

An Evaluation of Arizona's Arts Education Initiative



Arizona Department of Education
Tom Horne, Superintendent of Public Instruction

Research & Evaluation Section

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Executive Summary

The Arizona Department of Education has made arts education part of its content rich curriculum initiative as outlined in Superintendent Tom Horne’s 2004 State of Education speech. The initiative has several goals. First, the quality and comprehensiveness of arts education offerings in Arizona’s schools will be improved, and the benefits of arts education integration into other academic subjects as a “model teaching practice” will be measured. In addition, the benefits of arts education for Arizona’s students, including how arts education can serve as a basis for comprehensive school reform, will be measured. Measures of these benefits could include academic performance of participating students both within the arts and in the currently tested areas of reading, writing, and mathematics.

Schools that participated in the Arts Education Initiative increased the percentage of students who passed state achievement tests from the previous year. Teachers strongly supported the integration of arts into the curriculum and believed that the arts could benefit students in many ways. Students reported that they believed arts should be included in the curriculum and that arts would benefit their performance in other subjects. Parents reported that they believed arts integration would improve their child’s appreciation for the arts and their problem solving abilities.

Summary of Findings

- Approximately 35% of schools participating in the arts education initiative saw an improvement in their AZ Learns status.

- 25% of schools improved their AYP status from not meeting AYP to meeting AYP.
- Students that participated in the arts education initiative scored significantly higher on the reading subtest of the AIMS than students that did not participate in the arts initiative.
- Minorities in the arts education initiative scored significantly higher than minorities that were not in the arts initiative on the AIMS reading subtest.
- Examining gender revealed that girls in the arts initiative scored higher than girls not in the arts initiative and boys in the arts initiative scored higher than boys not in the arts initiative on the reading subtest of the AIMS.
- In the lower grades, grades 3-5, students in the arts initiative scored higher than students not in the arts initiative on the AIMS reading and math subtests.
- 87% of teachers were advocates for arts education, and 94% agreed that arts should be a basic part of education.
- Students thought arts education could help them work with others (58%), make connections from school to home (44%), motivate class engagement (39%), express self (66%), interact with people from other cultures (53%), and participate in the arts as an adult (54%).
- Approximately 80% of parents believed arts should be a basic part of their child's education, will enhance creativity and cultural responsiveness, and will help their children learn content.

Chapter 1

Evaluation Background and Purpose

Understanding the relationship between arts education and overall academic achievement has been a long standing endeavor (Hetland & Winner, 2001). Particularly in recent years, with the re-emphasis on increasing students' proficiency in reading, writing and math, arts educators have undergone much pressure to prove the worth of their field of study. In this regard, many educators have promoted the concept of instrumental arts instruction, in which arts education "serves as a means to, and a help in, bringing about knowledge in another academic subject" (Brewer, 2002). Proponents of instrumental arts instruction therefore champion the idea that arts education leads to significant gains in achievement not only in art-related areas, but in other academic domains, such as reading and math. This literature review is a summary of results on current research examining the relationship between arts education and academic achievement.

Several studies exploring the relationship between the arts and academic achievement have found promising results. In a study of 3rd grade students, Clark & Zimmerman (2001) found positive correlations amongst Torrance Tests of Creativity, Clark's Drawing Abilities Test and state achievement tests. Visual art has also been associated with enhancing student motivation in non-arts domains (Edens & Potter, 2001; Burger & Winner, 2000). In one study, Edens & Potter (2001) reported that art in the form of pictorial representations and descriptive drawing was helpful in increasing conceptual understanding on a particular task. A meta-analysis examining whether

instruction in visual art enhances reading skills indicated that this type of instruction has a moderate effect on reading readiness scores (Burger & Winner, 2000). Some researchers suggest that art education has positive effects on students' achievement in reading (Richards, 2003) and math (Forseth, 1980). In addition, other researchers report that music instruction leads to increased reading, math, science, and writing abilities (Kelstrom, 1998). Luftig (2000) performed an experiment examining the effect of arts infusion on creative thinking, academic achievement, self-esteem, locus of control, and arts appreciation. He reported that children who participated in the program score significantly better than the control group in creativity, self-esteem and appreciation for the arts. In one of the two participating districts, students receiving the program scored higher in reading. With respect to math, male participants scored significantly higher than any group, while female participants scored lower than any group.

Educators report that schools with successful arts programs tend to utilize innovative teaching tools throughout their curriculum, which may lead to increased student motivation and achievement levels (Deasy & Fulbright, 1999; Hetland & Winner, 2001). Eisner reported that the effects of the arts appear to be greatest when arts are intentionally used to raise academic achievement in reading and writing (Eisner, 1999). In an effort to draw conclusions from research that already exists on arts education and academic achievement, Hetland & Winner (2001) published a meta-analysis on this topic. From the 188 studies they included in the analysis, they indicated that causal links existed between: (a) listening to music and spatial-temporal reasoning; (b) learning to play music and spatial reasoning; and (c) classroom drama and verbal skills. Areas wherein no

causal links were found included: (a) arts rich education and verbal and math scores; (b) learning to play music and reading; (c) visual arts and reading; and (d) dance and reading. Small, but reliable information, was found for the link between learning to play music and math, and a link between dance and nonverbal reasoning. More studies were recommended by the authors before labeling the latter findings as conclusive (Hetland & Winner, 2001).

The purpose of this evaluation is to provide the state of Arizona with programmatic feedback on the schools which have implemented the Arts Education Initiative. Information from this evaluation delineates the academic progress of schools integrating arts in the curriculum and the quality of the implementation of these programs in public schools. This evaluation will focus on the following evaluation questions relating to the effects of participation in the Arts Education Initiative:

1. What is the academic achievement status (performance on AIMS) of students who participate in the arts education initiative?
2. Arts Achievement: Do students who participate in the arts education initiative perceive that they are learning more about the arts?
3. What is the likelihood that teachers who participate in the initiative will include arts learning in their classroom?

Chapter 2

Context of the Evaluation

The Arizona Department of Education has made arts education part of its content rich curriculum initiative as outlined in Superintendent Tom Horne's 2004 State of Education speech. The initiative has several goals. First, the quality and comprehensiveness of arts education offerings in Arizona's schools will be improved, and the benefits of arts education integration into other academic subjects as a "model teaching practice" will be measured. In addition, the benefits of arts education for Arizona's students, including how arts education can serve as a basis for comprehensive school reform, will be measured. Measures of these benefits could include academic performance of participating students both within the arts and in the currently tested areas of reading, writing, and mathematics.

The rationale for focusing on arts education is based on three basic points. First, the arts change the learning experience for participating students and can reach students who are not normally reached during other school activities. In addition, the arts change the learning experience for the participating educators, especially classroom teachers who many not have integrated the arts into their curriculum before. Finally, the arts are a core academic subject as defined by No Child Left Behind, and the arts are also mandated subject areas in Arizona's state statutes. By funding arts education, specifically arts integration with other subject areas, the department of education is encouraging schools to think more broadly about the curriculum and opportunities they offer students, especially with the added focus on accountability.

The arts are defined as the four disciplines of: (a) visual arts; (b) music; (c) theatre; and (d) dance, as outlined in the Arizona Academic standards. The Arts Education Initiative was intended to encourage schools to determine which of these four disciplines to focus on, with each school eventually representing all four disciplines over time.

The Arts education initiative is based on successful arts education models around the country and in Arizona, and it will involve the following elements:

- Arts learning tied to Arizona's academic standards in the arts
- The integration of arts learning into other academic areas
- Creating partnerships between classroom teachers, subject area teachers, arts specialist teachers and artistic resources in the local community such as artists in residence, higher education resources, and cultural organizations
- Intensive, ongoing professional development for participating educators and community arts partners
- Evaluation of the initiative

Chapter 3

Method

Achievement data and surveys constituted the primary method for data collection in this evaluation. We employed a mix of quantitative and qualitative methods, and collectively, these evaluation strategies covered the questions the Arizona Department of Education would prefer to answer with this evaluation. The evaluation compared the achievement of students participating to students not participating in the Arts Education Initiative, compared the academic achievement of schools prior to the Arts Education Initiative implementation and after Arts Education Initiative implementation, and examined the level of commitment to art education by relevant stakeholders.

