11. challenging materials	1840	1	5	3.37	1.152
12. try new things	1839	1	5	3.73	1.124
13. make difference	1831	1	5	3.96	1.090
14. demanding	1832	1	5	3.23	1.215
15. do my best	1829	1	5	4.36	1.033
16. fits abilities	1826	1	5	3.62	1.069
17. difficult	1827	1	5	2.46	1.190
18. work in group	1828	1	5	2.74	1.182
19. work alone	1826	1	5	3.44	1.325
20. choose partners	1835	1	5	2.92	1.202
21. choose projects	1829	1	5	2.32	1.274
22. choose jobs	1830	1	5	3.08	1.276
23. choose materials	1814	1	5	3.07	1.195
24. choose audience	1837	1	5	2.76	1.381
25. look forward	1831	1	5	3.74	1.351
26. have fun	1836	1	5	3.89	1.189
27. makes learning fun	1831	1	5	3.93	1.196
28. like what I do	1830	1	5	3.68	1.088
29. like working	1831	1	5	3.65	1.256
30. enjoyable activities	1831	1	5	3.77	1.108
31. like projects	1838	1	5	3.87	1.118

Comparing A+ Oklahoma Schools API Means with Means for their Districts

Paired Samples Test

		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	api03 - dist03	133.909	226.567	48.304	33.455	234.363	2.772	21	.011
Pair 2	api04 - dist04	86.409	205.635	43.842	-4.764	177.583	1.971	21	.062
Pair 3	api05 - dist05	131.200	188.214	37.643	53.509	208.891	3.485	24	.002
Pair 4	api06 - dist06	148.385	158.675	31.119	84.294	212.475	4.768	25	.000
Pair 5	api07 - dist07	137.970	144.842	25.214	86.611	189.328	5.472	32	.000
Pair 6	api08 - dis08	136.206	149.829	25.696	83.928	188.484	5.301	33	.000

Average API Scores were consistently higher for A+ Oklahoma Schools in comparison with State Averages and District averages.

Paired Samples T-Tests comparing A+ Oklahoma School averages with their district averages indicated that these differences were statistically significant (probability of error less than .05) for 2003, 2005, 2006, 2007, and 2008 API data.

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Scale Items for Teacher Opinion Survey (1st Administration)

Scale 1 Student Outcome	Scale 2 Collaboration	Scale 3 Teacher as Artist	Scale 4 Arts as a Separate Discipline
<i>Item and factor score</i>	<i>Item and factor score</i>	<i>Item and factor score</i>	<i>Item and factor score</i>
<i>I am motivated to use the arts in my classroom because of the diversity of my students.</i> .72 8	<i>I spend a large part of my planning time with other teachers.</i> .59 9	<i>My own personality and passion for the arts is shared with students daily.</i> .73 3	<i>The arts take away time from important preparation for regular curricular outcomes.</i> .60 3
<i>The arts in my classroom enhance the spirit of respect and empathy.</i> .70 2	<i>Group planning time for teaching the arts is scheduled and used consistently at my school.</i> .57 9	<i>My own participation in the arts is evident in my classroom.</i> .72 1	<i>The purpose of high quality instruction in the arts is to prepare those who will go on to work in art-related fields.</i> .51 6
<i>Arts integration aids in the goal of students loving to learn.</i> .67 4	<i>I take advantage of the resources offered with this arts program.</i> .51 6	<i>I do not have sufficient knowledge of any art domain to ensure the success of an integrated curriculum.</i> .63 4	<i>Teaching the arts is less demanding than teaching other subjects.</i> .49 4
<i>Using the arts in my classroom reduces discipline issues for the children I teach.</i> .58 1	<i>Ever since I started to be involved with this program, I have a renewed interest in coming to work.</i> .50 2	<i>Students study the arts in a multicultural context in my classroom.</i> .46 5	<i>Arts specialists are not as necessary at the elementary level because classroom teachers can teach the arts.</i> .45 8
<i>Integrating the arts into the general curriculum makes my teaching more rewarding to me.</i> .56 6	<i>There is adequate time for collaborating with in-school arts specialists.</i> .49 3	<i>My personal fulfillment as a teacher is enhanced by my work in the arts.</i> .40 7	<i>I feel uncomfortable with the disorder of the arts integrated into all subjects.</i> .40 9

Volume Three: Quantitative Measures

<i>I use the arts in my classroom to emphasize curricular themes.</i>	.43 3	<i>Teachers are encouraged to be creative at my school.</i>	.47 5		<i>Talent development in the arts is most appropriately served through extra-curricular programs.</i>	.38 2
<i>At my school, I am not expected to conform to any particular teaching style.</i>	.39 1	<i>My professional goal this past academic year was to work on learning to better integrate the arts into the general curriculum.</i>	.44 7		<i>Only those teachers who have artistic background and formal training have a realistic preparation for teaching the arts.</i>	.36 7
<i>Students become more self-actualized through the arts.</i>	.36 6	<i>The nature of this program allows for collaboration with others.</i>	.39 3			
<i>My theoretical orientation in planning curriculum is whole child: thinking, feeling, doing, and creating.</i>	.35 1	<i>There is much experimentation with different teaching approaches at my school.</i>	.38 5			
		<i>Collaborating with visiting artists is an essential part of my teaching.</i>	.38 1			
Number of Defining Statements for Scale	9		10			7
Reliability of Scale (Alpha)	.84		.78		.49	.695
Scale Mean	29.34		29.57		17.2	13.43
(Standard Deviation)	(3.45)		(3.94)		(1.72)	(2.75)
Item Mean	3.26		2.96		2.86	1.91

Teacher Opinion Survey Item Descriptive Statistics: 2003-04

TOS Item	N	Minimum	Maximum	Mean	Std. Deviation
My lessons are organized according to a curriculum map.	609	1	4	3.07	.670
Referring to other teachers' curriculum maps assists in my teaching interrelated curriculum.	588	1	4	2.99	.683
I take advantage of the resources offered with this arts program.	601	1	4	3.19	.556
The parents are more involved now that we are a part of this program.	566	1	4	2.82	.693
Ever since I started this program, I have a renewed interest in coming to work.	580	1	4	2.92	.678
Teachers are encouraged to be creative at my school.	644	1	4	3.58	.595
At my school, I am not expected to conform to any particular teaching style.	617	1	4	3.06	.775
There is much experimentation with different teaching approaches at my school.	622	1	4	3.01	.700
The nature of this program allows for collaboration with others.	636	1	4	3.44	.565
Collaborating with visiting artists is an essential part of my teaching.	589	1	4	2.66	.747
I spend a large part of my planning time with other teachers.	602	1	4	2.61	.847
There is adequate time for collaborating with in-school arts specialists.	602	1	4	2.27	.809
Group planning time for teaching the arts is scheduled and used consistently at my school.	600	1	4	2.48	.821
My professional goal this past academic year was to work on learning to better integrate the arts into the general curriculum.	601	1	4	3.00	.733
I need to develop more confidence in facilitating arts experiences in my classroom.	618	1	4	3.00	.737
I do not have sufficient knowledge of any art domain to ensure the success of an integrated curriculum.	619	1	4	2.19	.748
Only those teachers who have artistic background and formal training have a realistic preparation for teaching the arts.	638	1	4	1.82	.673
My own participation in the arts is evident in my classroom.	602	1	4	2.98	.685
My own personality and passion for the arts is shared with students daily.	635	1	4	2.99	.700

