

Project ARISE
(Arts Residency Interventions in Special
Education)

2010 Annual Performance Report to the US Department
of Education



Prepared with the assistance of

the **ImproveGroup**[™]

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Overview of quantitative data sources

To measure the performance objectives, Performing Arts Workshop and their external evaluator, the Improve Group, analyzed specific quantitative and qualitative questions on student, teacher and artist surveys, analyzed school attendance records and California State Test (CST) scores and reviewed videotaped classroom residency observations using a rubric developed for the evaluation. The ARISE residency period is between 20 to 30 weeks, approximately the length of the school year.

Student surveys were completed by comparison-group and treatment-group students twice; once at the beginning of the residency period in fall and again at the end of the residency period in spring. The target data for student survey indicators is a change in treatment-group survey responses that is greater than a change in comparison-group indicators.

Teacher surveys were completed by comparison-group and treatment-group classroom teachers once at the end of the residency period. The teacher survey questions used a retrospective pre-test model; teachers were asked to rate their opinion or experience at the time of the survey and to reflect back to the beginning of the school year to rate their opinion or experience at that time. The target data for teacher survey indicators is a change in treatment-group survey responses that is greater than a change in comparison-group indicators.

Artist surveys were completed by teaching artists once at the end of the residency period. The artist survey questions used a retrospective pre-test model; artists were asked to rate their opinion or experience at the time of the survey and to reflect back to the beginning of the school year to rate their opinion or experience at that time. Since there is not a comparison-group for artists, the target data for artist survey indicators is a measurable change in student outcomes from the beginning of the residency period to the end. Student post-test (spring) surveys, teacher surveys and artist surveys were collected in May 2010 and analyzed throughout June, July, August and September 2010.

Evaluators also analyzed school attendance records and California State Test (CST) scores of students in comparison-group and treatment-group schools. The target data for attendance records is stronger attendance for treatment-group students than for their comparison-group peers. The target data for CST scores is a stronger improvement in treatment-group student's scores than for their comparison-group peers. Attendance data was collected in May and June 2010 and analyzed throughout the summer 2010. CST scores were collected and analyzed in September 2010.

Classroom residency observations are another quantitative tool used to measure the project objectives. A select number of treatment-group classrooms with high student consent to participate in the evaluation were recorded during residency periods three times throughout the school year; only students with consent to participate in the evaluation were recorded. Then, senior artistic staff from Performing Arts

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Workshop used a quantitative rubric during observations of the recordings; the same trained staff has rated observations for all three years of the evaluation and has used the same tools and standards for rating observations during this time. The observation forms were then analyzed to see the progression of students' artistic abilities and critical thinking skills, student teamwork and collaboration between teacher and artist. The target data for residency observation data is an observed improvement from the beginning of the residency period to later in the residency period; this could be at the middle of the residency (approximately 19 weeks into the residency) or the end of the residency (approximately 20 to 30 weeks into the residency).



Section A-1 Complete evaluation and program planning activities

<input checked="" type="checkbox"/> Project Objective	<input type="checkbox"/> Check if this is a status update for the previous budget period
Complete evaluation and program planning activities	

A Performance Measure	Measure Type	Quantitative Data					
Build relationship with and gain support from the San Francisco Unified School District.	Project	Target			Actual Performance Data		
		Raw #	Ratio	%	Raw #	Ratio	%
				100%			100%
B Performance Measure	Measure Type	Quantitative Data					
Select schools for participation in evaluation activities of Years 2-4 of the grant period.	Project	Target			Actual Performance Data		
		Raw #	Ratio	%	Raw #	Ratio	%
		7/7		100%	7/7		100%
C Performance Measure	Measure Type	Quantitative Data					
Select teaching artists for participation in evaluation activities of Years 2-4 of the grant period.	Project	Target			Actual Performance Data		
		Raw #	Ratio	%	Raw #	Ratio	%
		4/4		100%	4/4		100%

Explanation of Progress

Measure A: Build Relationship With and Gain Support from SFUSD

Performing Arts Workshop has sustained a strong relationship with the SFUSD Special Education Department. Department staff sees value in Project ARISE (Arts Residency Interventions in Special Education) and the data that has come out of its evaluation. In the fall of 2009, Workshop staff met with Clare Davies, the new Executive Director of Special Education at SFUSD, who expressed enthusiasm and support for ARISE.



In October 2009, Performing Arts Workshop held the third annual Special Day Class Teacher Summit for Special Education classroom teachers, principals, and arts coordinators participating in ARISE, and staff from the District's Special Education office, including the Supervisor for Elementary Special Education and the Special Education Ombudsperson. This meeting, training and information exchange provided Performing Arts Workshop with an opportunity to ask teachers questions about their unique experiences with the ARISE program and in turn, allowed the Special Education teachers from different schools to share their experiences teaching students with special needs. The Summit also provided an opportunity to share promising practices identified in Years One and Two of Project ARISE. Performing Arts Workshop staff also provided teachers with lesson plans for Special Education students, and other resources for using the performing arts in their classrooms. The Summit ended with a facilitated discussion about the challenges and opportunities for using the performing arts in Special Education classrooms. The meeting was a rare opportunity for collegial collaboration not otherwise offered to teachers by the SFUSD or any other entity. This meeting also involved an interactive workshop wherein participants experienced some theater exercises from ARISE classrooms that they could then take back to their classrooms.

In January of 2010, the Workshop's Artists-in-Schools Program Manager and Artistic Director presented an overview of Project ARISE to SFUSD Arts Coordinators during a meeting hosted by the SFUSD Visual and Performing Arts office. The presentation emphasized ensuring access and equity in the arts among students with special needs along with offering key findings from the 2007-08 and 2008-2009 project years. At the request of the SFUSD, this meeting also included a professional development workshop around the arts and Special Education during the 2009-10 school year, which took place in February 2010.

In February 2010, participating teachers, administrators, and arts coordinators in ARISE attended a dinner hosted by Performing Arts Workshop to discuss the program to date, in addition to overall role the arts play in reaching Special Education students at their schools.

Measure B: Select Schools and Classroom Teachers for Participation

In September and October of 2007, Performing Arts Workshop completed selection of five treatment site and three comparison site public elementary schools in the San Francisco Unified School District. Four treatment sites and three comparison sites have continued with Project ARISE for the entirety of the 2009-2010 school year. Eleven of the 18 teachers in treatment classrooms this year have participated in ARISE all three years of the program, and three more teachers in treatment classrooms participated for two years. One of the nine teachers in comparison classrooms this year participated in the ARISE evaluation all three years of the program, and five more teachers in comparison classrooms participated for two years. Some teachers that had been involved in Project ARISE in previous years were no longer employed by the school in the 2009-10 school year, or had no Special Education students in the 2009-10



school year. Additional teachers were recruited for Project ARISE from treatment and comparison schools, using the same criteria from the 2007-2008 and 2008-2009 school years. Teachers were asked to participate if their third, fourth and fifth grade classrooms had one or more inclusion (Special Education) students.

Measure C: Select Artists for Participation

Performing Arts Workshop created a team of teaching artists to serve in the ARISE Project residencies. These artists work as a team with the curricular guidance of an Artist Mentor who has significant experience teaching in Special Education settings and with the Performing Arts Workshop teaching methodology. The ARISE artist team meets monthly and on an as-needed basis to discuss promising strategies for engaging students as well as common challenges. In the 2009-10 school year, a total of four teaching artists worked with ARISE classrooms; one of these teaching artists was unable to continue for the entire year and was replaced by another teaching artist. Throughout the three-year evaluation period, a total of 12 teaching artists worked with ARISE classrooms.

Additional supporting data

In Year 4 of the project, the Workshop disseminated research findings through conferences and publications. Workshop staff presented findings on ARISE in a session at the American Association of Theatre Educator's annual conference in August 2010, and at the National Guild for Community Arts Education annual conference in November 2009. Additionally, the Workshop published findings from ARISE reports on www.issuelab.org, an online clearinghouse of non-profit research. Disseminating findings help increase the sustainability of the performing arts education by conveying the importance of performing arts education in school settings.



Section A-2 Percentage of participants who benefit from standards-based arts education and meet state standards in the arts will increase.

2 Project Objective	<input type="checkbox"/> Check if this is a status update for the previous budget period
GPRA Performance Measure #1 Indicator 8.1.1 of 1	

A Performance Measure	Measure Type	Quantitative Data					
Percentage of participants who benefit from standards-based arts education and meet state standards in the arts will increase.	Project	Target			Actual Performance Data		
		Raw #	Ratio	%	Raw #	Ratio	%
					382		

Explanation of Progress

Measure A: During the 2009-10 school year, Performing Arts Workshop served about 6,200 students in twenty-five K-12 schools with its Artists-in-Schools residency program. Twenty-one of these schools are in the San Francisco Unified School District, one is in the Jefferson Unified School District, one is in the Pacifica School District, one is in the Hayward Unified School District, and one is in the Berkeley Unified School District.

During the 2009-10 school year, Performing Arts Workshop served 382 students in four schools in the San Francisco Unified School District through the ARISE Project with its Artists-in-Schools program, which is funded through the AEMDD grant. Of these students, 41 were served in Special Day Classes. In total, 1,039 students participated in ARISE for at least one year of the project, and 278 of these students participated in ARISE for two or three years. These residencies were also funded by grants from the San Francisco Department of Children, Youth and their Families (DCYF), the Stulsaft Foundation, and the California Arts Council. Three of the four treatment schools provided matching funds to support Project ARISE in their schools.



Section A-3 Improve teaching methods of artists and teachers through identification of curricular and pedagogical best practices and problem solving

3 Project Objective	Check if this is a status update for the previous budget period
Improve teaching methods of artists and teachers through identification of curricular and pedagogical best practices and problem solving.	