Funding and Eligibility

Schools could utilize two separate funding sources to support the implementation of their Arts Education Initiatives: Comprehensive School Reform (CSR, Title I-F) or Title V (Innovative and Exemplary Programs). Any school participating in the CSR program was eligible to apply using CSR funds, and four million dollars was available to fund between 40 and 55 sites. Any Arizona public school, district or charter, or consortium of Arizona public schools representing small schools, were eligible to apply using Title V funds.¹ Up to \$350,000 in Title V funds were available to fund between five and ten sites.

¹ For the purposes of the arts education initiative, a small school consortium was defined as containing more than one school district or charter holder, and having an average of less than 300 students served per participating school site. In addition, any governmental or nonprofit entity representing a consortium was also eligible to apply on the consortium's behalf.

Application Process

CSR Funded Sites

Each CSR school interested in participating in the Department's 2004 Arts Education Initiative completed an amendment to their existing CSR plan, including a brief program description and budget. Amendment awards are for one year, renewable depending on the availability of funding and eligibility within CSR (Title I-F) funding guidelines. The timeline for amendment application was as follows:

CSR Amendment Process	Timeline
Letter of Invitation and Amendment sent to eligible CSR schools	Wednesday, March 17, 2004
Amendment Information Session with ADE	Friday, March 26, 2004 , 9:30 a.m.-12:00 p.m. at 100 N. 15 th Ave., Suite 300 To RSVP, use the ADE on-line calendar: http://www.ade.az.gov/online-registration/
Amendment Deadline – receipt via e-mail or FAX	Tuesday, April 13, 2004 at 5:00 p.m.
Approval of amendment submissions by AZ State Board of Education	Monday, April 26, 2004
Notification to Accepted Schools	Tuesday, April 27, 2004
Contract Creation with CSR Arts Schools	Deadline: June 15, 2004
Arts Education Initiative Begins	June 15, 2004

Title V Funded Sites

For Title V recipients, a lengthier, competitive process was undertaken. An application was requested, and was reviewed by a peer panel of evaluators. Application awards for accepted applicants were for one year, renewable depending on the availability of funding, for an additional two years.

Title V Application Process	Timeline
Application Available for schools/ LEA's	May 4, 2004
Application Information Sessions with ADE	<p>Tuesday, May 11, 2004 1:00 – 3:00 p.m. at 100 N. 15th Ave., Suite 300, Phoenix, AZ.</p> <p>Wednesday, May 12, 2004 9:30 – 11:30 a.m. at the Yuma Art Center, 254 S. Main Street, Yuma, AZ.</p> <p>Monday, May 17, 2004, 2:00 – 4:00 p.m., Arizona School for the Deaf and Blind, Flagstaff Campus, 1000 E Butler Ave., Flagstaff, AZ.</p> <p>Friday, May 21, 2004, 10:30 a.m. – 12:30 p.m., 200 W. Congress Street, Tucson</p> <p>To RSVP, use the ADE on-line calendar: http://www.ade.az.gov/onlineregistration/</p>
Application DEADLINE	Thursday, May 27, 5:00 p.m.
Application Review	ADE Internal review: June 1-4 Peer Review meetings: week of June 14
State Board Approval	June 28, 2004
Applicants notified	Thursday, July 1, 2004
Approved applicant list available to Technical Assistance Providers	July 1, 2004
Arts Education Initiative begins	July 1, 2004

Sustainability

Given the limited amount of funds available and factors limiting fund renewal, both Title V and CSR funded sites were asked to address the issue of sustainability of funded programs as part of their amendment/application process.

Vendor Selection

Schools were provided with a list of potential vendors to choose from (Appendix A), all of which had undergone an RFP (Request for Proposal) process with the Arizona Department of Education. CSR schools were required to choose a vendor from this list; Title V schools were encouraged to work with an approved vendor, but could work with other professional development providers pending approval by the Department of Education. Once a vendor was selected, the schools were responsible for negotiating fees directly with the vendors based on the services they desired.

Instruments

Arts Attitude Survey

Parent and Teacher Surveys. Surveys were completed by parents of students participating in the arts education initiative, as well as teachers employed at the schools implementing the Arts Education Initiative. The parent and teacher surveys captured demographic information, in addition to attitudes about art education, and attitudes of parents and teachers concerning art integration. Attitudes were captured using a Likert style rating scale ranging from Strongly Agree to Strongly Disagree. Parents and teachers were also given an opportunity to comment on resources and support that they believed would promote arts integration in the classroom.

Student Surveys. Surveys were also completed by students participating in the arts education initiative. Demographic information, as well as student attitudes about arts education and arts integration was obtained.

Arizona Instrument to Measure Standards (AIMS)

The AIMS is a criterion-referenced test that assesses student mastery of the Arizona State standards in reading, math, and writing in grades 3 through 8 and 10. The test is a combination of multiple choice items, reading passages, and writing prompts. This test gauges if a student has exceeded (E), has met (M), is approaching (A), or falls far below (FFB) the Arizona standards. Students pass this assessment if they have met or exceeded the standards. Although the test encompasses all of the standards in the various subject areas, different concepts and performance objectives are tested on different forms of the assessment. In the analysis for this report we used students scale scores on the AIMS rather than their passing status. This was done to provide a richer description of the differences between arts students and non-arts students by providing more data points along the continuum of the dependent variable.

Variables in the Comparison

The main variable of interest in the comparison was the Arts Education Initiative. Students participating in the arts education initiative were compared to students not participating in the initiative. Comparisons were drawn between participating (hereafter “arts”) and non-participating (hereafter “non-arts”) students. Additionally, we compared students on their ethnicity and gender. The AIMS was used as the unit of comparison between arts students and non-arts students. A matched group of students similar to those

who participated in the arts education initiative but that did not receive the arts education initiative programming was selected in order to perform an accurate comparison.

AIMS scores are not standardized across different grade levels, however, the Arts Education Initiative took place across grades 3 through 12. We did not feel that a grade by grade analysis was appropriate because the sample size would be too low for a robust comparison. Therefore, we compared all arts students to all of the non-arts matched sample. In order to do this we had to first standardize students AIMS scores across grade levels. To accomplish this, AIMS scores were converted to z scores. A z score is a measure of a score's distance from the mean, standardized on a normal distribution with a mean of 0 and a standard deviation of 1. To make the comparison between groups, and the subsequent interpretation of that comparison, more meaningful, we converted the z scores to normal curve estimate (NCE) scores. An NCE is the rank of the z score standardized to a normal distribution with a mean of 50 and a standard deviation of 21.06. NCE scores range from 1-99 and a higher NCE score indicates a higher level of achievement.

Selection of Comparison Students

Comparison students were identified to evaluate the academic achievement of students participating in the arts education programs compared to those who did not. Students were matched on the following characteristics: 1) gender, 2) ethnicity, 3) level of English proficiency, and 4) Title I status. Due to difficulties in matching students SAIS ID numbers in the arts group the final sample was 283 arts students and 283 non-arts students.

Chapter 4

Academic Achievement of Arts Education Schools and Students

This chapter examines the academic achievement status of students participating in the arts education initiative. In order to investigate the effects of the various Arts Education Initiative programs, the evaluators examined the differential achievement between students who participated in an arts education initiative program to students who did not receive such an opportunity. Additionally, we compared the academic achievement of students in arts schools prior to implementation of the Arts Education Initiative and after implementation of Arts Education Initiative.

Figures 1-3 display the changes in achievement for participating “arts” schools prior to implementation and after implementation of the Arts Education Initiative². As can be observed, schools showed improvement in achievement after the implementation of an Arts Education Initiative for most grades. This trend can be observed in math, reading and writing achievement. Achievement in this comparison is measured by the percentage of students passing each subtest of the AIMS. Students in the “meets” and “exceeds” categories are considered passing.

² The comparison between academic years represents two different groups of students. Therefore it is difficult to attribute the increase in achievement to Arts Education Initiative implementation.