My theoretical orientation in planning curriculum is clearly Gardner's Multiple Intelligences.	592	1	4	2.85	.630
My theoretical orientation in planning curriculum is whole child: thinking, feeling, doing, and creating.	600	1	4	3.19	.596
My personal fulfillment as a teacher is enhanced by my work in the arts.	602	1	4	3.00	.683
Teaching the arts is less demanding than teaching other subjects.	603	1	4	2.16	.764
Students study the arts in a multicultural context in my classroom.	586	1	4	2.91	.664
The arts take away time from important preparation for regular curricular outcomes.	613	1	4	1.81	.674
Students become more self-actualized through the arts.	625	1	4	3.22	.645
Talent development in the arts is most appropriately served through extra-curricular programs.	607	1	4	2.25	.767
The purpose of high quality instruction in the arts is to prepare those who will go on to work in art-related fields.	623	1	4	1.96	.734
Integrating the arts into the general curriculum makes my teaching more rewarding to me.	594	1	4	3.21	.644
I am motivated to use the arts in my classroom because of the diversity of my students.	593	1	4	3.14	.599
The arts in my classroom enhance the spirit of respect and empathy.	594	1	4	3.23	.534
Arts integration aids in the goal of students loving to learn.	616	1	4	3.39	.557
I use the arts in my classroom to emphasize curricular themes.	597	1	4	3.25	.573
Using the arts in my classroom reduces discipline issues for the children I teach.	591	1	4	3.02	.714
I feel uncomfortable with the disorder of the arts integrated into all subjects.	592	1	4	2.01	.741
Arts specialists are not as necessary at elem. level because classroom teachers can teach the arts.	619	1	4	1.80	.798
The arts integrated into the total curriculum promote learning across subject boundaries.	617	1	4	3.40	.605
It is logical to teach concepts holistically across all subjects in the curriculum including the arts.	613	1	4	3.40	.568
Valid N (listwise)	403				

Teacher Opinion Survey Item Descriptive Statistics: 2004-05

TOS Item	N	Minimum	Maximum	Mean	Std. Deviation
My lessons are organized according to a curriculum map.	404	1	4	3.16	.696
Referring to other teachers' curriculum maps assists in my teaching interrelated curriculum.	400	1	4	3.01	.653
I take advantage of the resources offered with this arts program.	405	1	4	3.18	.564
The parents are more involved now that we are a part of this program	354	1	4	2.79	.721
Ever since I started this program, I have a renewed interest in coming to work.	375	1	4	2.95	.601
Teachers are encouraged to be creative at my school.	425	1	4	3.61	.520
At my school, I am not expected to conform to any particular teaching style.	413	1	4	3.14	.776
There is much experimentation with different teaching approaches at my school.	403	1	4	3.07	.677
The nature of this program allows for collaboration with others.	429	2	4	3.51	.541
Collaborating with visiting artists is an essential part of my teaching.	388	1	4	2.64	.766
I spend a large part of my planning time with other teachers.	408	1	4	2.65	.885
There is adequate time for collaborating with in-school arts specialists.	390	1	4	2.13	.775
Group planning time for teaching the arts is scheduled and used consistently at my school.	381	1	4	2.36	.808
My professional goal this past academic year was to work on learning to better integrate the arts into the general curriculum.	385	1	4	2.97	.670
I need to develop more confidence in facilitating arts experiences in my classroom.	409	1	4	2.94	.764
I do not have sufficient knowledge of any art domain to ensure the success of an integrated curriculum	410	1	4	2.18	.719
Trained arts specialists are necessary to provide comprehensive arts education.	425	1	4	2.55	.860
My own participation in the arts is evident in my classroom.	400	1	4	3.04	.620
My own personality and passion for the arts is shared with students daily.	417	1	4	2.99	.669

Talent development in the arts is most appropriately served through extra-curricular programs.	408	1	4	2.30	.749
My theoretical orientation in planning curriculum is clearly Gardner's Multiple Intelligences.	382	1	4	2.87	.630
Only those teachers who have artistic background and formal training have a realistic preparation for teaching the arts.	426	1	3	1.87	.574
My theoretical orientation in planning curriculum is whole child: thinking, feeling, doing, and creating.	414	1	4	3.26	.549
My personal fulfillment as a teacher is enhanced by my work in the arts.	410	1	4	3.00	.685
Teaching the arts is less demanding than teaching other subjects.	414	1	4	2.04	.702
Students study the arts in a multicultural context in my classroom.	388	1	4	2.90	.625
Teaching arts activities is too time-consuming.	415	1	4	1.78	.591
Students become more self-actualized through the arts.	422	2	4	3.32	.503
Most arts education should take place outside of regular class time.	427	1	4	1.73	.636
All children, regardless of their interests, should have high-quality arts instruction.	437	1	4	3.30	.618
Integrating the arts into the general curriculum makes my teaching more rewarding to me.	410	1	4	3.27	.577
I am motivated to use the arts in my classroom because of the diversity of my students.	409	1	4	3.11	.630
The arts in my classroom enhance the spirit of respect and empathy.	405	2	4	3.20	.549
The arts take away time from important preparation for regular curricular outcomes.	414	1	4	1.76	.637
Arts integration aids in the goal of students loving to learn.	425	2	4	3.40	.513
Arts specialists are not as necessary at elementary level because classroom teachers can teach the arts.	418	1	4	1.86	.722
I use the arts in my classroom to emphasize curricular themes.	397	1	4	3.18	.565
The purpose of high quality instruction in the arts is to prepare those who will go on to work in art-related fields.	410	1	4	1.85	.666
Using the arts in my classroom reduces discipline issues for the children I teach.	397	1	4	3.00	.636
Integrating the arts creates unwanted disorder in my classroom.	404	1	4	2.03	.777