A Performance Measure	Measure Type	Quantitative Data					
General Education teachers in AIS classrooms report greater confidence in reaching students in Special Education than comparison-group teachers, as measured by teacher surveys and focus groups.	Project	Target			Actual Performance Data		
		Raw #	Ratio	%	Raw #	Ratio	%
			> 4/8	> 50%		16/16	100%

• Data source: Teacher responses to open-ended survey items. See Explanation of Progress below.

B Performance Measure	Measure Type	Quantitative Data					
Teachers and artists identify strategies for using the performing arts to teach students in Special Education and mainstreaming classrooms, as measured by teacher and artist surveys and focus groups and action research process notes and reports.	Project	Target			Actual Performance Data		
		Raw #	Ratio	%	Raw #	Ratio	%
		> 0.4 change on a 10-pt scale			1.5 change on a 10-pt scale		

• Data source: Changes in teacher survey responses from pre-test to post-test for comparison and treatment groups. See Explanation of Progress below.



C Performance Measure	Measure Type	Quantitative Data					
		Target			Actual Performance Data		
		Raw #	Ratio	%	Raw #	Ratio	%
Partnerships between teachers and artists lead to best practices and usable curricula, particularly for reaching students in Special Education and mainstreaming classrooms, as measured by teacher and artist surveys, teacher and artist focus groups and action research reports.	Project	> 0.6			1.6		
		change on a 10-pt scale			change on a 10-pt scale		

- Data source: Changes in teacher survey responses from pre-test to post-test for comparison and treatment groups. See Explanation of Progress below.

D Performance Measure	Measure Type	Quantitative Data					
		Target			Actual Performance Data		
		Raw #	Ratio	%	Raw #	Ratio	%
Artists improve the adaptability of their lesson plans to Special Education environments.	Project			>33%			67%

- Data source: Residency observations taken at beginning-of-year, mid-year and end-of year. See Explanation of Progress below.

Measure A: The target data for open-ended teacher survey responses is having a higher presence of the item in treatment-group teacher survey responses than in the comparison-group teacher survey responses. General Education and Special Education teachers in Artists-in-Schools (AIS) classrooms reported greater confidence in reaching students in Special Education through the performing arts when compared with comparison-group teachers. In open-ended responses in the teacher survey, 100% of teachers in treatment classrooms (16 of 16 teachers) reported they felt that their students made gains through using the performing arts in the classroom by the end of the 2009-10 school year. In contrast, 50% of teachers in comparison classrooms felt that their students made gains through using the performing arts in the classroom (4 of 8 teachers). In focus groups, teachers in treatment classrooms discussed the ways that the performing arts impacts students in Special Education by offering them opportunities to feel successful in the classroom and giving them an opportunity to be on “equal ground” with mainstream students.

Measure B: The target data for teacher survey indicators is a change in treatment-group teacher survey responses that is greater than a change in the comparison-group teacher survey responses. Teacher surveys show that Special Day Class and General Education teachers in treatment classrooms show greater gains in their comfort trying new techniques in the classroom (1.5 points gained from pre-test to post-test on a 10-point scale) than do comparison group teachers (0.4 points gained from pre-test to post-



test). They showed a greater amount of growth, although the difference in growth between treatment and comparison groups was not statistically significant.

Measure C: The target data for teacher survey indicators is a change in treatment-group teacher survey responses that is greater than a change in the comparison-group teacher survey responses. Teacher surveys show that partnerships between teachers and artists lead to promising practices and usable curricula, particularly for reaching students in Special Education and mainstreaming classrooms. Teachers in treatment classrooms show greater gains in their comfort assessing the quality of their students' dance or theatre work (1.6 points gained from pre-test to post-test on a 10-point scale) than do comparison group teachers (0.6 points gained from pre-test to post-test). This indicates that teachers in treatment classrooms are benefiting from the partnership with ARISE teaching artists by learning best practices and usable curricula. They showed a greater amount of growth, although the difference in growth between treatment and comparison groups was not statistically significant.

Measure D: The target data for residency observation indicators is an observed improvement in student demonstration from the beginning of the residency period to later in the residency period. Using a rubric to measure residency observations from the beginning, middle and end of the residency period, artists demonstrated improvement in using teaching methods appropriate to age and ability levels of students throughout the course of the residency. The first sets of observations were taken about 12 weeks after the residency started. One-third of observations (33%) from the beginning of the residency show that artists strongly displayed that they used teaching methods appropriate to age and ability levels of students. At the end of the residency, 67% of observations show that the artist strongly displayed that they used teaching methods appropriate to age and ability level of students.

Data from focus groups shows that teachers reported that artists generally improve the adaptability of their lesson plans to Special Education environments. In focus groups, eight of 11 teachers (73%) reported that artists work extremely well with students with disabilities or special needs. Two teachers reported that while the artist worked well in their Special Day Class, their students need additional ways to communicate through non-verbal methods. Most teachers state that artists are responsive to students' needs and adjust their teaching methods accordingly.

One teacher of a Special Day Class said that, "Our current artist has been wonderfully responsive and is quite vigilant about picking up on student strengths and individual needs." A General Education teacher added, "[The artist] seems really capable of meeting my students where they're coming from." Teachers shared that ARISE provides an opportunity for Special Education students to allow their strengths to come through and to feel successful in school. As one Special Day Class teacher explained, "[The artist] has done a nice job of creating activities that make my students feel successful, whether it be through improve[isation], games, or exercises."



Qualitative data

Frequency of communication between the teachers and the artists depends on the level of interaction teachers seek out with the artist. There are two mandatory planning meetings with teachers and artists in all of the schools. Teachers meet with the artist for their school at the beginning of the residency to discuss and schedule the year ahead and also midway through the residency to touch base. Aside from these meetings the level of communication really varies by the needs of each teacher. Generally speaking, teachers do not engage in planning sessions with the artists (often due to scheduling conflicts and limited availability), but may offer suggestions if they see that something is not working with the students. Some teachers use email to communicate with artists if issues come up or will talk with artists briefly before or after the sessions. One teacher shared that he collaborated with the artist to get students ready to perform in an annual assembly and another collaborated with the artist to coincide with a literature lesson. Artists shared that Special Day Class teachers are more engaged than General Education teachers during the ARISE sessions and will assist the artists; artists felt like this was due in part to the smaller class sizes in Special Day Classes.



Section A-4 Improve student understanding of artistic processes and values

4 Project Objective	<input checked="" type="checkbox"/> Check if this is a status update for the previous budget period
Improve student understanding of artistic processes and values.	

A Performance Measure	Measure Type	Quantitative Data					
Students in AIS classrooms show growth in understanding and use of artistic vocabulary, as measured by surveys and focus groups.	Project	Target			Actual Performance Data		
		Raw #	Ratio	%	Raw #	Ratio	%
					> 0/8	> 0%	

- Data source: Teacher responses to open-ended survey items. See Explanation of Progress below.

B Performance Measure	Measure Type	Quantitative Data					
Students in AIS classrooms demonstrate abilities to analyze performing arts demonstrations, as measured by artist surveys and focus groups and residency observations.	Project	Target			Actual Performance Data		
		Raw #	Ratio	%	Raw #	Ratio	%
						> 33%	

- Data source: Residency observations taken at beginning-of-year, mid-year and end-of year. See Explanation of Progress below.

C Performance Measure	Measure Type	Quantitative Data					
Students in AIS classrooms improve their abilities to create performing art, as measured by student surveys, artist surveys, and residency observations.	Project	Target			Actual Performance Data		
		Raw #	Ratio	%	Raw #	Ratio	%
						> 33%	

- Data source: Residency observations taken at beginning-of-year, mid-year and end-of year. See Explanation of Progress below.



Explanation of Progress

Measure A: According to teacher focus groups and surveys, classroom teachers agree that the ARISE Project has improved student understanding of artistic concepts and vocabulary. The target data for open-ended teacher survey responses is a higher presence of the item in treatment-group teacher survey responses than in the comparison-group teacher survey responses. In open-ended responses in the teacher survey, one teacher in treatment classrooms (1 of 16 teachers) specifically mentioned that their students learned artistic vocabulary during the 2009-10 school year, but none of the comparison group teachers reported that their students learned artistic vocabulary during this timeframe. In the focus groups, nine out of 16 teachers (56%) report that students have learned artistic vocabulary during the 2009-10 school year. Teachers shared that students have learned artistic concepts and the application of the terms. Teachers reported using the artistic concepts they see modeled during the residency to teach students other subjects. Classroom teachers observed that students have improved in their verbal and non-verbal communication abilities. Teachers said that audience recognition and analysis of artistic concepts improved throughout the course of the ARISE residency.

Measure B: The target data for residency observation indicators is an observed improvement in student demonstration from the beginning of the residency period to later in the residency period. Residency observations were completed by program staff that have been involved in this process for three years. Using a rubric to measure residency observations from the beginning, students were observed making revisions to their work based on reflection more at the middle and end of the residency compared to the beginning of the residency. Observations from the beginning of the residency show that students somewhat displayed reflection on what worked and what could be improved in their performance in 33% of cases, compared with the 67% of cases from the middle and 40% of cases from the end of the residency.

Measure C: The target data for residency observation indicators is an observed improvement in student demonstration from the beginning of the residency period to later in the residency period. Using a rubric to measure residency observations from the beginning, middle and end of the residency period, students demonstrated improvement in their ability to create performing art over the course of the residency. At the end of the residency, 50% of the observations reviewed indicated that students strongly displayed the use of facial expression to express emotion and feeling compared with 17% of the observations reviewed at the middle of the residency and 33% of the observations reviewed at the beginning of the residency.

Qualitative data

According to focus groups, classroom teachers and teaching artists agree that the ARISE Project has improved student understanding of artistic concepts and vocabulary. While students may not have specific



names or terms for the artistic concepts they have learned, teachers and artists reported that students demonstrate mastery of artistic concepts.