Figure 1

Percent Passing Math in Arts Schools

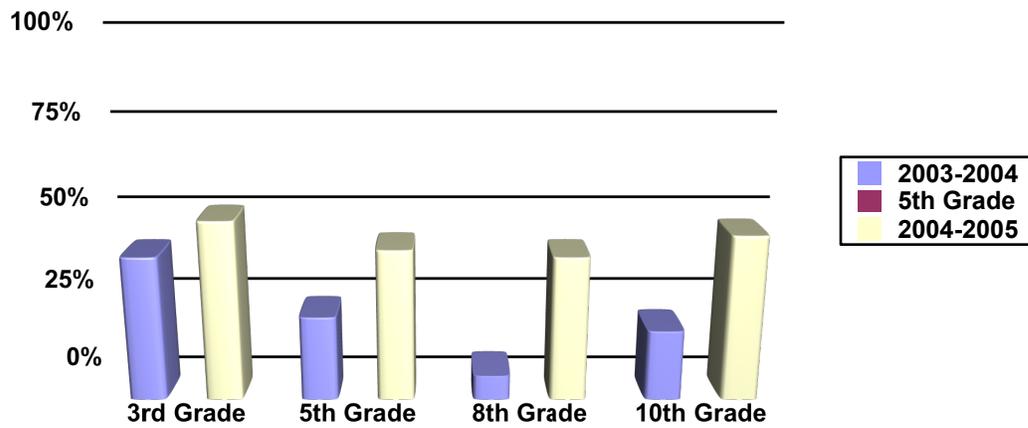


Figure 2

Percent Passing Reading in Arts Schools

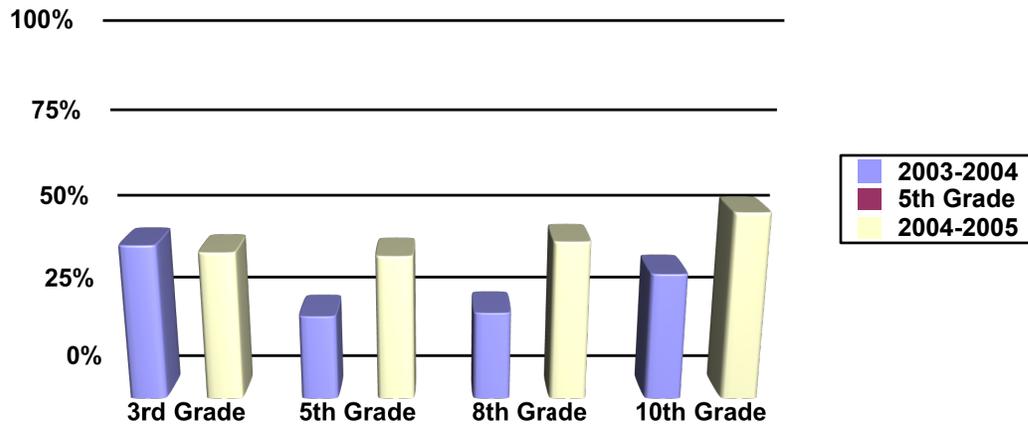
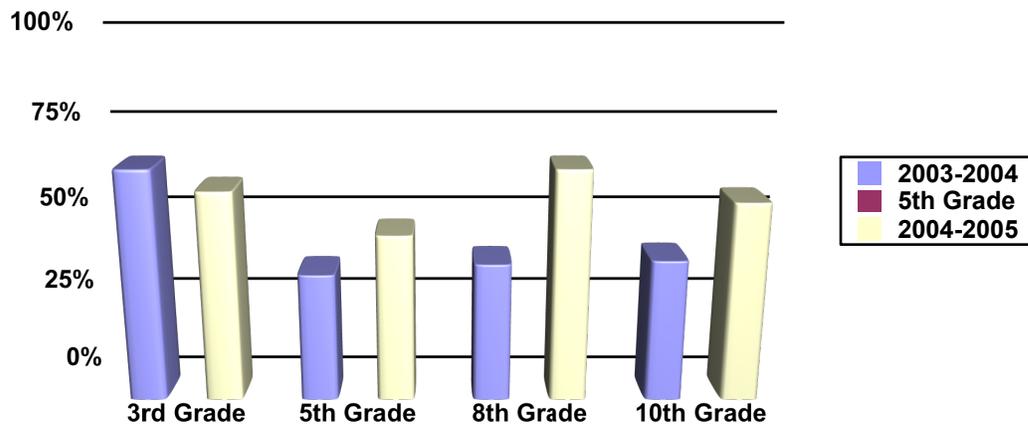


Figure 3

Percent Passing Writing in Arts Schools

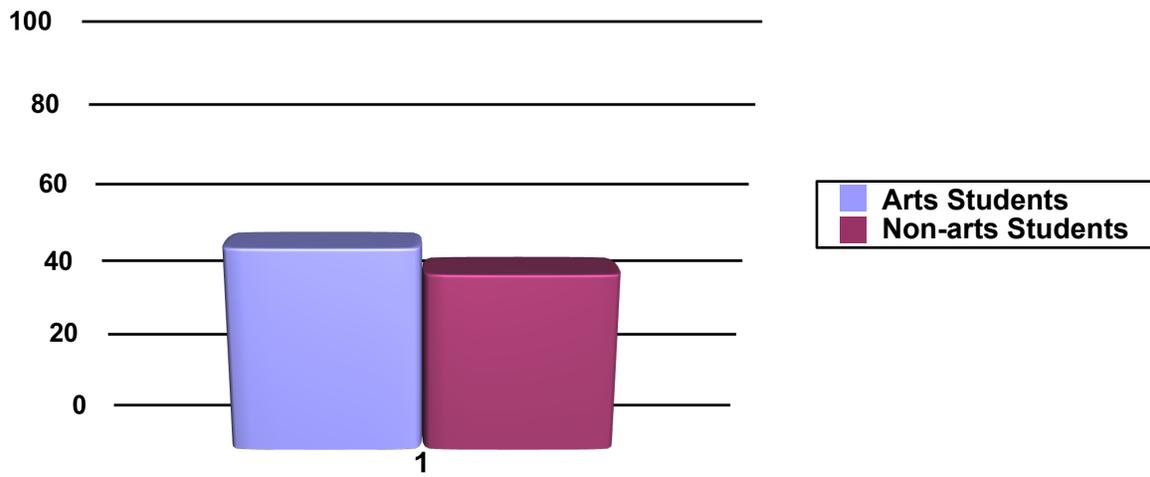


Academic Achievement at the Student Level

We conducted a t-test to determine differences in NCE scores between students that participated in the arts initiative to students that did not participate. We found a significant difference between arts students and non-arts students on the reading subtest of the AIMS, $t(558) = -3.74, p < .000$. Arts students scored significantly higher ($M = 50.56, SD = 22.20$) than non-arts students ($M = 44.23, SD = 17.55$).

Figure 4

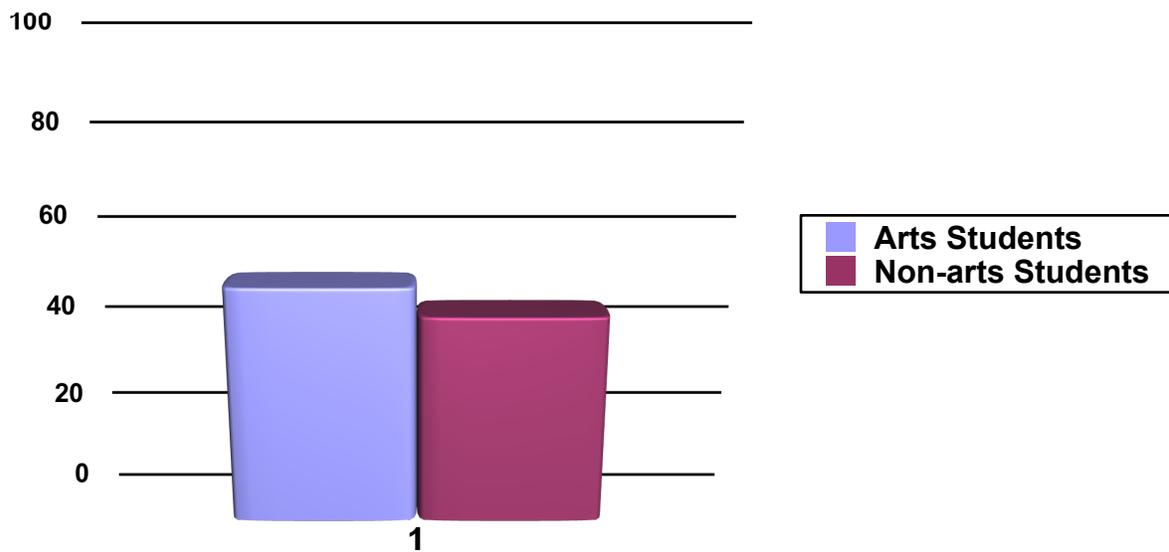
Differences in NCE Reading Scores between Arts Students and Non-Arts Students



We also examined differences between arts students and non-arts students based on demographic characteristics. First we compared minority students in the arts to minority students in non-arts schools. The results revealed a significant difference between the two $t(380) = -2.89, p < .01$. Minority students in the arts scored significantly higher ($M = 50.23, SD = 22.53$) on the reading subtest of the AIMS than minorities that were not in arts schools ($M = 44.21, SD = 17.84$).