At the elementary level, classroom teachers have the necessary skills to teach two-way integration of the arts with other content areas.	395	1	4	2.87	.641
The arts integrated into the total curriculum promote learning across subject boundaries.	419	1	4	3.32	.495
I feel uncomfortable with the disorder of the arts integrated into all subjects.	408	1	4	1.90	.649
It is logical to teach concepts holistically across all subjects in the curriculum including the arts.	415	2	4	3.37	.535
Valid N (listwise)	228				

Teacher Opinion Survey Item Descriptive Statistics: 2005-06

TOS Item	N	Minimum	Maximum	Mean	Std. Deviation
My lessons are organized according to a curriculum map.	480	1	4	3.23	.657
Referring to other teachers' curriculum maps assists in my teaching interrelated curriculum.	476	1	22	3.09	1.413
I take advantage of the resources offered with this arts program.	468	1	4	3.18	.595
The parents of the students at our school are more involved now that we are a part of this program.	412	1	4	2.67	.725
Ever since I started to be involved with this program, I have a renewed interest in coming to work.	450	1	4	2.92	.664
Teachers are encouraged to be creative in my school.	491	1	4	3.55	.545
At my school, I am not expected to conform to any particular teaching style.	480	1	4	3.09	.754
There is much experimentation with different teaching approaches at my school.	478	1	4	3.06	.657
The nature of this program allows for collaboration with others.	487	1	4	3.45	.578
Collaborating with visiting artists is an essential part of my teaching.	463	1	4	2.57	.764
I spend a large part of my planning time with other teachers.	481	1	4	2.58	.808
There is adequate time for collaborating with in-school arts specialists.	466	1	22	2.20	1.234
Group planning time for teaching the arts is scheduled and used consistently at my school.	453	1	4	2.29	.804
My professional goal this past academic year was to work on learning to better integrate the arts into the general curriculum.	464	1	4	2.91	.691
I need to develop more confidence in facilitating arts experiences in my classroom.	479	1	4	2.84	.759
I do not have sufficient knowledge of any art domain to ensure the success of an integrated curriculum.	479	1	4	2.09	.728
Trained arts specialists are necessary to provide comprehensive arts education.	488	1	44	2.65	2.061
My own participation in the arts is evident in my classroom.	482	1	4	3.02	.661
My own personality and passion for the arts are shared with the students daily.	487	1	4	2.96	.727

Talent development in the arts is most appropriately served through extra-curricular programs.	478	1	4	2.31	.750
My theoretical orientation in planning curriculum is clearly Gardner's Multiple Intelligences.	468	1	4	2.82	.650
Only those teachers who have an artistic background and formal training have a realistic preparation for teaching the arts.	493	1	4	1.89	.657
My theoretical orientation in planning curriculum is whole child: thinking, feeling, doing, and creating.	480	1	4	3.24	.554
My personal fulfillment as a teacher is enhanced by my work in the arts.	473	1	4	3.00	.701
Teaching the arts is less demanding than teaching other subjects.	479	1	4	2.11	.728
Students study the arts in a multicultural context in my classroom.	465	1	33	2.94	1.538
Teaching arts activities is too time consuming.	486	1	4	1.78	.614
Students become more self-actualized through the arts.	486	2	4	3.34	.518
Arts education should take place outside of regular class time.	488	1	4	1.75	.632
All children, regardless of their interests, should have high quality arts instruction.	495	1	6	3.32	.613
Integrating the arts into the general curriculum makes my teaching more rewarding to me.	478	1	4	3.25	.595
I am motivated to use the arts in my classroom because of the diversity of my students.	472	1	4	3.09	.642
The arts in my classroom enhance the spirit of respect and empathy.	466	1	4	3.16	.591
The arts take away time from important preparation for regular curricular outcomes.	481	1	22	1.83	1.095
Arts integration aids in the goal of students loving to learn.	487	1	4	3.42	.534
Arts specialists are not as necessary at the elementary level because classroom teachers can teach the arts.	483	1	4	1.89	.728
I use the arts in my classroom to emphasize curricular themes.	473	1	33	3.26	1.489
The purpose of high-quality instruction in the arts is to prepare those who will go on to work in art-related fields.	482	1	4	1.85	.667
Using the arts in my classroom reduces discipline issues for the children I teach.	472	1	4	2.88	.666
Integrating the arts creates unwanted disorder in my classroom.	469	1	4	2.04	.730

Volume Three: Quantitative Measures

At the elementary level, classroom teachers have the necessary skills to teach two-way integration of the arts with other content areas.	466	1	4	2.81	.650
The arts integrated into the total curriculum promote learning across subject boundaries.	482	1	4	3.31	.529
I feel uncomfortable with the disorder of the arts integrated into all subjects.	477	1	4	1.90	.700
It is logical to teach themes, ideas, and concepts holistically across all subjects in the curriculum including the arts.	477	1	44	3.46	1.946
Valid N (listwise)	325				

Teacher Opinion Survey Item Descriptive Statistics: 2006-07

TOS Item	N	Minimum	Maximum	Mean	Std. Deviation
My lessons are organized according to a curriculum map.	590	1	4	3.23	.675
Referring to other teachers' curriculum maps assists in my teaching interrelated curriculum.	585	1	4	3.07	.683
I take advantage of the resources offered with this arts program.	576	1	4	3.18	.584
The parents of the students at our school are more involved now that we are a part of this program.	529	1	4	2.74	.710
Ever since I started to be involved with this program, I have a renewed interest in coming to work.	550	1	4	2.87	.698
Teachers are encouraged to be creative in my school.	601	1	4	3.60	.536
At my school, I am not expected to conform to any particular teaching style.	598	1	4	3.13	.752
There is much experimentation with different teaching approaches at my school.	589	1	4	3.13	.637
The nature of this program allows for collaboration with others.	596	1	4	3.49	.551
Collaborating with visiting artists is an essential part of my teaching.	579	1	4	2.58	.777
I spend a large part of my planning time with other teachers.	595	1	4	2.71	.806
There is adequate time for collaborating with in-school arts specialists.	583	1	4	2.32	.810
Group planning time for teaching the arts is scheduled and used consistently at my school.	572	1	4	2.42	.822
My professional goal this past academic year was to work on learning to better integrate the arts into the general curriculum.	575	1	4	2.94	.703
I need to develop more confidence in facilitating arts experiences in my classroom.	596	1	4	2.76	.728
I do not have sufficient knowledge of any art domain to ensure the success of an integrated curriculum.	596	1	4	2.14	.721
Trained arts specialists are necessary to provide comprehensive arts education.	597	1	4	2.50	.835
My own participation in the arts is evident in my classroom.	596	1	4	2.98	.684
My own personality and passion for the arts are shared with the students daily.	589	1	4	2.97	.720