Students are more comfortable in front of the class, even outside of the residency. As one Special Day Class teacher shared, “This has been the 3rd year that my students have had this program and each year it has been different, and so I think it has given them an awareness of different ways in which they can express themselves, and that it doesn’t always have to be verbally, which they struggle with. My students actually performed twice for the school this year; at a school wide assembly, where they did the Can Can dance and sang a song, as well as in their mini opera. Three years ago, they struggled to go up on stage and recite a poem... [Now my students display increased knowledge and competence in] using their body as their language [through] facial expressions, self-control, [and] story/theater elements.” Teaching artists also observed that students are more comfortable in front of people, as one shared in a survey, “My 5th graders from [one teacher’s] class have each told me that they thought theatre would be scary but that they weren't afraid of being in front of people anymore [after participating in ARISE].”

Several teachers described how their students applied skills learned in the residency to other class presentations, such as performing plays or singing songs. Teachers reported that students learn vocabulary related to theatre, such as act, improv, audience, performer, stage, stage directions, tempo and tempo terminologies, such as allegro and adagio.

Teachers valued that students not only learn how to perform through ARISE, but also how to be a respectful audience member. Throughout the course of the school year, students have gained an appreciation for performers, as they have realized how difficult it is to get up in front of others and perform. As one teacher shared, “Students in my class have become more brave, and have volunteered in the school talent show. They also enjoy seeing others perform and have become more appreciative audience members when we have school performances.” Another added, “Also I think the kids started to see the amount of work it takes to perform, rather than just jumping on stage and expecting everything to work.”



Section A-5 Develop and improve pro-social behavior through the affective dimensions of performing art

5 Project Objective	☐ Check if this is a status update for the previous budget period
Develop and improve pro-social behavior through the affective dimensions of performing art.	

A Performance Measure	Measure Type	Quantitative Data					
Improve student behavior in the classroom.	Project	Target			Actual Performance Data		
		Raw #	Ratio	%	Raw #	Ratio	%
		>0.6 change on a 10-pt scale				1.6 change on a 10-pt scale	

- Data source: Changes in teacher survey responses from pre-test to post-test for comparison and treatment groups. See Explanation of Progress below.

B Performance Measure	Measure Type	Quantitative Data					
General Education and Special Education students in mainstreaming AIS classrooms work together better in team activities, as measured by teacher surveys and focus groups and action research reports.	Project	Target			Actual Performance Data		
		Raw #	Ratio	%	Raw #	Ratio	%
		> 1.5 change on a 10-pt scale				2.5 change on a 10-pt scale	

- Data source: Changes in teacher survey responses from pre-test to post-test for comparison and treatment groups. See Explanation of Progress below.

C Performance Measure	Measure Type	Quantitative Data					
Students in AIS classrooms enjoy and are more engaged in learning than their comparison-group peers, as measured by student and teacher surveys.	Project	Target			Actual Performance Data		
		Raw #	Ratio	%	Raw #	Ratio	%
		> 1.3 change on a 10-pt scale				2.3 change on a 10-pt scale	

- Data source: Changes in teacher survey responses from pre-test to post-test for comparison and treatment groups. See Explanation of Progress below.



D Performance Measure	Measure Type	Quantitative Data					
		Target			Actual Performance Data		
		Raw #	Ratio	%	Raw #	Ratio	%
Students in AIS classrooms, particularly students in Special Education, are more adaptable to change in their environment, as reported by their classroom teachers, as measured by teacher and artist surveys, focus groups and action research reports.	Project	> 1.1			0.8		
		change on a 10-pt scale			change on a 10-pt scale		

- Data source: Changes in teacher survey responses from pre-test to post-test for comparison and treatment groups. See Explanation of Progress below.

Explanation of Progress

Measure A: The target data for teacher survey indicators is a change in treatment-group teacher survey responses that is greater than a change in the comparison-group teacher survey responses. Teacher surveys demonstrate that students improved their behavior throughout the course of the school year. Teachers in both treatment and comparison classrooms generally reported increases in their students’ pro-social behaviors over the course of the school year. Teachers in treatment classrooms reported significantly greater gains in their belief that “my students are rarely disruptive in class” over the course of the ARISE residency (1.6 points gained from pre-test to post-test on a 10-point scale) than did comparison classroom teachers (0.6 points gained from pre-test to post-test on the same scale).¹

Measure B: The target data for teacher survey indicators is a change in treatment-group teacher survey responses that is greater than a change in the comparison-group teacher survey responses. Teacher surveys demonstrate that General Education students and Special Education students in mainstreaming Artists-in-Schools (AIS) classrooms worked better in team activities from the beginning of the residency to the end of the residency. On average, teachers in treatment classrooms rated their students’ ability to work well in teams at the beginning of the residency as 4.9 on a 10-point scale with 1 being strongly disagree and 10 being strongly agree. At the end of the residency, teachers in treatment classrooms rated their students’ ability to work well in teams as an average of 7.4 on the same scale. This represents a 2.5-point increase from pre-test to post-test for teachers in treatment classrooms on a 10-point scale. Teachers in comparison classrooms experienced a 1.5-point change on this item from pre-test to post-test. Teachers in treatment classrooms showed a greater amount of growth, although the difference in growth between treatment and comparison groups was not statistically significant.

¹ Differences between treatment and comparison teachers are significant at the 0.05 confidence level.



Measure C: The target data for teacher survey indicators is a change in treatment-group teacher survey responses that is greater than a change in the comparison-group teacher survey responses. Teacher surveys demonstrate that students in Artists-in-Schools (AIS) classrooms gained more in the area of student engagement in learning than did their comparison group peers. On average, teachers in treatment classrooms rated their agreement with the statement “my students care about the quality of their work” as 5.8 on a 10-point scale (with 1 being strongly disagree and 10 being strongly agree) at the beginning of the residency. At the end of the residency, teachers in treatment classrooms on average rated their agreement with the statement “my students care about the quality of their work” as 8.1 on that same scale. This represents a 2.3-point increase from pre-test to post-test for teachers in treatment classrooms on a 10-point scale, which is significantly higher than the 1.3-point change from pre-test to post-test reported by teachers in comparison classrooms.² The target data for student survey indicators is a change in student treatment-group survey responses that is greater than a change in student comparison-group indicators. From pre- to post-test, the same number of students in treatment classrooms reported that it was “very true” that they liked going to school (no change); in contrast, fewer students in comparison classrooms reported it was “very true” that they liked going to school (16% decrease) during this same timeframe.

Measure D: The target data for teacher survey indicators is a change in treatment-group teacher survey responses that is greater than a change in the comparison-group teacher survey responses. Teacher surveys demonstrate that students in treatment classrooms are more adaptable to change in their environment at the end of the residency. On average, teachers in treatment classrooms rated their students’ ability to adapt to new situations with ease at the beginning of the residency as 6.6 on a 10-point scale (with 1 being strongly disagree and 10 being strongly agree). At the end of the residency, teachers in treatment classrooms rated their students’ ability to adapt to new situations with ease as an average of 7.4 on that same scale. This represents a 0.8-point increase from pre-test to post-test for teachers in treatment classrooms on a 10-point scale. Teachers in comparison classrooms experienced 1.1-point change on this item from pre-test to post-test. Teachers in comparison classrooms rated their students to have a significantly greater amount of growth than teachers in treatment classrooms.³

Qualitative data

According to teacher focus groups, the ARISE Project increases students’ self-confidence. Many teachers noted improvements in students’ confidence after participating in ARISE. As one teacher shared, “They have gained another outlet and area to succeed in. They have gained more confidence.” Teachers and teaching artists noted that ARISE is an opportunity for quieter students to gain confidence in front of groups. As another teacher shared about a class made up primarily of students who are shy and who did

² Differences between treatment and comparison teachers are significant at the 0.05 confidence level.

³ Differences between treatment and comparison teachers are significant at the 0.05 confidence level.



not like to be in front of the class at the beginning of the year, “I liked the way they worked together as a team [during ARISE], and then they discussed things. [The students] seemed more confident and more willing to be in front of the class... they are confident in class. [ARISE] really developed their self-confidence.” A Special Day Class teacher shared, “The quieter students were able to show their personal strengths in front of the more outgoing types. I think this helped them bond and build more confidence. There were some situations in which students laughing at another student made him feel intimidated and upset. Luckily, though, he still wanted to participate despite feeling put down.” Another Special Day Class teacher shared the impact they felt ARISE had on their students saying, “I do know that many students are more likely to take risks when it comes to sharing verbally.” One of the artists also shared this sentiment, stating, “I think my kids learn risk as their biggest thing [from ARISE]. A lot of them [were] pretty inhibited [before participating].”

Teachers shared that ARISE can have a strong impact on students who are nonverbal and who need other outlets for expression. As a Special Day Class teacher shared, “I think it helps for the confidence of my nonverbal students who often have a difficult time participating in group discussions and activities, but are able to fully participate in nonverbal movement activities during ARISE that their verbal peers are doing also.”

Teachers shared that ARISE provides an outlet for expression for students who are learning English and may not have the vocabulary to express themselves verbally. “In general many of the students are second language learners and lack confidence in speaking or [performing] creative movement in front of others so this class helped bring kids out of their shells and [they] are learning how to open up [and] to express themselves.”

Teachers shared that students who struggle academically are given an opportunity to gain confidence and to excel through ARISE. As one teacher shared about the impact of ARISE on academically challenged students, “[They gain] confidence! All my students that struggle with academic areas blossom in ARISE they finally have the opportunity to shine.” Another added, “Some [academically challenged] students found their niche and thrived [through ARISE].” A Special Day Class teacher elaborated, “I think [ARISE] is great and that this program is a must. These students are behind academically and for most of them, they will always be behind, but they still need the same opportunities of the arts as the other students do.”