Figure 5

Differences in NCE Reading Scores between Arts Minorities and Non-Arts Minorities



When examining differences between arts students and non-arts students based on gender we again found significant differences. Girls in arts schools scored significantly higher ($M = 49.15$, $SD = 22.07$) on the reading subtest than girls in non-arts schools ($M = 43.56$, $SD = 18.49$), $t(257) = -2.21$, $p < .05$. Additionally, boys in arts schools scored significantly higher ($M = 51.79$, $SD = 22.32$) on the reading subtest than boys in non-arts schools ($M = 44.82$, $SD = 16.75$), $t(299) = -3.06$, $p < .01$.

Figure 6

Differences between Girls in Arts and Girls in Non-arts on the Reading Subtest

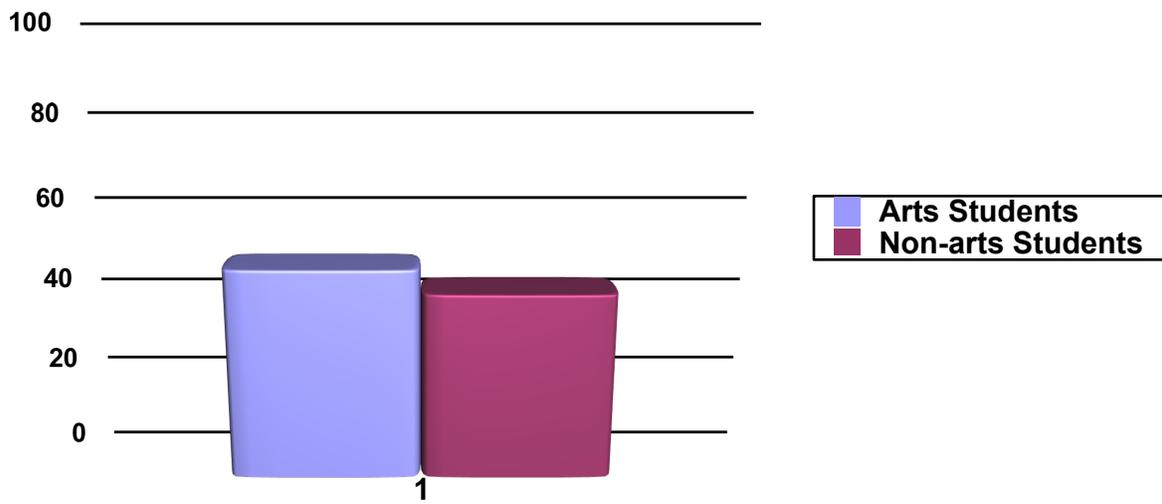
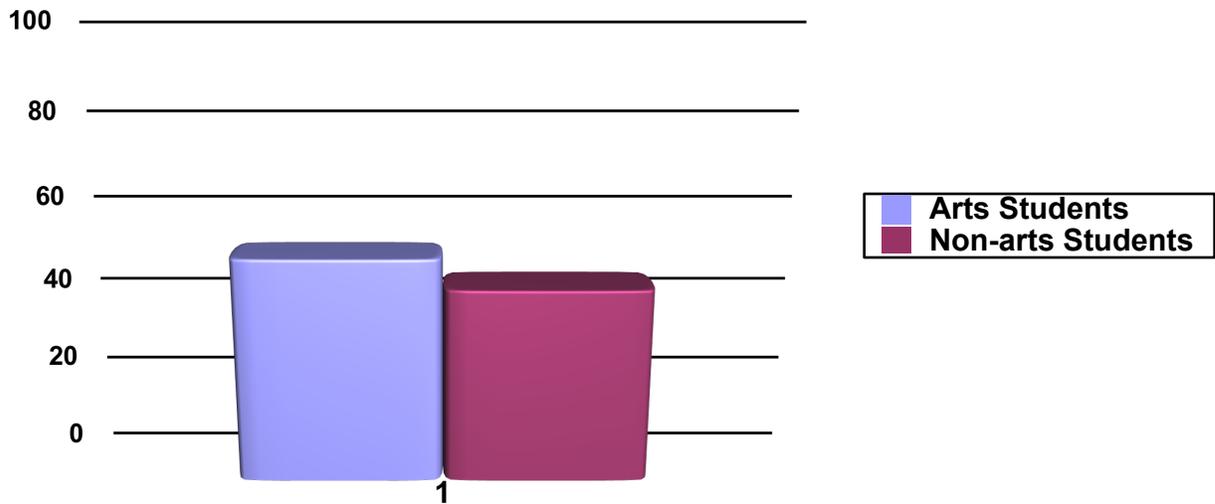


Figure 7

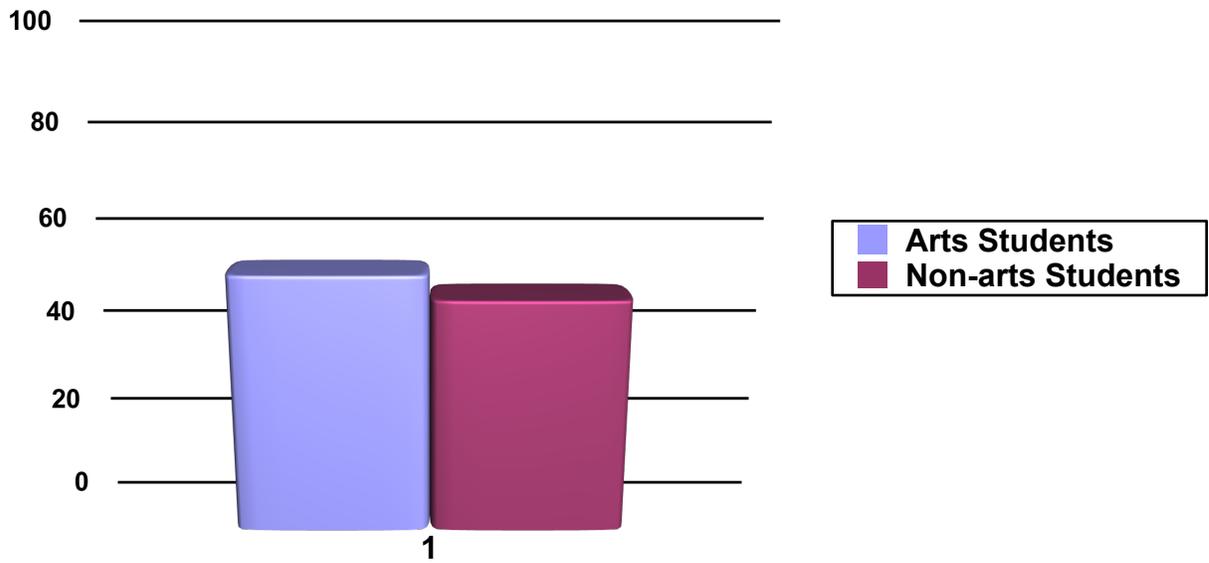
Differences between Boys in Arts and Boys in Non-arts on the Reading Subtest



Finally, we compared students between arts schools and non-arts schools based on their grade level. Grades were grouped to facilitate this comparison. The groupings were based on the average grouping between school levels, elementary, middle school, and high school. Therefore, our groups were composed as follows; grades 3 through 5 grouped, grades 6 through 8 grouped, and grades 9 through 12 grouped. We conducted a 3(grade group) X 2 (arts status) ANOVA to determine differences between these grades on AIMS scores based on their arts status. We found a significant interaction between arts status and grade group $F(2) = 4.26, p = .01$. Students in grades 3 through 5 in arts schools scored significantly higher ($M = 53.49, SD = 21.47$) on the reading and math subtests than students in grades 3 through 5 in non-arts schools ($M = 48.53, SD = 23.46$).