Talent development in the arts is most appropriately served through extra-curricular programs.	590	1	4	2.32	.755
My theoretical orientation in planning curriculum is clearly Gardner's Multiple Intelligences.	582	1	4	2.92	.639
Only those teachers who have an artistic background and formal training have a realistic preparation for teaching the arts.	604	1	4	1.85	.590
My theoretical orientation in planning curriculum is whole child: thinking, feeling, doing, and creating.	595	1	4	3.25	.572
My personal fulfillment as a teacher is enhanced by my work in the arts.	588	1	33	3.00	1.432
Teaching the arts is less demanding than teaching other subjects.	594	1	4	2.08	.710
Students study the arts in a multicultural context in my classroom.	578	1	47	2.98	1.934
Teaching arts activities is too time consuming.	589	1	4	1.80	.645
Students become more self-actualized through the arts.	595	1	4	3.30	.528
Arts education should take place outside of regular class time.	599	1	4	1.76	.615
All children, regardless of their interests, should have high-quality arts instruction.	606	1	4	3.31	.616
Integrating the arts into the general curriculum makes my teaching more rewarding to me.	586	1	4	3.23	.597
I am motivated to use the arts in my classroom because of the diversity of my students.	591	1	4	3.08	.658
The arts in my classroom enhance the spirit of respect and empathy.	589	1	4	3.16	.588
The arts take away time from important preparation for regular curricular outcomes.	595	1	4	1.84	.639
Arts integration aids in the goal of students loving to learn.	597	1	4	3.38	.541
Arts specialists are not as necessary at the elementary level because classroom teachers can teach the arts.	598	1	4	1.86	.775
I use the arts in my classroom to emphasize curricular themes.	590	1	4	3.17	.584
The purpose of high-quality instruction in the arts is to prepare those who will go on to work in art-related fields.	588	1	4	1.81	.657
Using the arts in my classroom reduces discipline issues for the children I teach.	574	1	4	2.89	.643
Integrating the arts creates unwanted disorder in my classroom.	581	1	4	2.02	.755

At the elementary level, classroom teachers have the necessary skills to teach two-way integration of the arts with other content areas.	577	1	4	2.84	.624
The arts integrated into the total curriculum promote learning across subject boundaries.	591	2	4	3.30	.496
I feel uncomfortable with the disorder of the arts integrated into all subjects.	586	1	4	1.90	.678
It is logical to teach themes, ideas, and concepts holistically across all subjects in the curriculum including the arts.	596	1	4	3.36	.589
Valid N (listwise)	411				

Teacher Opinion Survey
MANOVA Results: Wilks' Lambda

Academic Year	Hypothesis df	Error df	F	Sig.
2006-07	4.000	366.000	9.313E3	.000
2005-06	4.000	283.000	4.000a	.000
2004-05	4.000	283.000	5.523E3	.000
2003-04	4.000	379.000	5.215E3	.000

***Teacher Opinion Survey
Analysis of Variance (ANOVA) by School***

Source	Dependent Variable	Type III Sum of Squares	Df	Mean Square	F	Sig.
School 2007	Student Outcome Scale Mean	12.636	41	.308	1.800	.003
	Collaboration Scale Mean	11.493	41	.280	2.401	.000
	Teacher as Artist Scale Mean	9.661	41	.236	1.390	.062
	Arts as a Separate Discipline Scale Mean	7.505	41	.183	1.811	.002
School 2006	Student Outcome Scale Mean	9.185	35	.262	1.146	.270
	Collaboration Scale Mean	14.651	35	.419	3.737	.000
	Teacher as Artist Scale Mean	9.943	35	.284	1.533	.032
	Arts as a Separate Discipline Scale Mean	7.952	35	.227	1.513	.037
School 2005	Student Outcome Scale Mean	5.013	27	.186	1.597	.037
	Collaboration Scale Mean	6.560	27	.243	2.398	.000
	Teacher as Artist Scale Mean	5.617	27	.208	1.370	.115
	Arts as a Separate Discipline Scale Mean	6.113	27	.226	2.232	.001
School 2004	Student Outcome Scale Mean	4.698	20	.235	1.594	.051
	Collaboration Scale Mean	9.543	20	.477	4.201	.000
	Teacher as Artist Scale Mean	5.655	20	.283	1.950	.009
	Arts as a Separate Discipline Scale Mean	12.722	20	.636	3.516	.000

TAEPS Results: A+ Eight Essentials
Overall Responses Broken Down by A+ Entry Year

Response Scale: 1 = Strongly Agree; 2 = Agree; 3 = Uncertain; 4 = Disagree; 5 = Strongly Disagree
 Note. These items were administered to A+ Schools only.

SURVEY ITEM	ALL Schools (N = 2197)		Entering 2002-03 (N = 1317)		Entering 2003-04 (N = 587)		Entering 2004-05 (N = 293)	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
ARTS INTEGRATION								
Arts (creative writing, drama, dance, music, visual arts) are included as part of each child's learning experience	1.88	.982	1.77	.936	2.04	1.052	2.07	.980
Teachers use the arts to teach other subjects	2.03	.999	1.95	.979	2.15	1.024	2.14	1.008
CURRICULUM								
Teachers and principals have an overall plan for what is taught throughout the year	1.74	.930	1.64	.867	1.91	1.018	1.82	.965
Teachers and principals provide learning that builds upon what students already know	1.80	.919	1.71	.866	1.98	.984	1.86	.967
Teachers and principals help students expand their learning into new areas	1.71	.906	1.63	.853	1.88	.987	1.77	.927
EXPERIENTIAL LEARNING								
Students participate in hands-on learning activities	1.66	.890	1.58	.843	1.84	.968	1.67	.885
Students can apply what they learn in school in real life	1.71	.918	1.66	.886	1.84	.981	1.69	.909
MULTIPLE INTELLIGENCES								
Teachers and principals help students to learn in different ways (hands-on, watching a program, group projects, etc.)	1.68	.911	1.61	.873	1.83	.990	1.68	.884
Teachers and principals understand individual students' strengths and weakness in learning	1.91	1.035	1.84	1.004	2.08	1.106	1.87	.999
Students learn various ways to problem solve (communication, writing, logical thinking, etc.)	1.72	.915	1.67	.877	1.86	.996	1.71	.896
Students are allowed to use their strengths to make sense of new ideas and materials	1.85	.969	1.78	.933	2.00	1.046	1.83	.939
ENRICHED ASSESSMENT								
Teachers and principals use a variety of ways to measure	1.82	.967	1.75	.925	1.98	1.060	1.80	.929