Teachers reported that the ARISE residencies are an opportunity for Special Education students to be treated the same way as their General Education peers. A teacher stated, “Almost always, performing arts is a curriculum that almost all kids can be a part of. Involves every person, every time.” General Education teachers have different strategies when working with artists; some teachers do not tell artists which students are Special Education students unless an issue arises. A few teachers shared that their



Special Education students are able to do the same things as other students during ARISE and often enjoy the activities more as they provide an outlet for the students to demonstrate how they are feeling.

Teachers noted that through ARISE the classroom becomes a more inclusive environment for students who may otherwise feel excluded. As a teacher shared, “I noticed today that when enabled to select their own groups, they all chose groups I would not have guessed. They included students who are frequently excluded. It was delightful.” Another General Education teacher explained, “I think the whole teamwork and building trust [through ARISE] is helpful to help [Special Education] students become more part of the class, as they can often feel separated academically.”

ARISE provides an opportunity for children’s multiple intelligences to be appreciated. As one teacher shared, “ARISE provides an opportunity for students to receive positive reinforcement for possessing other intelligences. It shows my students that being a good reader or mathematician are not the only ways to be a success in school.” Another added, “This is where ARISE is great. I have some students who never have an opportunity to be recognized for their talents. This program gives some of these students that opportunity.” A teacher shared examples stating, “I think about one of my students who was recognized for her humor. I think of another who is constantly being asked to stay on task and quiet down having the opportunity to move and shout appropriately. I think of another student with low reading/math skills, but tremendous movement capability being applauded for his miming ability.” Another added, “I have noticed, however, a real appreciation for the students to whom theater arts come naturally. I see and feel them get recognition from their peers and that feels like a great recognition of the multiple intelligences in the room.”

Teachers reported in focus groups that they have seen changes in student behavior throughout the course of the residency. As a Special Day Class teacher shared, “I’m sure ARISE activities that promote students watching each other perform and performing with each other cooperatively have helped advance their social skills with their classroom peers. They all have autism so need a lot of work with socializing with each other.”

Teachers reported that the residencies give students a chance to relax; their curricular days are so focused on academic achievement, that they rarely have a chance to be a kid. A teacher elaborated, “It was an opportunity for my students to experience something that I could not give them... some things are more important than the academic aspects, and there is so much pressure with that, [ARISE] is an opportunity where the kids can get away from that [pressure].” Another teacher added, “I’ve noticed that most of the children know this is a time to relax and it’s ok to express yourself creatively and let loose within the boundaries of the class.”



Section A-6 Improve student critical thinking in and through the arts

6 Project Objective	<input checked="" type="checkbox"/> Check if this is a status update for the previous budget period
Improve student critical thinking in and through the arts.	

A Performance Measure	Measure Type	Quantitative Data					
Students in AIS classrooms improve their understanding of vocabulary and concepts related to performing arts, as measured by student and artist surveys, artist focus groups and residency observations.	Project	Target			Actual Performance Data		
		Raw #	Ratio	%	Raw #	Ratio	%
				> 17%			60%

- Data source: Residency observations taken at beginning-of-year, mid-year and end-of year. See Explanation of Progress below.

B Performance Measure	Measure Type	Quantitative Data					
Students in AIS classrooms improve more than their peers in areas of critical thinking, such as considering the pros and cons of ideas, expressing new ideas with comfort, reflecting about their work, being receptive to feedback and caring about the quality of their work, as measured by teacher, student and artist surveys and action research reports.	Project	Target			Actual Performance Data		
		Raw #	Ratio	%	Raw #	Ratio	%
		> 1.1 change on a 10-pt scale			1.7 change on a 10-pt scale		

- Data source: Average change in teacher survey responses for five survey items from pre-test to post-test for comparison and treatment groups. See Explanation of Progress below.

Explanation of Progress

Measure A: The target data for residency observation indicators is an observed improvement in student abilities from the beginning of the residency period to later in the residency period. Using a rubric to measure residency observations from the beginning, middle and end of the residency period, students demonstrated their understanding of vocabulary and concepts related to performing arts in the beginning, middle and end of the year. At the beginning of the residency (on average twelve weeks after the

Prepared by:



residency started), 60% of the observations reviewed indicated that students strongly demonstrated different scales or ranges of performance, such as large or small movements with varied intensity and high and low space. Different scales or ranges of performance were strongly displayed in 20% of the observations reviewed at the middle of the residency and 17% of the observations reviewed at the beginning of the residency. Additionally, 100% of the observations reviewed at the end of the residency strongly displayed students modeling activities or movements for their peers, compared with 33% of observations at the middle of the residency and 50% of observations at the beginning of the residency.

Measure B: The target data for teacher survey indicators is a change in treatment-group teacher survey responses that is greater than a change in the comparison-group teacher survey responses. Teacher surveys demonstrate that students in treatment classrooms generally improve more than their peers in comparison classrooms in the area of critical thinking. Teachers in both treatment and comparison classrooms reported increases in their students' critical thinking abilities over the course of the school year. When rating individual students' abilities to consider the pros and cons of ideas, teachers in comparison classrooms rated significantly more positive change for their students (1.1-point change from pre-test to post-test on a 10-point scale) than did teachers in treatment classrooms (0.8-point change).⁴ When rating individual students' abilities to show comfort expressing ideas, teachers in treatment classrooms rated more positive change for their students (1.0-point change from pre-test to post-test on a 10-point scale) than did teachers in comparison classrooms (0.9-point change). When rating the statement "my students care about the quality of their work," teachers in treatment classrooms rated significantly more positive change for their students (2.2-point change from pre-test to post-test on a 10-point scale) than did teachers in comparison classrooms (0.9-point change).⁵ Teachers in treatment classrooms also rated their students to have more favorable change than did teachers in comparison classrooms in the areas being receptive to feedback (2.3-point change versus 1.3-point change, respectively) and being reflective about their work (2.1-point change, versus 1.3-point change, respectively). When examining the five survey items above together, teachers in treatment classrooms reported a 1.7-point average increase from pre-test to post-test on a 10-point scale while teachers in comparison classrooms reported a 1.1-point average change from pre-test to post-test. When the five survey items listed above are taken together, teachers in treatment classrooms showed a greater amount of growth.

Qualitative data

Classroom teachers generally noticed improvement in students' artistic concepts and vocabulary. Most students look forward to the residency time and are disappointed if they miss a class. Students use problem solving skills during ARISE activities. Teachers shared that the artists will often use group

⁴ Differences between treatment and comparison teachers are significant at the 0.05 confidence level.

⁵ Differences between treatment and comparison teachers are significant at the 0.05 confidence level.



exercises and present the students with a problem that they must work together to solve. Teachers shared that through these activities students build problem solving skills and teamwork skills.

Students use critical thinking skills when judging the quality of their peers' performances, and making recommendations on how the performance could be improved in the future. Teachers shared that artists ask students to reflect on and critique their classmates work. A teacher stated, "My students are more able to critique other work constructively. Instead of only saying, 'I liked it' they can express reasons for liking a performance and offer suggestion on how one could improve a performance."

Teachers report that students enjoy expressing themselves artistically and physically and transfer these skills and the increase in confidence to other classes. As a teacher wrote on a survey, "My students have gained confidence in their performance abilities and they have learned to have fun and express themselves freely." A Special Day Class teacher shared in a survey, "They feel more comfortable sharing verbally in front of their peers. Their self-esteem has increased." Another teacher wrote, "[With performing arts, students have been] learning how to express themselves using their bodies, [that] breaking out of their quiet 'shell' [and] their comfort zone is ok, and of course [gaining] confidence."

Teachers felt that nonverbal communication skills improved through ARISE. As a Special Day Class teacher shared on a survey, "I think the [performing arts] have led to increased non-verbal communication. My students are more likely to 'act out' parts of stories/ characters since participating in ARISE."

Teachers found that through incorporating arts into their other subjects they can improve student comprehension. As one teacher shared in a survey, "I look for ways to incorporate performing arts activities in science [and] history to make abstract concepts more meaningful." Another teacher shared, "I see the benefits of using theater in my classroom to enhance comprehension and social studies content."



Section A-7 Use the performing arts to positively impact academic performance

7 Project Objective	<input checked="" type="checkbox"/> Check if this is a status update for the previous budget period
Use the performing arts to positively impact academic performance.	

A Performance Measure	Measure Type	Quantitative Data					
Students in AIS classrooms show greater gains in standardized exams than comparison-group students, and the achievement gap between students in Special Education and General Education is decreased, as measured by standardized test scores.	Project	Target			Actual Performance Data		
		Raw #	Ratio	%	Raw #	Ratio	%
						7%	

• Data source: California Standards Test scores. See Explanation of Progress below.

B Performance Measure	Measure Type	Quantitative Data					
Classrooms that receive the AIS program have lower tardiness and absence records, as measured by school attendance records.	Project	Target			Actual Performance Data		
		Raw #	Ratio	%	Raw #	Ratio	%
				<4.1			2.9
		absences per 100 days in the classroom			absences per 100 days in the classroom		

• Data source: School attendance data. See Explanation of Progress below.



C Performance Measure	Measure Type	Quantitative Data					
		Target			Actual Performance Data		
Students in AIS classrooms show more improvement than their comparison-group peers in areas of academic progress, such as learning information quickly, feeling successful and approaching problems creatively, as measured by teacher and artist surveys and teacher focus groups.	Project	Raw #	Ratio	%	Raw #	Ratio	%
		> 0.9 change on a 10-pt scale				1.1 change on a 10-pt scale	

- Average change in teacher survey responses for three survey items from pre-test to post-test for comparison and treatment groups. See Explanation of Progress below.

Explanation of Progress

Measure A: In the fourth year of the ARISE grant period, the evaluator collected 2009 and 2010 California Standards Test (CST) scores for students in treatment and comparison classrooms participating in the ARISE evaluation. The California Standards Tests were administered to students at the end of each school year, in April and May of 2009 and April and May of 2010. Students are assigned a performance level for each subject, derived from their raw test scores. The performance levels are: far below basic, below basic, basic, proficient and advanced. Students that achieve proficient or advanced have a passing score; students that achieve far below basic, below basic or basic do not have a passing score. The performance levels of students are standard across grade levels and so can be compared from one year to another.