Figure 8

Differences between Students in Grades 3 through 5 on the Reading and Math Subtests



Chapter 5

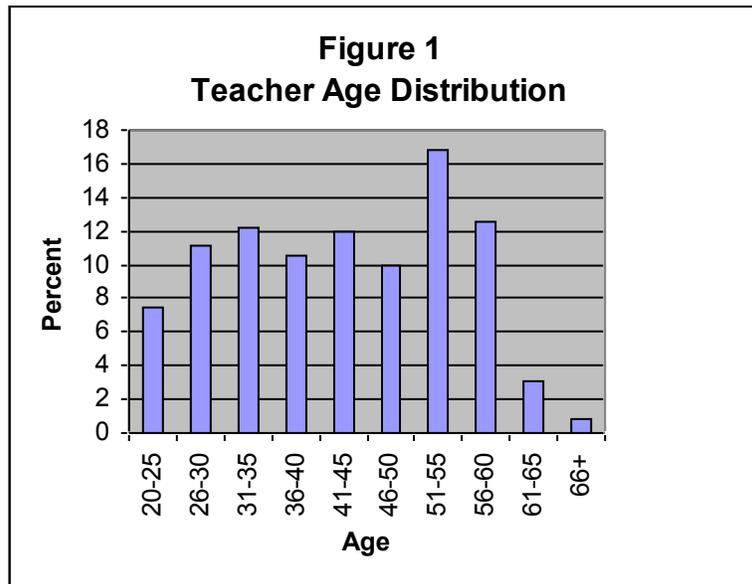
Assessment of Program Support for Arts in Education

In order to gauge the longevity of the program, the authors assessed the support of the program from those who administered the program, the student participants, and the parents of students engaging in arts integration programs through the use of self-report surveys. In the following chapter we will provide descriptive information about the responses of these three groups on the surveys. Additionally, we report demographic data for parents, students, and teachers, to frame the source of the information reported.

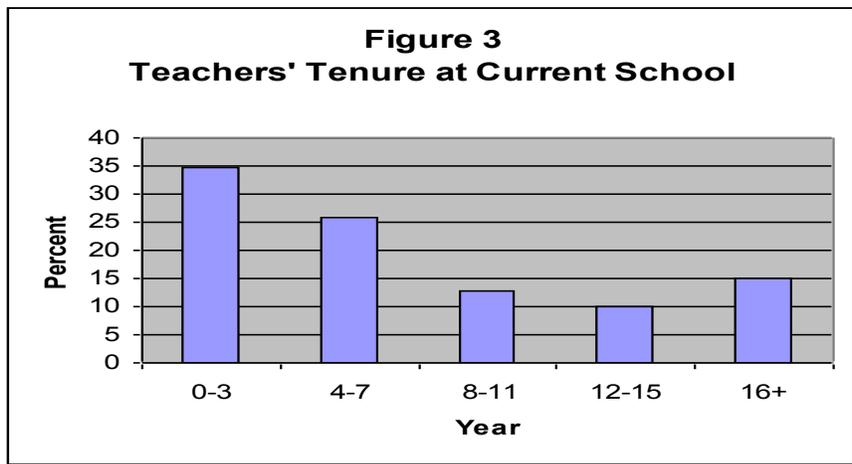
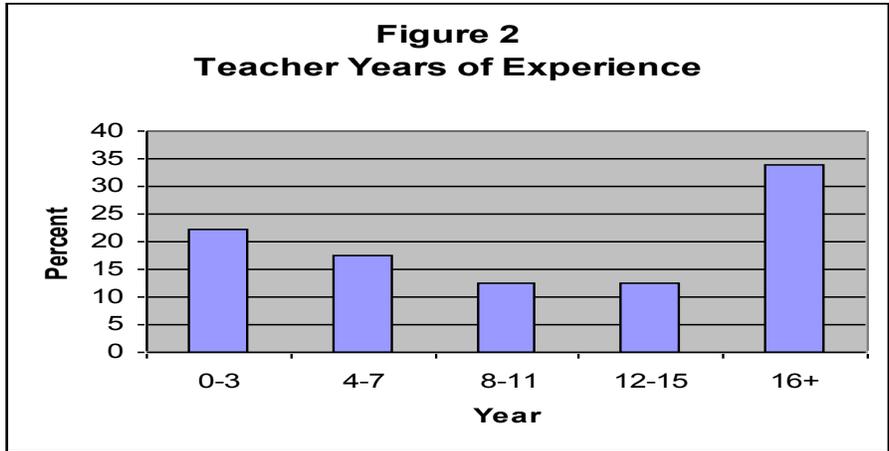
Teacher Survey

Demographic information

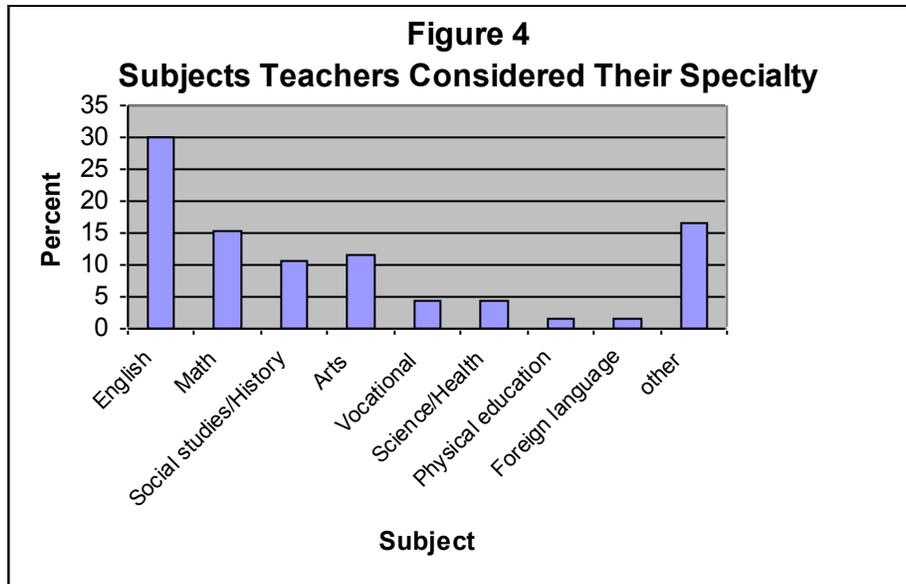
A total of 351 teachers returned their surveys. Seventy two percent of respondents were female teachers, and 27% were male teachers. Teachers who comprised the highest proportion of responses were 51 to 55 years old, whereas the fewest teachers who responded were over age 66 (Figure 1).



Regarding education background, 47% of teachers have an undergraduate diploma and 51% have a master's degree. Thirty-four percent of the teachers had served as a full time teacher for more than 16 years (Figure 2). In addition, considering the years teachers had served as a full time teacher in their current school, most of the teachers had worked for the current school from 0 to 3 years (Figure 3).



Finally, most of the responses were from English teachers (30%) with the fewest responses from teachers who taught foreign language (2%). Please see Figure 4 for the proportion of each subject taught.



Survey Data

Overall, teachers thought that arts education was very important for students. The percentage of teachers who reported that arts education can enhance: 1) creativity, 2) cultural responsiveness, and 3) benefit students to learn other subjects through arts was over 90%. 87% of teachers were advocates for arts education, and 94% agreed that arts should be a basic part of education. However, the percentage of teachers who believed that they had knowledge to integrate the arts into instruction was only 37%. Additionally, only 20% teachers perceived they had resources to for arts integration education (Table 7).

Table 7 Attitude about Arts Education

Items	Percent
Arts should be a basic part of education	94%
Arts instruction can enhance creativity	97%
Arts instruction can enhance cultural responsiveness	95%
Students can learn content from other subject areas through participation in the arts	96%
Arts instruction should be provided by an arts specialist	70%
Regular classroom teachers have the knowledge to effectively integrate the arts into their instruction	37%
Regular classroom teachers have the resources to effectively integrate the arts into their instruction	20%
Assessment of arts learning needs to occur at local and state levels	46%
I am an advocate for arts instruction	86%

Note. The percentage was counted by responses of “Agree” and “Strongly Agree.”