Volume Three: Quantitative Measures

student learning (projects, activities, written tests, etc.)								
Teachers assess the effectiveness of their own teaching	1.95	1.009	1.92	1.003	2.05	1.037	1.89	.973
Teachers continually assess student learning	1.81	.939	1.74	.902	1.94	.999	1.83	.950
COLLABORATION								
Teachers and principals work as a team	1.80	.979	1.71	.922	2.02	1.085	1.77	.942
Parents, teachers and school administrators work together for student success	1.80	.999	1.72	.950	2.00	1.090	1.77	.969
The entire school staff (teachers, principals, cafeteria personnel, janitors, other support staff) work together for student success	1.85	1.040	1.72	.958	2.15	1.180	1.82	.974
School personnel and the community (businesses, churches, civic groups, etc.) work together as a team	2.14	1.097	2.06	1.046	2.32	1.159	2.12	1.153
Teachers meet together to plan	1.83	.964	1.73	.910	1.99	1.022	1.94	1.026
INFRASTRUCTURE								
Teachers and principals participate in ongoing professional development (planned workshops, professional seminars, in-service meetings, etc.)	1.79	.964	1.72	.916	1.97	1.057	1.79	.940
Adequate space for arts instruction is provided	2.53	1.182	2.45	1.166	2.63	1.215	2.69	1.164
The school seeks external funding for support to expand arts offerings (creative writing, dance, drama, music, visual arts)	2.28	1.070	2.22	1.041	2.40	1.130	2.31	1.057
SCHOOL CLIMATE								
Students enjoy attending this school	1.65	.969	1.59	.931	1.84	1.073	1.57	.877
Students have regular opportunities to share their learning experiences with parents and the community	1.83	.970	1.77	.945	1.98	1.032	1.81	.931
Parents and visitors feel welcome in this school	1.61	.951	1.54	.903	1.74	1.027	1.64	.977
This school provides a positive learning environment	1.59	.922	1.49	.845	1.84	1.057	1.55	.882
Teachers, principals, and support staff are respected by the community	1.67	.937	1.58	.875	1.92	1.075	1.54	.813

***TAEPS Results: Eight Essentials
All A+ Schools Broken Down by Role of Respondent***

Response Scale: 1 = Strongly Agree; 2 = Agree; 3 = Uncertain; 4 = Disagree; 5 = Strongly Disagree

SURVEY ITEM	State Legislator (n= 5)		Business (n= 80)		Parent (n= 1818)		Teacher (n= 232)		School Admin (n= 32)		School Board Member (n= 12)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
ARTS INTEGRATION												
Arts (creative writing, drama, dance, music, visual arts) are included as part of each child’s learning experience	1.80	.837	2.11	1.025	1.89	.997	1.75	.877	1.69	.780	1.91	.539
Teachers use the arts to teach other subjects	1.80	.837	2.24	1.112	2.06	1.011	1.80	.862	1.87	.751	1.91	.701
CURRICULUM												
Teachers and principals have an overall plan for what is taught throughout the year	1.80	.837	1.74	.791	1.78	.950	1.48	.800	1.31	.592	1.38	.650
Teachers and principals provide learning that builds upon what students already know	1.80	.837	1.90	.866	1.85	.941	1.47	.714	1.34	.602	1.54	.660
Teachers and principals help students expand their learning into new areas	1.60	.548	1.92	.908	1.75	.927	1.41	.698	1.31	.592	1.67	.778
EXPERIENTIAL LEARNING												
Students participate in hands-on learning activities	1.60	.548	1.80	.868	1.68	.911	1.52	.742	1.32	.599	1.67	.778
Students can apply what they learn in school in real life	1.60	.548	1.87	.897	1.70	.937	1.72	.787	1.71	.864	1.83	.718
MULTIPLE INTELLIGENCES												
Teachers and principals help students to learn in different ways (hands-on, watching a program, group projects, etc.)	1.60	.548	1.74	.746	1.72	.940	1.39	.694	1.38	.660	1.33	.651
Teachers and principals understand individual students’ strengths and weakness in learning	1.80	.837	2.15	.994	1.96	1.060	1.53	.783	1.55	.768	1.50	.674
Students learn various ways to problem solve (communication, writing, logical thinking, etc.)	1.60	.548	1.92	.917	1.73	.935	1.65	.774	1.61	.761	1.67	.651
Students are allowed to use their strengths to make sense of new ideas and materials	1.80	.837	2.06	.965	1.86	.990	1.70	.813	1.61	.715	2.08	.669

Volume Three: Quantitative Measures

ENRICHED ASSESSMENT												
Teachers and principals use a variety of ways to measure student learning (projects, activities, etc.)	1.80	.837	2.00	.953	1.85	.987	1.57	.804	1.66	.787	1.33	.492
Teachers assess the effectiveness of their own teaching	1.80	.837	2.30	1.191	1.98	1.019	1.60	.806	1.81	.780	2.25	.866
Teachers continually assess student learning	1.80	.837	1.99	.954	1.86	.960	1.43	.682	1.48	.724	1.91	.539
COLLABORATION												
Teachers and principals work as a team	1.80	.837	2.08	.970	1.84	.999	1.49	.786	1.38	.660	1.75	.754
Parents, teachers and school administrators work together for student success	2.00	1.000	2.00	1.098	1.82	1.013	1.64	.878	1.44	.619	1.64	.809
The entire school staff (teachers, principals, cafeteria personnel, janitors, other support staff) work together for student success	1.80	.837	2.06	1.043	1.87	1.058	1.63	.904	1.56	.716	1.64	.809
School personnel and the community (businesses, churches, civic groups, etc.) work together as a team	2.00	1.000	2.27	1.101	2.15	1.108	2.06	1.047	1.78	.870	1.91	.701
Teachers meet together to plan	1.80	.837	1.79	.879	1.85	.963	1.72	1.023	1.53	.718	1.64	.924
INFRASTRUCTURE												
Teachers and principals participate in ongoing professional development (planned workshops, professional seminars, in-service meetings, etc.)	1.60	.894	2.01	.966	1.85	.982	1.37	.714	1.25	.568	1.33	.651
Adequate space for arts instruction is provided	2.20	1.095	2.62	1.090	2.49	1.165	2.80	1.328	2.50	1.244	2.73	.647
The school seeks external funding for support to expand arts offerings (creative writing, dance, drama, music, visual arts)	2.00	1.000	2.14	1.016	2.29	1.063	2.30	1.129	2.44	1.190	2.18	.982
SCHOOL CLIMATE												
Students enjoy attending this school	1.40	.548	1.81	.968	1.66	.996	1.55	.753	1.48	.724	2.18	.751
Students have regular opportunities to share their learning experiences with parents and the community	1.60	.548	2.10	.995	1.81	.971	1.95	.970	1.65	.877	1.67	.651
Parents and visitors feel welcome in this school	1.60	.548	1.74	1.025	1.63	.972	1.46	.757	1.41	.665	1.91	.944
This school provides a positive learning environment	1.40	.548	1.73	.935	1.62	.949	1.35	.681	1.38	.609	1.73	.905
Teachers, principals, and support staff are respected by the community	1.20	.447	1.65	.819	1.68	.948	1.66	.932	1.50	.672	1.45	.934