The evaluator examined 2009 and 2010 CST scores for 3rd through 5th grade students that had parental consent to participate in the evaluation for the 2009-10 school year. The evaluator recorded each student’s performance level in the subjects of English Language Arts and Mathematics for the 2009 and 2010 tests. Students that were missing 2009 and/or 2010 CST data were excluded from the analysis. The evaluator assigned numeric values to each of the performance levels (far below basic=1, below basic=2, basic=3, proficient=4 and advanced=5). The evaluator then calculated the percent of students with a passing score in treatment classrooms and in comparison classrooms for the 2009 and 2010 CST tests in English Language Arts and Mathematics. The average performance level included data for all students that had consent to participate in the evaluation and took the tests in 2009 and 2010. The 2009 CST scores served as a baseline data for the 2010 CST scores.

Students in treatment schools showed greater gains in the California Standards Tests compared to students in comparison classrooms. From 2009 to 2010, 9% more students in treatment classrooms had a passing score on the English Language Arts, compared with 7% more students in comparison classrooms.



From 2009 to 2010, 3% more students in treatment classrooms had a passing score on the English Language Arts, compared with 1% more students in comparison classrooms.

Measure B: The target data for attendance records is lower absenteeism and fewer tardies for treatment-group students than for their comparison-group peers. In the third year of the ARISE grant period, the evaluator collected school attendance records from treatment and comparison classrooms participating the ARISE evaluation through May 2010. Attendance rates were examined for the 3rd through 5th grade students in the four treatment and three comparison elementary schools, including rates of absenteeism and tardiness. Analysis performed on both semesters combined for treatment versus comparison classes showed a significantly lower number of tardies and absences for students in treatment classes. Students in treatment classrooms had an average of 2.9 absences and 1.3 tardies per 100 days in the classroom, while students in comparison classrooms had an average of 4.1 absences and 3.0 tardies per 100 days in the classroom. Treatment-group students had significantly fewer absences and tardies than their comparison-group peers.

Measure C: The target data for teacher survey indicators is a change in treatment-group teacher survey responses that is greater than a change in the comparison-group teacher survey responses. Teachers in both treatment and comparison classrooms generally reported increases in their students' academic progress over the course of the school year. Teachers in treatment classrooms reported greater gains in their students' ability to learn new information quickly over the course of the school year (1.5-point change from pre-test to post-test on a 10-point scale) compared to teachers in comparison classrooms (0.8-point change from pre-test to post-test). Teachers in treatment classrooms also rated greater change in their individual students' ability to display feelings of success compared with teachers in comparison classrooms (0.9-point change versus 0.8-point change, respectively). On the other hand, teachers in comparison classrooms reported significantly greater gains in their students' ability to approach problems creatively (1.1-point change) compared with treatment classrooms (0.8-point change). When examining the above three survey items together, teachers in treatment classrooms reported a 1.1-point average change from pre-test to post-test on a 10-point scale while teachers in comparison classrooms reported a 0.9-point average change from pre-test to post-test. When the three survey items listed above are taken together, teachers in treatment classrooms showed a greater amount of growth.

Teachers in Special Day Class treatment classrooms reported greater gains in their individual students' ability to display feelings of success (2.1-point change from pre-test to post-test on a 10-point scale) compared to teacher ratings of individual students in Special Day Class comparison classrooms (1.6-point change from pre-test to post-test).



Qualitative data

According to focus groups, classroom teachers acknowledge difficulty in attributing improvements in academic performance to the ARISE Project. The residencies coincide with the school year and student growth in maturity, so teachers feel that they are unable to determine exactly what changes in academic success could be attributed to ARISE. Several teachers said that ARISE is one piece of the puzzle that contributes to student development. Changes that teachers noted and attributed to ARISE include improvements in public speaking, students wanting to be heard in class, group work, increased interest in writing scripts and skits, and in learning about sequencing in stories.

A few teachers also shared that applying engagement techniques in the classroom has increased student focus and in turn academic performance. One teacher shared, “By using some of the strategies to engage students during the rest of the week, I think there has been impact on academics.” Another added, “Children responded better when there was a chant, a cheer, or a particular sound such as a chime to draw their attention to, so the class stayed focused and the teacher is able to move on with the lesson.” An artist shared, “One of my teachers now uses one of my phrases for focus ‘Eyes, ears, and whole body!’ in her classroom.”

One Special Day Class teacher shared how the ARISE program influences the academics of students through improving pro-social behavior, “When students feel more comfortable in their own skin and more at ease with their classmates, they focus less on the social (feeling inadequate, embarrassed, etc.) piece of school and more on the academic piece. I think all of my students have probably benefited in this sense.”

Some teachers reported a connection between the students’ enjoyment of ARISE and their motivation to be at school. As one teacher shared, “My students fully enjoy our session with [the artist]. They verbally and physically cheer when they see ‘ARISE’ posted on our daily schedule. They also enjoyed putting together a performance to show [the artist] appreciation for the skills he has taught us this year.” Another teacher shared on a survey, “[My students’ have gained] a sense of enjoyment of theater. They're joyful learners on theater day.”



Section A-8 Increase access to General Education for students in Special Day Classes through behavior improvement

8 Project Objective	<input checked="" type="checkbox"/> Check if this is a status update for the previous budget period
Increase access to General Education for students in Special Day Classes through behavior improvement.	

A Performance Measure	Measure Type	Quantitative Data					
Students in Special Education who are receiving the AIS program show more improved behavior than their comparison group peers, as measured by teacher surveys and focus groups and IEP behavior goals.	Project	Target			Actual Performance Data		
		Raw #	Ratio	%	Raw #	Ratio	%
		> 0.7 change on a 10-pt scale			2.2 change on a 10-pt scale		

- Data source: Change in Special Day Class teacher survey responses from pre-test to post-test for comparison and treatment groups. See Explanation of Progress below.

B Performance Measure	Measure Type	Quantitative Data					
Students in Special Education are mainstreamed for more hours after receiving the AIS program, as measured by IEP program goals and school records.	Project	Target			Actual Performance Data		
		Raw #	Ratio	%	Raw #	Ratio	%
			100/100	100%		100/100	100%

- Data source: Qualitative data from teacher focus groups.

Explanation of Progress

Measure A: The target data for teacher survey indicators is a change in treatment-group teacher survey responses that is greater than a change in the comparison-group teacher survey responses. Results from teacher surveys indicate that Special Education students in the treatment group show more improved behavior than their General Education peers. Special Day Class teachers in treatment classrooms rated the students to have greater gains in the area of being respectful of their classmates (1.8-point gain from pre-test to post-test on a 10-point scale) than students rated by General Education teachers (1.6-point gain). General Education teachers in comparison classrooms rated their students to have greater gains in the area of being respectful of their classmates (2.2-point gain from pre-test to post-test on a 10-point scale) than students rated by Special Day class teachers (0.7-point gain). For this survey item, teachers in treatment



classrooms showed a greater amount of growth, although the difference in growth between treatment and comparison groups was not statistically significant.

Measure B: When designed, the evaluation team intended to measure this benchmark using IEP data; however, IEP data was not made available to the evaluation team and the team decided not to pursue obtaining the data after learning of limitations in the data. The San Francisco Unified School District IEP format includes some basic information on time spent in General Education settings; however, the IEP format does not specifically state the hours spent in General Education classrooms. Additionally, district and school staff raised concerns that requesting IEP data would result in lower consent to participate in the ARISE evaluation for Special Education students (the target population that makes up a tenth of our total sample).

The qualitative data below outlines progress towards this benchmark. Teachers reported in focus groups that behavior issues are an obstacle that keeps students from being mainstreamed, but that ARISE can assist students in improving behavior. One Special Day Class teacher shared, “I think there may be a greater positive impact on special needs students [from ARISE], despite the challenges. Behavior can definitely keep some students away from opportunities like this.” As one Special Day Class teacher explained, “The kids need many chances and multiple ways to succeed. Success is key to their self-concept which in turn affects behavior. I think they need as many different ways as possible so they can find themselves, performing arts are one of them.” Another teacher shared how things improved over the course of the year, “My full inclusion student had a bad start with our artist. I thought that he would love the opportunity to act and express himself. He would blow up and walk out of ARISE. Over time, working with [the artist], this student came around and now he is a star on the stage.” Another teacher shared that a student was very uncomfortable, shy and self-conscious during ARISE classes and would purposefully get in trouble to get sent out of the class. The teacher in the class spoke to him and explained that he did not have to get up in front of the class and participate. After that the student gradually became more confident, started to fully participate in the sessions and in the end was excited for ARISE. Although these students expressed reluctance in the beginning and acted out, they eventually came to look forward to ARISE. As a teacher shared, “I have a few students who crave attention that would otherwise play out badly in the classroom. ARISE gives these students a positive outlet.” The artists agreed with this sentiment, as one artist shared, “Definitely my 'difficult' students are my best performers in almost all my classes, that's what theatre does, gives attention to those who need it!” Another artist added, “I would agree with [the other artist], my 'difficult' kids are often the 'leaders' in the group improv... they often are the one organizing ‘You go here’, ‘You say this...’ etc. and he/she really wants the improv to be [very good].”

One Special Day Class teacher felt that ARISE helped students become more comfortable with mainstreaming, stating, “[ARISE] definitely built self-esteem and self-concept [in my students].”



Academics are hard for them, but this was something where they could feel successful every time. Also, my students felt more comfortable with mainstreaming and going into new situations [after participating in ARISE].” Teachers shared that they were able to use concepts from the ARISE classes such as self-control or discussions of how others perceive behavior to reign in students when they exhibit disruptive behaviors.