Teachers reported high scores in beliefs that arts integration can benefit students in many ways. The highest percentage, 98%, was reported on *arts integration can help students to express more through the arts*. The lowest percentage, 87% was reported by teachers that arts integration can help students understand how information and skills learned in school related to life in the home and community.

Table 8 Attitude about Arts Integration

Items	Percent
Arts integration can help alternative solutions to problems	89%
Arts integration can help work cooperatively with others	94%
Arts integration can help understand how information and skills learned in school relate to life in the home and community	87%
Arts integration can help become more motivated to learn and engage in instructional activities	95%
Arts integration can help make connections across different subjects or content areas	95%
Arts integration can help express more through the arts	98%
Arts integration can help respond appropriately to different cultures	91%
Arts integration can help appreciate the arts	96%
Arts integration can help participate in the arts as an adult	90%

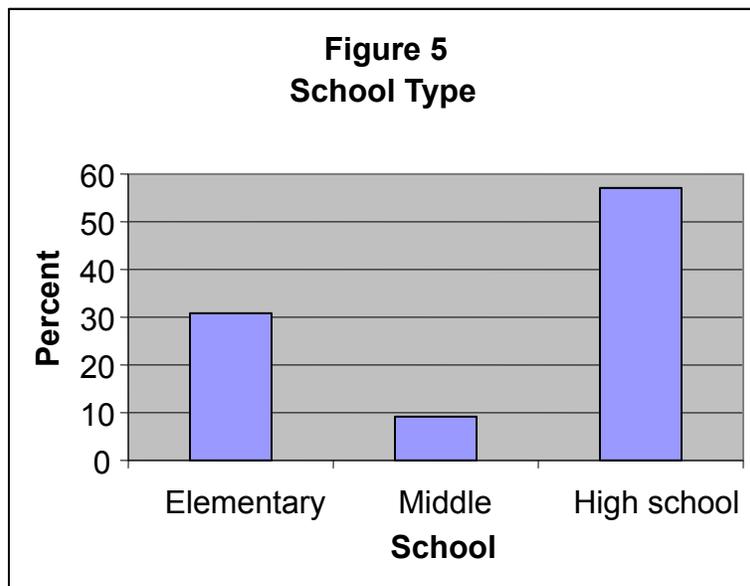
Note. The percentage was counted by responses of “Agree” and “Strongly Agree.”

When asking teachers about their needs regarding implementing arts into their class instruction, many teachers reported that they needed professional development about the arts, an arts specialist, access to art supplies, and funding to support them. For example, one elementary school teacher mentioned: “An arts specialist to offer their expertise and introduce new styles will benefit us.” A high school teacher said: “We need more money to buy supplies, money to buy time of art teachers to work with my students.”

Student Survey

Demographic information

A total of 5147 students returned their surveys. Thirty two percent of the responses were from elementary schools, 9% from middle schools, and 59% from high schools (Figure 5). Fifty one percent of respondents were female students, and 45% were male students.



Survey Data

Seventy seven percent of students did not receive arts instruction outside of school. Regarding attending public events in community, 49% of students reported that they did not go to public arts events in their community, whereas 50% of students answered that they did.

Overall, students held a positive attitude toward arts education. Students answered that they thought arts education could help them to be more creative (72%), understand

other cultures (61%), and learn other subjects (53%). Forty eight percent of students thought they should have arts education, and furthermore it should be instructed by an arts specialist (55%). In addition, 41% of students reported that their regular teachers taught them about arts. However, most of students (32%) did not think they have enough art materials, although 34 % of students said they did not know about this issue (Table 9).

Table 9 Attitude about Arts Education

Items	Percent		
	Yes	No	Unknown
Arts should be a basic part of education	19%	5%	8%
Arts instruction helps me to be more creative	72%	13%	12%
Arts instruction helps me to understand people from different cultures	60%	19%	19%
Arts instruction helps me to learn other subjects	53%	26%	19%
Arts instruction is best when taught by an arts specialist	55%	19%	24%
My regular teachers can teach me about the arts	41%	26%	30%
My teachers have enough materials for teaching the arts	31%	32%	34%
I think every student should have arts instruction	48%	24%	26%

Overall, students believed that arts integration into education could benefit them in many ways. The highest percent of agreement, 67%, was reported by students that arts education could help them to appreciate the arts. Furthermore, students thought arts education could help them work with others (58%), make connections from school to home (44%), motivate class engagement (39%), express self (66%), interact with people from other cultures (53%), and participate in the arts as an adult (54%). Although students also answered that arts integration could help improve their ability to solve problems, the percent of students who answered “No”, and “I don’t know” was

moderately high as well (30% and 29%, respectively). Also, students reported diverse opinions about the effect that arts integration could enhance motivation to learn in other classes, with percent of “Yes”, 39%; “No”, 35%; “I don’t know”, 24% (Table 10).

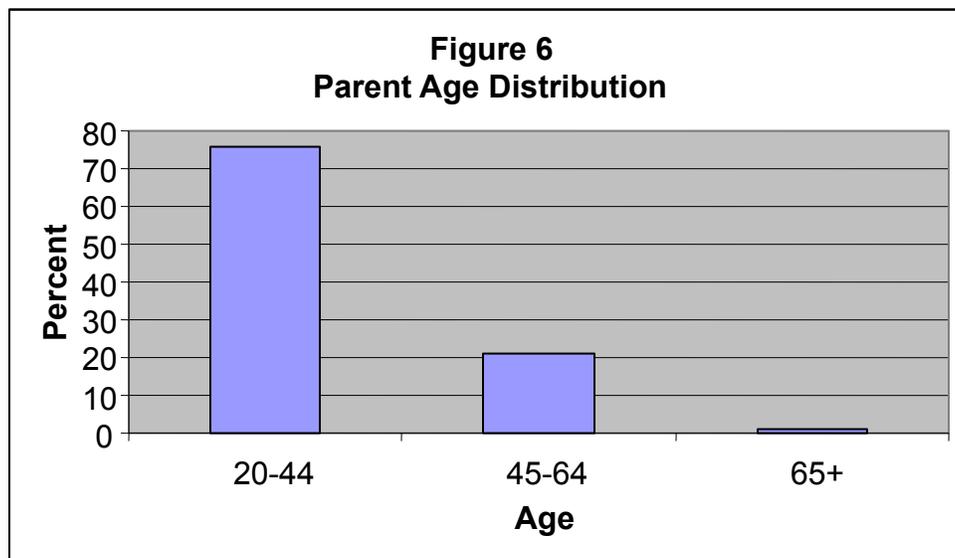
Table 10 Attitude about Arts Integration

Items	Percent		
	Yes	No	Unknown
Learning about the arts improve my ability to solve problems	39%	30%	29%
Learning about the arts improve my ability to work with others	58%	20%	19%
Learning about the arts help me make connections from school to home	44%	28%	25%
Learning about the arts motivate me learn in all of my classes	39%	35%	24%
Learning about the arts help me make connections to other classes	42%	32%	23%
Learning about the arts help me express myself	66%	17%	14%
Learning about the arts help me interact with people from other cultures	53%	22%	21%
Learning about the arts help me appreciate the arts	67%	14%	16%
Learning about the arts help me participate in the arts as an adult	54%	16%	28%

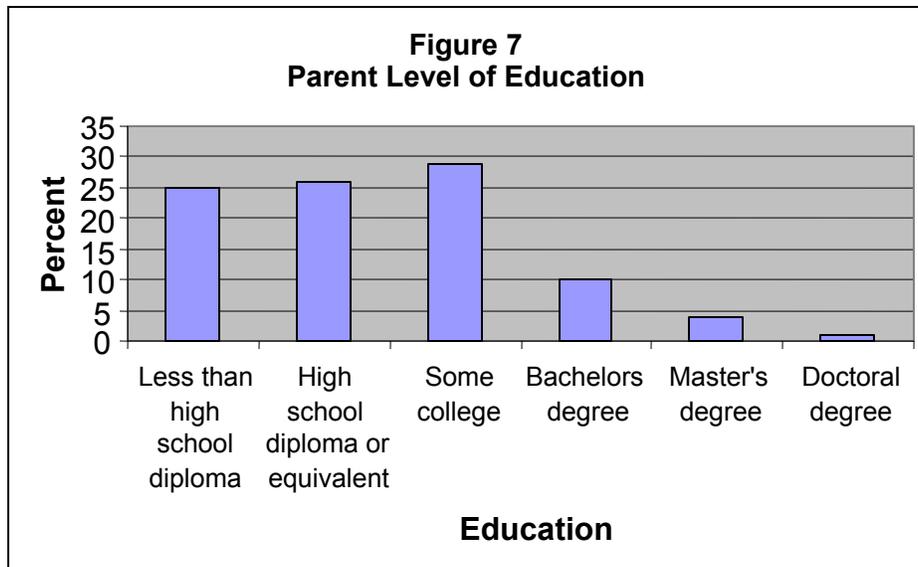
Parent Survey

Demographic Information

A total of 1784 parents returned their surveys. Approximately 78% of respondents were females, and 20% were males. Parents who comprised the highest proportion of responses were 20 to 44 years old, whereas the fewest parents who responded were over 65 (Figure 6).