TAEPS Results: Eight Essentials

2002-03 A+ Schools Broken Down by Role of Respondent

Response Scale: 1 = Strongly Agree; 2 = Agree; 3 = Uncertain; 4 = Disagree; 5 = Strongly Disagree

SURVEY ITEM	State Legislator (n= 2)		Business (n= 28)		Parent (n= 1117)		Teacher (n= 141)		School Admin (n= 23)		School Board Member (n= 9)	
	Mean	SD	Mean	SD	Mean	Sd	Mean	SD	Mean	SD	Mean	SD
ARTS INTEGRATION												
Arts (creative writing, drama, dance, music, visual arts) are included as part of each child’s learning experience	2.00	.000	2.00	.861	1.80	.964	1.58	.720	1.52	.790	1.86	.378
Teachers use the arts to teach other subjects	2.00	.000	2.21	1.134	1.98	.996	1.71	.809	1.78	.736	2.00	.816
CURRICULUM												
Teachers and principals have an overall plan for what is taught throughout the year	2.00	.000	1.82	.863	1.68	.890	1.40	.675	1.26	.541	1.22	.441
Teachers and principals provide learning that builds upon what students already know	2.00	.000	2.21	1.031	1.75	.886	1.40	.597	1.30	.559	1.44	.527
Teachers and principals help students expand their learning into new areas	2.00	.000	2.07	1.016	1.66	.876	1.34	.558	1.26	.541	1.63	.744
EXPERIENTIAL LEARNING												
Students participate in hands-on learning activities	2.00	.000	1.89	.832	1.60	.870	1.40	.609	1.27	.550	1.50	.756
Students can apply what they learn in school in real life	2.00	.000	1.75	.752	1.65	.907	1.67	.746	1.64	.902	1.75	.707
MULTIPLE INTELLIGENCES												
Teachers and principals help students to learn in different ways (hands-on, watching a program, group projects, etc.)	2.00	.000	1.75	.799	1.65	.907	1.31	.549	1.35	.647	1.13	.354
Teachers and principals understand individual students’ strengths and weakness in learning	2.00	.000	2.18	.945	1.89	1.034	1.47	.692	1.50	.673	1.38	.744
Students learn various ways to problem solve (communication, writing, logical thinking, etc.)	2.00	.000	1.86	.970	1.67	.896	1.61	.717	1.59	.796	1.63	.744
Students are allowed to use their strengths to make sense of new ideas and materials	2.00	.000	2.11	1.100	1.80	.957	1.58	.691	1.55	.671	2.38	.518
ENRICHED ASSESSMENT												
Teachers and principals use a variety of ways to measure	2.00	.000	2.11	1.031	1.78	.944	1.52	.752	1.65	.714	1.38	.518

Volume Three: Quantitative Measures

student learning (projects, activities, etc.)												
Teachers assess the effectiveness of their teaching	2.00	.000	2.32	1.335	1.95	1.014	1.53	.753	1.74	.810	2.38	.916
Teachers continually assess student learning	2.00	.000	2.00	.816	1.79	.929	1.36	.614	1.41	.666	2.00	.000
COLLABORATION												
Teachers and principals work as a team	2.00	.000	2.07	.958	1.75	.950	1.36	.614	1.30	.559	1.75	.707
Parents, teachers and school administrators work together for student success	2.50	.707	2.04	1.105	1.74	.971	1.56	.761	1.48	.593	1.43	.787
The entire school staff (teachers, principals, cafeteria personnel, janitors, other support staff) work together for student success	2.00	.000	2.11	.892	1.75	.988	1.44	.691	1.57	.662	1.57	.787
School personnel and the community (businesses, churches, civic groups, etc.) work together	2.50	.707	2.57	1.168	2.07	1.054	1.94	.976	1.83	.887	1.71	.756
Teachers meet together to plan	2.00	.000	1.68	.772	1.76	.928	1.52	.818	1.43	.662	1.57	.535
INFRASTRUCTURE												
Teachers and principals participate in ongoing professional development (planned workshops, professional seminars, in-service meetings, etc.)	1.50	.707	2.00	.920	1.78	.940	1.28	.602	1.22	.518	1.25	.463
Adequate space for arts instruction is provided	3.00	.000	2.71	1.117	2.42	1.155	2.59	1.275	2.35	1.191	2.86	.690
The school seeks external funding for support to expand arts offerings (creative writing, dance, drama, music, visual arts)	2.50	.707	2.21	.917	2.22	1.047	2.19	1.021	2.39	1.118	2.29	.951
SCHOOL CLIMATE												
Students enjoy attending this school	2.00	.000	1.96	.999	1.59	.963	1.44	.603	1.45	.739	2.43	.535
Students have regular opportunities to share their learning experiences with parents and the community	2.00	.000	2.18	1.020	1.76	.954	1.83	.876	1.55	.858	1.50	.535
Parents and visitors feel welcome in this school	2.00	.000	1.86	1.044	1.56	.925	1.38	.694	1.35	.647	1.86	.690
This school provides a positive learning environment	2.00	.000	1.67	.784	1.52	.879	1.26	.541	1.30	.559	1.43	.535
Teachers, principals, and support staff are respected by the community	1.50	.707	1.82	.819	1.59	.890	1.55	.820	1.43	.590	1.29	.488

***TAEPS Results: Eight Essentials
2003-04 A+ Schools Broken Down by Role of Respondent***

Response Scale: 1 = Strongly Agree; 2 = Agree; 3 = Uncertain; 4 = Disagree; 5 = Strongly Disagree