Qualitative data

According to focus groups, teachers generally believe that artists do a good job of including and engaging Special Education students in their lessons, in both Special Day Class and General Education classrooms. A Special Day Class teacher shared, “[The artist] did a very nice job modifying the activities for the different students. [She] definitely pushed the students that were more capable and she adapted the activities for those that were struggling, and did a great job of including my student who uses the walker.” Another teacher shared, “The artist, for the most part, knew how to interact with those who were inclusion students. They were excited and focused.” Teaching artists also shared in surveys that they modify their lessons continually throughout the year to accommodate students and to adapt to their needs and abilities. As one artist explained, “Yes, I created my curriculum overview in the beginning, and changed it a lot. There were certain ideas that didn't work with the students, others that were great, some that needed to be broken down into simpler objectives, ideas, or exercises. The whole process was revision.”

As many of the teachers have worked with ARISE across multiple years, they may give the artists feedback about what works and what does not work with their students. In focus groups, teachers reported that through ARISE students learn body awareness and control. A teacher shared, “[ARISE is] another opportunity for children to understand who they are and to experience movement and body, [to explore] how their bodies work. They don't normally experience that. Kids need movement. Performance is that avenue for kids to show their strength.”



Section A-9 Increase sustainability of the performing arts by institutionalizing performing arts education in school settings

9 Project Objective	<input checked="" type="checkbox"/> Check if this is a status update for the previous budget period
Increase sustainability of the performing arts by institutionalizing performing arts education in school settings.	

A Performance Measure	Measure Type	Quantitative Data					
Teachers in AIS classrooms show greater use of performing arts in their regular curriculum than comparison-group teachers, as measured by teacher surveys and focus groups and action research process notes and reports.	Project	Target			Actual Performance Data		
		Raw #	Ratio	%	Raw #	Ratio	%
		> 1.1 change on a 10-pt scale				1.5 change on a 10-pt scale	

- Data source: Changes in teacher survey responses from pre-test to post-test for comparison and treatment groups. See Explanation of Progress below.

B Performance Measure	Measure Type	Quantitative Data					
Teachers and artists report that performing arts have an increased value in the school environment, as measured by teacher and artist focus groups.	Project	Target			Actual Performance Data		
		Raw #	Ratio	%	Raw #	Ratio	%
			100/100	100%		100/100	100%

- Data source: Qualitative data from teacher focus groups. See Explanation of Progress below.

C Performance Measure	Measure Type	Quantitative Data					
Teachers document and use new curricular approaches, as measured by teacher surveys and focus groups and action research process notes and reports.	Project	Target			Actual Performance Data		
		Raw #	Ratio	%	Raw #	Ratio	%
			> 1/8	> 13%		12/16	75%

- Data source: Teacher responses to open-ended survey items. See Explanation of Progress below.



D Performance Measure	Measure Type	Quantitative Data					
		Target			Actual Performance Data		
		Raw #	Ratio	%	Raw #	Ratio	%
Artists are consulted about using performing arts across the curriculum and teachers incorporate arts into the lesson plan, as measured by artist and teacher focus groups and surveys.	Project		100/100	100%		100/100	100%

- Data source: Qualitative data from teacher focus groups. See Explanation of Progress below.

Explanation of Progress

Measure A: The target data for teacher survey indicators is a change in treatment-group teacher survey responses that is greater than a change in the comparison-group teacher survey responses. Teacher surveys demonstrate that teachers in Artists-in-Schools (AIS) classrooms show greater use of performing arts in their regular curriculum than comparison group teachers. Teachers in treatment classrooms reported that at the end of the school year, they use dance or creative movement techniques more frequently in their lesson plans (1.3 increase from pre-test to post-test on a 10-point scale), and they also use theater more often in their lesson plans (1.6 increase on a 10-point scale). On the other hand, teachers in comparison classrooms reported a 0.8 change from pre-test to post-test in using dance and creative movement, and a 1.4-point change in using theater in their classrooms. When examining the two survey items above together, teachers in treatment classrooms reported a 1.5-point average increase from pre-test to post-test on a 10-point scale while teachers in comparison classrooms reported a 1.1-point average change from pre-test to post-test.

Measure B: This performance measure was designed to measure qualitative data; the target data is a general consensus through teacher focus groups and surveys that performing arts have an increased value in the school environment. In focus groups, teachers reported that their students benefit from learning from an expert in the field through ARISE. Many teachers said ARISE is valuable because it offers their students something they cannot give them themselves. One teacher explained, “It is a great program that truly benefits the students. They are able to work on skills that are not addressed specifically in the district adopted curriculum, and it opens up and gives these students an opportunity to experience arts that they may not have otherwise had an opportunity to.” Another teacher shared, “[Students] learn about cooperation and develop courage and public speaking skills. I would also express gratitude that this program offers something to my students that I don’t feel all that capable of teaching them myself.” A few teachers shared in surveys that they are very comfortable with having a trained arts teacher come in to teach, but less confident in integrating the arts themselves.



Outside of the ARISE residencies, students have limited opportunities to participate in performing arts activities at school. According to focus group respondents, the biggest obstacles teachers face in including performing arts in the classroom are a lack of time and a lack of training. Teachers talk of the numerous curricular mandates that they are required to teach by and that it is challenging to fulfill those mandates and provide arts education at the same time. As one teacher explains in a survey, “I find it difficult to incorporate [art] with all the standards I need to teach. I like [art taught] on its own, with an outside teacher. Art for art's sake.”

Many of the classroom teachers have participated in ARISE for all three years that the programming has been offered; they continued with the ARISE program because they value the opportunity for their students to participate in the performing arts. As one teacher shared, “I believe in the program. I know it works.” Another stated, “I was extremely impressed with the first artist and saw a strong change and impact with that group of students. After that, I was sold on the program.”

Measure C: The target data for open-ended teacher survey responses is a higher presence of the item in treatment-group teacher survey responses than in the comparison-group teacher survey responses. Results from teacher surveys show that teachers in the treatment groups document and use new curricular approaches after the ARISE residency. In open-ended responses in the teacher survey, 75% of teachers in treatment classrooms (12 of 16 teachers) reported new specific tools to use performing arts in the classroom that they learned about in the 2009-10 school year, compared with 13% of teachers (1 of 8 teachers) in the comparison group. Teachers in the treatment group listed a variety of performing arts techniques they learned that aim to energize students, get their attention and engage them further in lessons.

Measure D: This performance measure was designed to measure qualitative data; the target data is a general consensus through teacher focus groups and surveys that artists are consulted about using performing arts across the curriculum and teachers incorporate arts into the lesson plan. In teacher focus groups, the majority of teachers shared that they have adopted or applied certain techniques or concepts to their lesson plans throughout the week. In surveys, teachers shared that they feel more comfortable using performing arts in their classroom this year. In the words of one Special Day Class teacher, “While I have not used performing arts often, I do feel more comfortable and motivated to do so [after participating in ARISE this year].” Another teacher shared that being involved in the ARISE program for multiple years has helped her integrate performing arts in the classroom: “Since this is the third year of implementation, I have found it very natural to incorporate more performing arts in my classroom.”

Teachers apply performing arts concepts to their classrooms in their own ways. Some examples include asking students to take a story from the Language Arts class and turn it into a play to perform for their classmates, using an ARISE activity as a transition, singing songs learned from the artists, and prompting



students to apply skills or techniques they learned in ARISE into presentations or plays. One teacher shared that they applied concepts they learned in ARISE to a class presentation about blood cells. Other teachers shared that they felt that the activities carried into physical education classes or that concepts overlap with other arts residencies the students are participating in. A Special Day Class teacher explained in a survey, “I learned that seemingly ordinary classroom supplies and activities can be used within a performing arts context. No extra props/ expenses are needed - just imagination.”

Two teachers that have not used any techniques expressed that it was due to time constraints. Another teacher explained her reluctance to apply the techniques to other subjects, saying “Every time I watch them delight in ARISE I think how it would be fun to use the activities during different parts of the week, but it's difficult to reel them back in after so much action.”



Conclusion

Key findings

ARISE helps students gain self-confidence, especially students with special needs

Teachers reported that students gain self-confidence and stage presence through ARISE. Teachers noted that students who are most gifted in the performing arts are often inclusion students and students who struggle with other, more traditional academic subject areas such as Language Arts and Math. ARISE provides an opportunity for these students to succeed in school. As one teacher shared, “ARISE provides an opportunity for students to receive positive reinforcement for possessing other intelligences. It shows my students that being a good reader or mathematician are not the only ways to be a success in school.” One Special Day Class teacher adds, “I think it helps for the confidence of my nonverbal students who often have a difficult time participating in group discussions and activities, but are able to fully participate in nonverbal movement activities during ARISE that their verbal peers are doing also.” Through ARISE, special needs students are able to perform at the same level as their General Education peers, and teachers reported that leads to increased self-confidence.

Many teachers reported that with more experience in ARISE, students became more and more confident performing in front of others. One Special Day Class teacher explains, “This has been the third year that my students have had this program and each year it has been different, and so I think it has given them an awareness of different ways in which they can express themselves, and that it doesn’t always have to be verbally, which they struggle with. My students actually performed twice for the school this year; at a school wide assembly, where they did the Can Can dance and sang a song, as well as in their mini opera. Three years ago, they struggled to go up on stage and recite a poem... [Now my students display increased knowledge and competence in] using their body as their language [through] facial expressions, self-control, [and] story/theater elements.”

Students involved in ARISE are engaged learners

Teachers report in surveys that students participating in ARISE showed significantly greater improvements in participating in class discussions, caring about the quality of their work, and being rarely disruptive in class compared to their comparison group peers. Over the course of the school year, teachers in treatment classrooms reported significantly greater gains in their belief that the performing arts have a positive impact on their students’ overall attitude toward learning compared with teachers in comparison classrooms. Additionally, school records show that students that participated in ARISE had significantly better attendance compared with students in comparison classrooms.