Regarding parent level of education, 29% had some college education, 26% had a high school diploma or equivalent degree, 25% had less than a high school diploma, 10% had a Bachelor's degree, 4% had a Master's degree, and less than 1% had a Doctoral degree (Figure 7).



Survey Data

Overall, parents also reported that arts education was very important for their children. Approximately 80% of parents believed arts should be a basic part of their child’s education, will enhance creativity and cultural responsiveness, and help their children learn content. Fifty one percent of parents believed that classroom teachers have the knowledge to integrate arts into the classroom, and 44% believed they had the necessary resources to do this. However, only 53% of parents were advocates of arts education (Table 11).

Table 11 Attitude about Arts Education

Items	Percent
Arts should be a basic part of education	81%
Arts instruction can enhance creativity	85%
Arts instruction can enhance cultural responsiveness	81%
Children can learn content from other subject areas through participation in the arts	78%
Arts instruction should be provided by an arts specialist	63%
Regular classroom teachers have the knowledge to effectively integrate the arts into their instruction	51%
Regular classroom teachers have the resources to effectively integrate the arts into their instruction	44%
Assessment of arts learning needs to occur at local and state levels	55%
I am an advocate for arts instruction	53%

Note. The percentage was counted by responses of “Agree” and “Strongly Agree.”

Parents’ beliefs about arts integration were relatively consistent, with approximately 82% of parents reporting that arts integration can help their children appreciate the arts and 70% reporting that integration of the arts can help children develop alternative solutions to problems (Table 12).

Table 12 Attitude about Arts Integration

Items	Percent
Arts integration can help alternative solutions to problems	70%
Arts integration can help work cooperatively with others	80%
Arts integration can help understand how information and skills learned in school relate to life in the home and community	74%
Arts integration can help become more motivated to learn and engage in instructional activities	78%
Arts integration can help make connections across different subjects or content areas	73%
Arts integration can help express more through the arts	81%
Arts integration can help respond appropriately to different cultures	77%
Arts integration can help appreciate the arts	82%
Arts integration can help participate in the arts as an adult	72%

Note. The percentage was counted by responses of “Agree” and “Strongly Agree.”

Chapter 6

Changes in AZ Learns and AYP

The AZ Learns Profiles for the academic years 2003-2004 and 2004-2005 of schools participating in the arts education initiative were compared to evaluate changes in academic status. Thirty-five percent of schools had an improvement in status in the 2004-2005 year. Table 13 lists the schools participating in the program and their AZ Learns Profile for 2003-2004 and 2004-2005.

Table 13
AZ Learns Profiles for Schools Participating in Arts Education Initiative

School Name	2003-2004 Status	2004-2005 Status
A J Mitchell Elementary School	Performing	Performing Plus
Ajo Elementary School	Performing	Performing Plus
Ajo High School	n/a	Performing
Alchesay High School	Underperforming	Underperforming
Brooks Academy	Performing	Underperforming
Camelback High School	Performing	Performing
Carl Hayden High School	Performing	Performing
Carmel Community Arts and Technology	Performing	Performing
Cavett Elementary School	Performing	Performing
Central High School	Performing	Performing
Challenger Elementary School	Performing	Performing Plus
Cochise Elementary School	Highly Performing	Performing Plus
Davidson Elementary School	Performing	Performing

Desert Horizon Elementary School	Performing	Performing Plus
Desert Shadows Middle School	Performing	Performing
Double Adobe Elementary School	Performing	Performing Plus
Dzil Libei Elementary School	Performing	Performing
Eagles Nest Intermediate School	Performing	Performing
Elgin Elementary School	Excelling	Excelling
Excel Education Centers Cottonwood, LLC	Performing	Performing
Excel Education Centers Prescott Valley, LLC	Performing	Underperforming
Fort Thomas Elementary School	Performing	Performing
Fowler Elementary School	Performing	Underperforming
Ganado High School	Performing	Performing
Gila Bend Elementary	Failing to Meet the Academic Standards	Performing
Gila Bend High School	Performing	Underperforming
Grand Canyon Elementary	Performing	Highly Performing
Grand Canyon High School	Performing	Performing Plus
Ignacio Conchos School	Failing to Meet the Academic Standards	Failing to Meet Academic Standards
Kiser Elementary School	Underperforming	Performing Plus
Larry C Kennedy School	Performing	Performing Plus
Laveen Elementary School	Performing	Performing
Lincoln Elementary School	Performing	Performing Plus
Little Red Schoolhouse	Highly Performing	Highly Performing

Littleton Elementary School	Performing	Performing
Maricopa High School	Underperforming	Performing
Mary L Welty Elementary School	Performing	Performing
Maryland Elementary School	Performing	Performing
Maryvale High School	Performing	Performing Plus
Maurice C Cash School	Performing	Performing
Mcneal Elementary School	Performing	Performing Plus
Metro Tech High School	Performing	Performing
Mobile Elementary School	Performing	Performing Plus
Morristown Elementary School	Performing	Performing Plus
Nadaburg Elementary School	Performing	Performing
Nogales High School	Performing	Performing
North High School	Performing	Performing
Ocotillo School	Performing	Performing
Palo Verde School	Performing	Performing Plus
Patagonia Elementary School	Performing	Highly Performing
Patagonia Middle School	Excelling	Performing
Pearce Elementary School	Performing	Performing Plus
Percy L Julian School	Performing	Performing
R E Simpson School	Performing	Performing
Robert Bracker Elementary	Performing	Performing Plus
Roberts Elementary School	Performing	Performing Plus
Rudy G Bologna Elementary	Performing	Performing Plus
San Luis High School	n/a	Performing Plus

Santa Cruz Valley Union High School	Performing	Underperforming
Sierra Vista Elementary School	Performing	Underperforming
South Mountain High School	Performing	Performing
STAR Charter School	Performing	Performing
Summit View Elementary	Performing	Performing Plus
Sunnyslope Elementary School	Performing	Performing
Tsaile Elementary School	Performing	Performing Plus
Tuba City High School	Performing	Performing
Tuba City Junior High School	Performing	Performing
Underdown Junior High School	Performing	Performing
Valley View School	Performing	Performing
Vasquez De Coronado Francisco School	Performing	Excelling
Wade Carpenter Middle School	Performing	Performing
Winslow High School	Performing	Performing

AYP determinations were compared for the academic years 2003-2004 and 2004-2005 of schools participating in the arts education initiative to evaluate changes in academic status. Twenty-five percent of schools had an improvement in status in the 2004-2005 year. Table 14 lists the schools participating in the program and their AYP determination for 2003-2004 and 2004-2005.