SURVEY ITEM	State Legislator (n= 1)		Business (n= 47)		Parent (n=74)		Teacher (n= 57)		School Admin (n= 5)		School Board Member (n= 4)	
	Mean	SD	Mean	SD	Mean	Sd	Mean	SD	Mean	SD	Mean	SD
ARTS INTEGRATION												
Arts (creative writing, drama, dance, music, visual arts) are included as part of each child's learning experience	1.00		2.09	1.071	2.03	1.056	2.07	1.067	2.00	.707	2.00	.816
Teachers use the arts to teach other subjects	1.00		2.17	1.060	2.18	1.035	1.96	.925	2.00	1.000	1.75	.500
CURRICULUM												
Teachers and principals have an overall plan for what is taught throughout the year	1.00		1.70	.749	1.97	1.042	1.75	1.005	1.40	.894	1.75	.957
Teachers and principals provide learning that builds upon what students already know	1.00		1.77	.729	2.05	1.004	1.68	.948	1.60	.894	1.75	.957
Teachers and principals help students expand their learning into new areas	1.00		1.82	.860	1.92	1.002	1.63	.957	1.60	.894	1.75	.957
EXPERIENTIAL LEARNING												
Students participate in hands-on learning activities	1.00		1.65	.766	1.86	.987	1.89	.985	1.60	.894	2.00	.816
Students can apply what they learn in school in real life	1.00		1.87	.885	1.84	1.007	1.84	.890	2.00	.707	2.00	.816
MULTIPLE INTELLIGENCES												
Teachers and principals help students to learn in different ways (hands-on, watching a program, group projects, etc.)	1.00		1.73	.720	1.87	1.017	1.68	.985	1.60	.894	1.75	.957
Teachers and principals understand individual students' strengths and weakness in learning	1.00		2.07	.963	2.12	1.133	1.82	1.002	1.80	1.095	1.75	.500
Students learn various ways to problem solve (communication, writing, logical thinking, etc.)	1.00		1.85	.788	1.87	1.027	1.80	.942	1.80	.837	1.75	.500
Students are allowed to use their strengths to make sense of new ideas and materials	1.00		1.98	.882	2.00	1.073	2.09	.996	1.80	.837	1.50	.577

Volume Three: Quantitative Measures

ENRICHED ASSESSMENT												
Teachers and principals use a variety of ways to measure student learning (projects, activities, etc.)	1.00		1.82	.806	2.02	1.090	1.82	.993	1.80	1.095	1.25	.500
Teachers assess the effectiveness of their teaching	1.00		2.20	1.088	2.06	1.048	1.89	.939	1.80	.837	2.00	.816
Teachers continually assess student learning	1.00		1.91	.939	1.99	1.016	1.63	.879	1.60	.894	1.75	.957
COLLABORATION												
Teachers and principals work as a team	1.00		2.02	.988	2.05	1.099	1.87	1.080	1.60	.894	1.75	.957
Parents, teachers and school administrators work together for student success	1.00		1.91	1.050	2.03	1.088	1.91	1.184	1.60	.894	2.00	.816
The entire school staff (teachers, principals, cafeteria personnel, janitors, other support staff) work together for student success	1.00		1.98	1.076	2.16	1.187	2.21	1.235	1.80	1.095	1.75	.957
School personnel and community (businesses, churches, civic groups, etc.) work together as a team	1.00		2.04	.952	2.35	1.175	2.32	1.212	2.00	1.000	2.25	.500
Teachers meet together to plan	1.00		1.82	.936	2.04	1.026	1.84	1.031	1.80	.837	1.75	1.500
INFRASTRUCTURE												
Teachers and principals participate in ongoing professional development (planned workshops, professional seminars, in-service meetings, etc.)	1.00		1.96	.928	2.02	1.075	1.68	.985	1.40	.894	1.50	1.000
Adequate space for arts instruction is provided	1.00		2.59	1.087	2.60	1.207	2.93	1.374	2.40	1.342	2.50	.577
The school seeks external funding for support to expand arts offerings (creative writing, dance, drama, music, visual arts)	1.00		2.15	1.074	2.41	1.104	2.58	1.343	2.40	1.342	2.00	1.155
SCHOOL CLIMATE												
Students enjoy attending this school	1.00		1.64	.830	1.85	1.100	1.91	1.059	1.80	.837	1.75	.957
Students have regular opportunities to share their learning experiences with parents and community	1.00		2.00	.919	1.95	1.032	2.25	1.132	2.00	1.000	2.00	.816
Parents and visitors feel welcome in this school	1.00		1.59	.909	1.76	1.048	1.74	.955	1.80	.837	2.00	1.414
This school provides a positive learning environment	1.00		1.67	.920	1.87	1.080	1.67	.970	1.80	.837	2.25	1.258
Teachers, principals, and support staff are respected by the community	1.00		1.52	.781	1.95	1.078	2.09	1.195	1.80	.837	1.75	1.500

***TAEPS Results: Eight Essentials
2004-05 A+ Schools Broken Down by Role of Respondent***

Response Scale: 1 = Strongly Agree; 2 = Disagree; 3 = Uncertain; 4 = Disagree; 5 = Strongly Disagree

SURVEY ITEM	State Legislator (n= 2)		Business (n= 5)		Parent (n= 249)		Teacher (n= 34)		School Admin (n= 3)		School Board Member (n= 0)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
ARTS INTEGRATION												
Arts (creative writing, drama, dance, music, visual arts) are included as part of each child’s learning experience	2.00	1.414	3.00	1.225	2.06	.977	1.94	.952	2.33	.577		
Teachers use the arts to teach other subjects	2.00	1.414	3.00	1.414	2.15	1.007	1.91	.933	2.33	.577		
CURRICULUM												
Teachers and principals have an overall plan for what is taught throughout the year	2.00	1.414	1.60	.894	1.90	.972	1.35	.812	1.33	.577		
Teachers and principals provide learning that builds upon what students already know	2.00	1.414	1.40	.548	1.95	.990	1.38	.652	1.00	.000		
Teachers and principals help students expand their learning into new areas	1.50	.707	2.00	.707	1.84	.952	1.33	.645	1.00	.000		
EXPERIENTIAL LEARNING												
Students participate in hands-on learning activities	1.50	.707	2.60	1.517	1.69	.899	1.42	.561	1.00	.000		
Students can apply what they learn in school in real life	1.50	.707	2.60	1.517	1.67	.912	1.70	.770	1.33	.577		
MULTIPLE INTELLIGENCES												
Teachers and principals help students to learn in different ways (hands-on, group projects, etc.)	1.50	.707	1.80	.837	1.76	.913	1.21	.485	1.00	.000		
Teachers and principals understand individual students’ strengths and weakness in learning	2.00	1.414	2.80	1.483	1.94	1.005	1.29	.579	1.00	.000		
Students learn various ways to problem solve (communication, writing, logical thinking, etc.)	1.50	.707	3.00	1.225	1.71	.903	1.55	.666	1.33	.577		
Students are allowed to use their strengths to make sense of new ideas and materials	2.00	1.414	2.60	.894	1.85	.955	1.55	.754	1.33	.577		
ENRICHED ASSESSMENT												
Teachers and principals use a variety of ways to measure student learning (projects, activities, written tests, etc.)	2.00	1.414	3.00	1.225	1.84	.937	1.35	.544	1.00	.000		