Methodological challenges

Quasi-experimental design

The quasi-experimental design of the current Arts Education Model Development and Dissemination (AEMDD) evaluation requires both treatment and comparison sites. Inherent in the quasi-experimental design is the hypothesis that treatment students will have greater improvements than comparison students; that hypothesis has been tested throughout this report. During the ARISE project design phase, comparison and treatment schools were randomly selected from the pool of potential partner schools. While every attempt was made to choose schools with as similar populations as possible, students are not randomly assigned to schools in the district, and there are both known and unknown factors that limit the comparability of the groups. This is a major limitation of the quasi-experimental design. Ideally, students that receive the ARISE residencies would be compared to students that receive no arts programming. However, students in comparison schools are exposed to a number of arts programs and other interventions both inside and outside of the classrooms. As a result, the *de facto* hypothesis tested is whether students that receive the ARISE residencies have greater improvements than students that receive various other interventions and programs which are unknown to the evaluation team.

The quasi-experimental research design creates a disparity of service and a perceived inequity by the comparison schools and district officials. In the ARISE evaluation, we have responded to this concern by offering an incentive to comparison schools; once throughout the school year, teachers in comparison classrooms receive a science enrichment program for their students. Additionally, in the 2010-11 school year after the evaluation is complete, teachers in comparison schools will receive the ARISE residencies in their classrooms. Despite these measures, some district and school staff still consider it unfair that comparison students participate in all the evaluation activities, but do not receive the benefits of the ARISE residencies while they participate in the evaluation.

We encourage the U.S. Department of Education to consider a broader range of evaluation designs for Arts Education funding. Managing comparison sites is cumbersome, and it requires a lot of time and resources for the evaluation, given that the sites not receiving the program have less buy-in for the evaluation than do treatment sites—requiring greater follow-up and support. The investment of time and resources to maintain relationships with comparison sites may be better spent on other evaluation activities. In addition, greater flexibility in evaluation design would allow researchers to devote more resources to learning about program quality and improvement through qualitative methods such as residency observations, group reflection on observations, focus groups, and interviews.



Appendix A : Quantitative data results and statistical analysis

Student survey results

Table A1: Student survey results in treatment and comparison classrooms

Survey item	Treatment v. Comparison	N	Pre-test Mean	Pre-test Standard Deviation	Post-test Mean	Post-test standard deviation	X ²
I like going to school	Treatment	230	2.43	.592	2.44	.571	.276
	Comparison	84	2.50	.570	2.39	.602	
I work very hard on my homework.	Treatment	230	2.56	.540	2.52	.550	.769
	Comparison	83	2.60	.562	2.56	.567	
I learn a lot in school.	Treatment	229	2.69	.480	2.71	.465	.893
	Comparison	83	2.71	.482	2.74	.439	
I pay attention in class.	Treatment	229	2.48	.543	2.55	.516	.655
	Comparison	84	2.39	.560	2.52	.503	
I like the other kids in my class.	Treatment	229	2.39	.586	2.33	.506	.555
	Comparison	83	2.53	.549	2.37	.557	
I feel comfortable talking in class.	Treatment	230	2.21	.674	2.19	.734	.030
	Comparison	84	2.17	.848	2.38	.663	
I like to do art in school.	Treatment	230	2.67	.637	2.60	.672	.080
	Comparison	84	2.65	.570	2.66	.610	
I like to hear what people think of my school work.	Treatment	230	2.22	.721	2.15	.678	.982
	Comparison	83	2.22	.645	2.14	.730	
I understand the rules in my school and classroom.	Treatment	230	2.86	.371	2.85	.366	.130
	Comparison	83	2.78	.519	2.83	.377	
I like to follow directions.	Treatment	230	2.55	.579	2.55	.541	.193
	Comparison	81	2.60	.517	2.52	.611	
Playing theater games.	Treatment	230	2.34	.618	2.32	.600	.114
	Comparison	81	2.10	.682	2.24	.600	
Making up new dance moves.	Treatment	228	1.77	.819	1.78	.760	.097
	Comparison	82	1.71	.745	1.80	.773	
Acting or performing in class.	Treatment	230	2.01	.742	2.05	.709	.309
	Comparison	83	1.93	.659	1.96	.783	
Dancing in front of other people	Treatment	230	1.72	.761	1.73	.711	.420
	Comparison	83	1.73	.766	1.70	.803	
Telling stories.	Treatment	229	2.05	.776	2.01	.747	.046
	Comparison	83	2.23	.738	2.30	.636	



Table A2: Student survey results in Special Day Class and General Education classrooms (inclusion students and students with no special needs) from Treatment Classrooms

Survey item	Special Day Class versus General Education Student	N	Pre-test Mean	Pre-test Standard Deviation	Post-test Mean	Post-test standard deviation
I like going to school.	Special Day Class	8	2.25	1.035	2.50	.756
	General Education	222	2.43	.573	2.44	.565
I work very hard on my homework.	Special Day Class	8	2.38	.744	2.63	.744
	General Education	222	2.56	.532	2.52	.544
I learn a lot in school.	Special Day Class	8	2.63	.518	2.86	.378
	General Education	221	2.70	.480	2.70	.468
I pay attention in class.	Special Day Class	8	2.25	.886	2.57	.787
	General Education	221	2.49	.528	2.55	.508
I like the other kids in my class.	Special Day Class	8	2.13	.991	2.29	.756
	General Education	221	2.40	.568	2.33	.499
I feel comfortable talking in class.	Special Day Class	8	2.38	.744	2.29	.951
	General Education	222	2.20	.672	2.18	.729
I like to do art in school.	Special Day Class	8	2.88	.354	2.57	.787
	General Education	222	2.66	.644	2.60	.670
I like to hear what people think of my school work.	Special Day Class	8	2.25	.886	2.43	.535
	General Education	222	2.22	.717	2.15	.682
I understand the rules in my school and classroom.	Special Day Class	8	2.38	.744	2.67	.816
	General Education	222	2.88	.341	2.86	.349
I like to follow directions.	Special Day Class	8	2.00	.926	2.00	.816
	General Education	222	2.57	.556	2.56	.524
Playing theater games.	Special Day Class	8	2.63	.518	2.86	.378
	General Education	222	2.33	.620	2.31	.599
Making up new dance moves.	Special Day Class	7	2.29	.951	2.43	.787
	General Education	221	1.76	.811	1.76	.752
Acting or performing in class.	Special Day Class	8	2.75	.707	2.14	.690
	General Education	222	1.98	.730	2.05	.710
Dancing in front of other people.	Special Day Class	8	2.50	.756	1.71	.951
	General Education	222	1.69	.748	1.73	.705
Telling stories.	Special Day Class	8	2.75	.707	2.00	.816
	General Education	221	2.03	.768	2.01	.746



Table A3: Student survey results in Special Day Class and General Education classrooms (inclusion students and students with no special needs) from Comparison Classrooms

Survey item	Treatment v. Comparison	N	Pre-test Mean	Pre-test Standard Deviation	Post-test Mean	Post-test standard deviation
I like going to school.	Special Day Class	7	2.57	.787	2.14	1.069
	General Education	77	2.49	.553	2.42	.547
I work very hard on my homework.	Special Day Class	7	2.43	.976	2.43	.787
	General Education	76	2.62	.516	2.57	.548
I learn a lot in school.	Special Day Class	7	2.57	.535	2.71	.488
	General Education	76	2.72	.479	2.75	.438
I pay attention in class.	Special Day Class	7	2.57	.535	2.86	.378
	General Education	77	2.38	.563	2.49	.503
I like the other kids in my class.	Special Day Class	7	2.57	.787	2.29	.756
	General Education	76	2.53	.528	2.38	.541
I feel comfortable talking in class.	Special Day Class	7	2.57	.787	1.83	.983
	General Education	77	2.13	.848	2.43	.619
I like to do art in school.	Special Day Class	7	3.00	.000	2.43	.787
	General Education	77	2.62	.586	2.68	.594
I like to hear what people think of my school work.	Special Day Class	7	2.29	.951	2.57	.535
	General Education	76	2.21	.618	2.10	.736
I understand the rules in my school and classroom.	Special Day Class	7	2.57	.787	2.71	.488
	General Education	76	2.80	.490	2.84	.367
I like to follow directions.	Special Day Class	7	2.71	.488	2.29	.951
	General Education	74	2.59	.521	2.55	.575
Playing theater games.	Special Day Class	7	2.14	.690	2.43	.535
	General Education	74	2.09	.686	2.23	.606
Making up new dance moves.	Special Day Class	7	2.14	.900	2.14	.690
	General Education	75	1.67	.723	1.77	.776
Acting or performing in class.	Special Day Class	7	2.14	.378	2.14	.900
	General Education	76	1.91	.677	1.95	.776
Dancing in front of other people.	Special Day Class	7	2.43	.535	2.00	.816
	General Education	76	1.67	.755	1.68	.802
Telling stories.	Special Day Class	7	2.86	.378	2.71	.488
	General Education	76	2.17	.737	2.26	.637



Student survey illustration results

Table A4: Is there an illustration?

	Comparison pre-test	Comparison post-test	Treatment pre-test	Treatment post-test
N	100	100	275	274
Is there an illustration?	95%	92%	99%	97%

Table A5: How many people are performing?

	Comparison pre-test	Comparison post-test	Treatment pre-test	Treatment post-test
N	94	92	270	263
0	1%	2%	0%	0%
1	5%	7%	6%	3%
2 to 4	72%	73%	77%	73%
5 or more	21%	19%	16%	24%

Table A6: For those with two or more performing, what genders are represented?

Genders	Comparison pre-test	Comparison post-test	Treatment pre-test	Treatment post-test
N	89	84	250	256
All same gender	43%	46%	46%	43%
Mixed gender	20%	12%	20%	18%
Cannot tell	37%	42%	34%	40%

Table A7: Does the illustration include other people?