Table 14

School Name	2003-2004 Status	2004-2005 Status
A J Mitchell Elementary School	Yes	Yes
Ajo Elementary School	Yes	Yes
Ajo High School	No	Yes
Alchesay High School	No	No
Brooks Academy	Yes	Yes
Camelback High School	Yes	Yes
Carl Hayden High School	Yes	Yes
Carmel Community Arts and Technology	No	Yes
Cavett Elementary School	Yes	No
Central High School	Yes	Yes
Challenger Elementary School	No	Yes
Cochise Elementary School	Yes	Yes
Davidson Elementary School	Yes	Yes
Desert Horizon Elementary School	Yes	Yes
Desert Shadows Middle School	Yes	Yes
Double Adobe Elementary School	Yes	Yes
Dzil Libei Elementary School	No	Yes
Eagles Nest Intermediate School	No	Yes
Elgin Elementary School	Yes	Yes
Excel Education Centers Cottonwood, LLC	Yes	No

Excel Education Centers Prescott Valley, LLC	Yes	Yes
Fort Thomas Elementary School	No	No
Fowler Elementary School	No	No
Ganado High School	No	No
Gila Bend Elementary	No	Yes
Gila Bend High School	Yes	No
Grand Canyon Elementary	Yes	Yes
Grand Canyon High School	Yes	Yes
Ignacio Conchos School	No	No
Kiser Elementary School	Yes	Yes
Larry C Kennedy School	No	Yes
Laveen Elementary School	Yes	Yes
Lincoln Elementary School	Yes	Yes
Little Red Schoolhouse	Yes	Yes
Littleton Elementary School	Yes	Yes
Maricopa High School	No	No
Mary L Welty Elementary School	Yes	Yes
Maryland Elementary School	Yes	Yes
Maryvale High School	Yes	Yes
Maurice C Cash School	No	Yes
Mcneal Elementary School	Yes	Yes
Metro Tech High School	Yes	Yes
Mobile Elementary School	Yes	Yes
Morristown Elementary School	Yes	Yes

Nadaburg Elementary School	No	Yes
Nogales High School	Yes	Yes
North High School	No	Yes
Ocotillo School	No	No
Palo Verde School	Yes	Yes
Patagonia Elementary School	No	Yes
Patagonia Middle School	No	Yes
Pearce Elementary School	Yes	Yes
Percy L Julian School	Yes	No
R E Simpson School	No	Yes
Robert Bracker Elementary	Yes	Yes
Roberts Elementary School	No	Yes
Rudy G Bologna Elementary	Yes	Yes
San Luis High School	Yes	Yes
Santa Cruz Valley Union High School	No	No
Sierra Vista Elementary School	Yes	No
South Mountain High School	Yes	Yes
STAR Charter School	No	Yes
Summit View Elementary	Yes	Yes
Sunnyslope Elementary School	No	Yes
Tsaile Elementary School	Yes	Yes
Tuba City High School	Yes	No
Tuba City Junior High School	No	Yes

Underdown Junior High School	Yes	No
Valley View School	No	Yes
Vasquez De Coronado Francisco School	Yes	Yes
Wade Carpenter Middle School	No	No
Winslow High School	Yes	Yes

Chapter 7

Discussion and Conclusions

The purpose of the current report was to examine the academic effects at the student and school level, as well as student, teacher, and parent perceptions of the Arts Education Initiative in the state of Arizona, and provide programmatic feedback to schools implementing the program. The evaluators utilized a mixed method approach to determine the overall impact of the arts education initiative in Arizona. The evaluation captured two facets of the initiative: a) academic achievement of student participants and b) the perception of arts education of the relevant stakeholders; teachers, parents, and students.

The findings indicated that overall, arts education was related to higher scores in reading on the AIMS. This finding was observed when arts students were compared to non-arts students on the whole, as well as when minorities and genders between arts schools and non-arts schools were compared. Minorities, girls, and boys in arts education scored higher on the reading subtest than their counterparts that were not in arts education. Additionally, higher AIMS scores were related to kids in arts programs in grades 3 through 5. This may indicate that arts programs are more beneficial for younger grade cohorts. This finding corresponds with previous research citing increased performance in math and reading of students receiving arts instruction (Forseth, 1980; Richards, 2003). Additionally, 35% of schools implementing arts education made improvements in their AZ Learns status from 2003-2004 to 2004-2005.

Information from parents, teachers, and students regarding their perceptions of the arts revealed that they all strongly supported the implementation and integration of arts into the curriculum. Specifically, they agreed that it would help increase creativity, appreciation of the arts, and cultural responsiveness. However, very few teachers felt that they had the knowledge to integrate the arts into instruction, and even fewer felt that they had the necessary resources to accomplish this. While the program has support, it will be difficult to implement if teachers are not well-prepared to teach the arts and do not have the tools to do so.

Challenges of the Evaluation

It is difficult to make definitive conclusions about the achievement data of the arts education program for several reasons. Primarily, the type of Arts Education Initiative

implemented by each school is not consistent, making it difficult to compare schools and draw conclusions. For example, one school may have initiated a dance program while another initiated a music program. These differences in program implementation may even exist between grade levels within the same school. Also, because schools could use CSR funding to implement Arts Education Initiatives, they also had other CSR initiatives at work in their schools. Therefore, we are unable to conclude that the effects observed in this study are due to arts education. The difference in AIMS scores could be attributed to other programs that were taking place in the arts schools.

Barriers to Implementation

Although schools are including these programs, teachers may lack the preparation, knowledge, and resources to effectively deliver them. A minority of teachers believed that they had adequately knowledge to integrate arts and only 1/5 of teachers believed they had adequate resources. When asking teachers their needs of implementing arts into their class instruction, many teachers reported that they needed professional development of arts, an arts specialist at their school, art supplies, and funding to support them.

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Appendix A
Vendor Selection

**TECHNICAL ASSISTANCE PROVIDERS APPROVED LIST
COMPREHENSIVE SCHOOL REFORM ARTS EDUCATION ADDENDUM**

Arizona Commission on the Arts –

Artist Teacher Institute http://www.arizonaarts.org/arts_education/ati.htm

Dr. Alison Marshall

Phone: 602/255-5882

amarshall@arizonaarts.org

This Institute intends to help participants (teachers, administrators, parents) from Arizona schools to engage in active inquiry. Participants connect the tools and experiences presented in the Institute to their teaching practice, linking classroom curriculum and the state arts standards. The two to three day Institute provides on-site professional development workshops with a main emphasis dance and theatre and a secondary emphasis on visual arts and music. The Institute's arts experiences are connected with the Arizona Arts Standards and with the participants' own teaching practice and curriculum in all content areas and disciplines.

Effective Resources Associates, Inc.

<http://www.effectiveresources.org/>

Dr. Judith March

Phone: 330/653-8242

Having worked in the field of effective school reform since 1987, Effective Resources Associates specialists in Comprehensive School Reform programs. They have worked with K-12 schools in Ohio, Arizona and California, and base their work on developing effective curriculum mapping that is tied to state standards and is interdisciplinary in nature.

Expeditionary Learning/Outward Bound<http://www.elob.org/>

Scott Gill

Phone: 208/336-0853

Jsg@elob.org

Expeditionary Learning Outward Bound is a proven model for comprehensive school reform for elementary, middle and high schools. It emphasizes learning by doing, with a particular focus on character growth, teamwork, authentic performances, reflection and literacy. Teachers connect high quality academic learning to adventure, service, the arts and character development through a variety of student experiences including interdisciplinary, project based learning.

The Galef Institute<http://www.lalc.k12.ca.us/catalog/providers/107.html>

Susan McGreevy-Nichols

800/473-8883

suzym@differentways.org

The Galef Institute is a nonprofit educational organization whose school reform model, Different Ways of Knowing (DWO K) focuses on improvements in the classroom to develop student literacy. Recognizing that every child has talent and that children learn by doing, the DWO K approach provides clear and flexible guidelines for learner-centered classroom practice that develops literacy through children's multiple intelligences. They work with schools grades K-12.

Karen Husted

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Ms. Husted is a resident of Douglas, Arizona and a specialist in Theatre. For the past 10 years, she has been the designer and facilitator of different professional development experiences for schools grades K-12 in Arizona and around the United States. Her expertise is in arts education integration and arts education assessment, and focuses on developing a cadre of teachers and administrators at a school who incorporate arts education into the daily curriculum. She is currently a faculty member at the University of Phoenix.

Opening Minds through the Arts (OMA)<http://www.omaproject.org>

Dr. Joan Ashcraft, Board Member

Phone: 520/225-4900

Piloted in Tucson Unified School District, OMA utilizes a mix of professional artists and trained arts education specialists to enhance auditory acuity, language acquisition/literacy development, critical thinking, composition/enhanced academic skills, and abstract reasoning/spatial intelligence via intensive arts integration programs. To date, OMA has specialized in interdisciplinary arts integration programs for students grades K-8, but is piloting programs at the high school level in 2004/2005.

Appendix B (Insert Teacher Survey)

Appendix C
(Insert Student Survey)

Appendix D
(Insert Parent Survey)

Appendix E
(Logic Model)

Logic Model for Arts in Education Evaluation