Volume Three: Quantitative Measures

Teachers assess effectiveness of their own teaching	2.00	1.414	3.20	1.095	1.93	.979	1.38	.652	2.00	.000		
Teachers continually assess student learning	2.00	1.414	2.60	1.673	1.88	.964	1.38	.493	1.33	.577		
COLLABORATION												
Teachers and principals work as a team	2.00	1.414	2.60	.894	1.82	.960	1.35	.646	1.00	.000		
Parents, teachers and school administrators work together for student success	2.00	1.414	2.60	1.517	1.79	.990	1.53	.615	1.00	.000		
The entire school staff (teachers, principals, cafeteria personnel, janitors, other support staff) work together for student success	2.00	1.414	2.60	1.517	1.87	.994	1.44	.561	1.00	.000		
School personnel and the community (businesses, churches, civic groups, etc.) work together as a team	2.00	1.414	2.60	1.673	2.12	1.168	2.12	.977	1.00	.000		
Teachers meet together to plan	2.00	1.414	2.25	.957	1.88	.946	2.32	1.451	1.67	1.155		
INFRASTRUCTURE												
Teachers and principals participate in ongoing professional development (planned workshops, professional seminars, in-service meetings, etc.)	2.00	1.414	2.60	1.517	1.86	.949	1.18	.387	1.33	.577		
Adequate space for arts instruction is provided	2.00	1.414	2.40	1.140	2.58	1.108	3.44	1.260	3.67	1.528		
The school seeks external funding to expand arts offerings (creative writing, dance, drama, music, visual arts)	2.00	1.414	1.50	1.000	2.32	1.035	2.30	1.132	2.67	2.082		
SCHOOL CLIMATE												
Students enjoy attending this school	1.00	.000	2.40	1.673	1.59	.895	1.39	.496	1.00	.000		
Students have regular opportunities to share their learning experiences with parents and community	1.50	.707	2.60	1.517	1.78	.914	1.94	.966	1.33	.577		
Parents and visitors feel welcome in this school	1.50	.707	2.75	1.708	1.68	1.005	1.30	.467	1.00	.000		
This school provides a positive learning environment	1.00	.000	2.60	1.517	1.59	.900	1.21	.410	1.00	.000		
Teachers, principals, and support staff are respected by the community	1.00	.000	2.00	1.155	1.57	.836	1.38	.604	1.00	.000		

Means and Standard Deviations for “What is Arts Education” during School

Response Scale: 1 = Strongly Agree; 2 = Agree; 3 = Uncertain; 4 = Disagree; 5 = Strongly Disagree

A+ N = 2,308, Non A+ N = 9,753

SD = Standard Deviation

	ACTIVE	A+		Non-A+		PASSIVE	A+		Non-A+	
SUBJECT		Mean	SD	Mean	SD		Mean	SD	Mean	SD
Music	Playing in the band	1.74	1.04	1.74	1.05	Attending concert	1.92	1.13	2.07	1.15
	Playing in the orchestra	1.84	1.11	1.97	1.18	Listening to music	1.92	1.07	2.07	1.11
	Singing in the choir	1.72	1.03	1.74	1.02					
Visual Arts	Taking pictures	2.07	1.14	2.14	1.11	Visiting a museum	1.64	.98	1.72	1.00
	Knitting/sewing/quilting	2.35	1.25	2.50	1.25	Professional artist showing work	1.70	1.03	1.76	1.02
	Participating in woodwork projects	1.93	1.07	2.03	1.08					
	Painting or drawing a picture	1.57	.93	1.59	.927					
Dance	Performing in ballet	2.04	1.24	2.22	1.30	Attending dance program	2.08	1.16	2.26	1.20
	Learning square dance	2.29	1.31	2.55	1.32	Learning about a country’s cultural dances	1.88	1.07	2.01	1.09
Theatre	Acting in a play	1.67	1.00	1.93	1.05	Attending a play	1.84	1.03	1.80	.95
	Participating in a musical	1.74	1.00	1.80	1.03	Seeing a movie	2.54	1.24	2.68	1.25
	Putting on a puppet show	2.13	1.18	2.31	1.17	Attending a school musical	1.80	1.02	1.89	1.04

Means and Standard Deviations for “What is Arts Education” Outside of School

Response Scale: 1 = Strongly Agree, 5 = Strongly Disagree

A+ N = 2,308, Non A+ N = 9,753

SD = Standard Deviation

SUBJECT	ACTIVE	A+		Non-A+		PASSIVE	A+		Non-A+	
		Mean	SD	Mean	SD		Mean	SD	Mean	SD
Music	Playing in the band	2.00	1.22	2.03	1.23	Attending concert	1.95	1.13	1.93	1.09
	Playing in the orchestra	1.99	1.21	2.08	1.25	Listening to music	2.02	1.16	2.08	1.16
	Singing in the choir	1.92	1.15	1.95	1.17					
Visual Arts	Taking pictures	2.05	1.15	2.09	1.13	Visiting a museum	1.84	1.11	1.87	1.12
	Knitting/sewing/quilting	2.22	1.22	2.33	1.24	Professional artist showing work	1.91	1.16	1.96	1.17
	Participating in woodwork projects	2.08	1.16	2.15	1.18					
	Painting or drawing a picture	1.79	1.08	1.82	1.10					
Dance	Performing in ballet	1.94	1.18	2.02	1.23	Attending dance program	2.02	1.16	2.11	1.16
	Learning square dance	2.22	1.28	2.33	1.27	Learning about a country's cultural dances	2.03	1.16	2.11	1.16
Theatre	Acting in a play	1.90	1.13	1.94	1.15	Attending a play	1.95	1.13	2.00	1.13
	Participating in a musical	1.91	1.14	1.97	1.16	Seeing a movie	2.35	1.26	2.40	1.27
	Putting on a puppet show	2.20	1.22	2.32	1.21	Attending a school musical	1.95	1.13	2.03	1.14