	Comparison pre-test	Comparison post-test	Treatment pre-test	Treatment post-test
N	95	92	272	266
Teacher	1%	3%	3%	3%
Audience	4%	3%	9%	8%
Other, but cannot tell	0%	0%	0%	0%
Other	0%	1%	0%	4%

**Table A8: What type of performance is depicted in the illustration?**

	Comparison pre-test	Comparison post-test	Treatment pre-test	Treatment post-test
N	95	92	272	266
Dance	14%	13%	16%	10%
Theater	8%	8%	12%	11%
Puppetry	1%	2%	0%	0%
Singing	3%	10%	7%	3%
Musical instruments	2%	4%	4%	5%
Cannot tell	66%	64%	57%	62%
Other	4%	4%	6%	11%

Table A9: What elements of stage and stagecraft are depicted in the illustration?

	Comparison pre-test	Comparison post-test	Treatment pre-test	Treatment post-test
N	95	92	272	266
Curtains	17%	25%	20%	29%
Platform	34%	35%	39%	32%
Scenery	24%	22%	20%	16%
Scarves	2%	2%	0%	1%
Drum and/or mallet	0%	0%	3%	5%
Other props	15%	13%	15%	16%
Audience space	2%	4%	5%	2%
Music boombox/ radio notes	5%	11%	10%	7%
Craft lighting	3%	9%	6%	6%
Stagecraft microphone	6%	4%	6%	4%
Stagecraft using flies	2%	1%	3%	2%
Stage craft narration	0%	0%	1%	0%
Other	8%	11%	10%	16%

**Table A10: What performance theme elements are depicted?**

	Comparison pre-test	Comparison post-test	Treatment pre-test	Treatment post-test
N	95	92	272	266
Has title	6%	12%	9%	10%
Theme is indicated	5%	11%	11%	6%
Involves conflict	1%	1%	4%	4%
Culture	0%	0%	0%	2%

Table A11: What composition skills are included in the illustration?

	Comparison pre-test	Comparison post-test	Treatment pre-test	Treatment post-test
N	95	92	272	266
Vocalizing	23%	19%	29%	22%
Choreography	13%	14%	15%	10%
Practicing	6%	13%	11%	15%
Use of multiple levels	0%	3%	4%	4%
Use of multiple body shapes	0%	0%	1%	2%
Performers touching	8%	7%	14%	13%
Making eye contact	8%	7%	14%	13%
Use of theatre space	5%	8%	4%	3%
Details of body, face, and words associate with feeling	10%	7%	7%	8%
Smiles	5%	3%	3%	6%
Singing	1%	2%	13%	13%
Dialogue	54%	62%	63%	53%
Other	1%	8%	4%	3%

Table A12: What elements of character are depicted?

	Comparison pre-test	Comparison post-test	Treatment pre-test	Treatment post-test
N	95	92	272	266
Costume	16%	10%	11%	10%
Named Roles	2%	2%	2%	2%
Hair and Make-up	2%	0%	0%	2%
Other	3%	1%	5%	1%



Teacher Survey Results

Table A13: Teacher survey results in treatment (n = 16) and comparison (n = 8) classrooms

Survey item	Treatment v. Comparison	Pre-test Mean	Pre-test Standard Deviation	Post-test Mean	Post-test standard deviation	T-test
The performing arts have a positive impact on my students' overall classroom behavior	Treatment	5.56	1.750	7.19	2.316	0.075
	Comparison	5.25	3.105	5.88	3.044	
The performing arts have a positive impact on my students' overall attitude toward learning	Treatment	6.06	1.569	7.94	1.692	0.031
	Comparison	5.50	3.117	6.00	3.295	
I am comfortable assessing the quality of my students' dance or theater work	Treatment	5.38	2.062	7.00	1.897	0.099
	Comparison	2.88	2.295	3.50	3.024	
I am comfortable trying new techniques in the classroom	Treatment	6.38	1.668	7.88	1.147	0.073
	Comparison	5.25	2.493	5.63	2.774	
My students are respectful of their classmates	Treatment	5.88	1.708	7.50	1.633	1.000
	Comparison	7.00	1.852	8.63	.744	
My students are respectful of the adults in our school	Treatment	7.20	1.656	8.19	1.642	0.741
	Comparison	7.88	1.727	9.00	.926	
My students are rarely disruptive during class	Treatment	5.36	1.550	7.00	1.966	0.039
	Comparison	7.63	1.408	8.25	1.282	
My students rarely fight in my classroom	Treatment	7.20	2.624	8.31	2.522	0.389
	Comparison	8.88	1.458	9.50	.756	
My students care about the quality of their work	Treatment	5.69	1.702	7.93	1.335	0.003
	Comparison	7.25	1.035	8.13	.991	
My students participate in class discussions	Treatment	5.19	1.721	7.69	1.401	0.029
	Comparison	6.50	1.773	7.75	1.909	
My students are engaged learners	Treatment	5.81	1.797	8.06	1.731	0.087
	Comparison	6.75	1.389	8.00	1.690	
My students learn new information quickly	Treatment	5.25	2.408	6.75	2.543	0.136
	Comparison	6.50	2.000	7.25	2.053	
My students are reflective about their work	Treatment	4.75	1.612	6.81	1.905	0.170
	Comparison	5.75	2.053	7.00	2.726	
My students are receptive to feedback	Treatment	5.31	1.537	7.56	1.672	0.055
	Comparison	7.38	1.598	8.63	.744	



Survey item	Treatment v. Comparison	Pre-test Mean	Pre-test Standard Deviation	Post-test Mean	Post-test standard deviation	T-test
My students work well in teams	Treatment	4.94	1.843	7.38	1.928	0.086
	Comparison	5.63	1.685	7.13	2.100	
About how often is dance/creative movement used in your lesson plans?	Treatment	1.88	.957	3.19	1.642	0.253
	Comparison	2.88	2.475	3.63	2.875	
About how often is theater used in your lesson plans?	Treatment	2.63	1.360	4.19	2.198	0.744
	Comparison	3.25	1.909	4.63	2.560	
How comfortable do you feel using dance/creative movement in your classroom?	Treatment	3.69	2.442	4.88	2.187	0.396
	Comparison	3.50	1.927	4.25	2.765	
How comfortable do you feel using theater in your classroom?	Treatment	4.56	2.308	6.06	2.112	0.069
	Comparison	4.25	2.252	4.75	2.550	



Table A14: Teacher survey results on individual students from treatment (n=256) and comparison (n=99) classrooms

Survey item	Treatment v. Comparison	Pre-test Mean	Pre-test Standard Deviation	Post-test Mean	Post-test standard deviation	T-test
Approaches Problems Creatively	Treatment	6.69	2.020	7.50	1.781	0.034
	Comparison	5.97	1.849	7.09	1.896	
Adapts to new situations with ease	Treatment	6.62	1.883	7.44	1.689	0.027
	Comparison	6.22	2.023	7.33	1.874	
Respects cultural differences	Treatment	7.14	1.539	7.92	1.456	0.185
	Comparison	7.40	1.889	8.32	1.544	
Considers the pros/cons of ideas	Treatment	6.64	1.923	7.41	1.813	0.003
	Comparison	6.13	1.694	7.25	1.848	
Appreciate the work of others	Treatment	6.98	1.923	7.82	1.699	0.292
	Comparison	6.73	1.862	7.69	1.736	
Is enthusiastic about learning	Treatment	7.23	2.030	8.13	1.740	0.509
	Comparison	6.70	2.097	7.51	2.140	
Volunteers to answer questions during class	Treatment	6.38	2.221	7.34	2.017	0.474
	Comparison	5.40	2.610	6.57	2.675	
Shows comfort with expressing ideas	Treatment	6.22	2.144	7.20	1.918	0.477
	Comparison	5.74	2.188	6.60	2.351	
Stays on task	Treatment	7.04	2.177	7.84	1.892	0.938
	Comparison	6.32	2.402	7.15	2.267	
Perseveres through challenges	Treatment	7.01	2.079	7.80	1.777	0.417
	Comparison	6.33	2.000	7.29	1.930	
Displays feelings of success	Treatment	6.95	1.893	7.87	1.562	0.214
	Comparison	6.83	2.065	7.67	1.925	
Is respectful of others' ideas	Treatment	7.24	1.959	8.03	1.807	0.933
	Comparison	7.20	1.974	8.00	1.750	



Table A15: Teacher survey results for Special Day Class (n=5) and General Education classrooms (n=11) in treatment classrooms

Survey item		Pre-test Mean	Pre-test Standard Deviation	Post-test Mean	Post-test standard deviation	T-test
The performing arts have a positive impact on my students' overall classroom behavior	Special Day Class	4.60	1.517	6.20	1.789	0.961
	General Education	6.00	1.732	7.64	2.461	
The performing arts have a positive impact on my students' overall attitude toward learning	Special Day Class	5.40	1.140	6.60	1.673	0.265
	General Education	6.36	1.690	8.55	1.368	
I am comfortable assessing the quality of my students' dance or theater work	Special Day Class	5.20	2.049	6.40	1.949	0.435
	General Education	5.45	2.162	7.27	1.902	
I am comfortable trying new techniques in the classroom	Special Day Class	6.40	2.408	7.40	1.140	0.416
	General Education	6.36	1.362	8.09	1.136	
My students are respectful of their classmates	Special Day Class	5.40	2.074	7.20	1.789	0.765
	General Education	6.09	1.578	7.64	1.629	
My students are respectful of the adults in our school	Special Day Class	6.60	1.517	7.40	2.074	0.803
	General Education	7.50	1.716	8.55	1.368	
My students are rarely disruptive during class	Special Day Class	4.25	.957	5.60	1.342	0.947
	General Education	5.80	1.549	7.64	1.912	
My students rarely fight in my classroom	Special Day Class	7.20	2.588	8.00	2.345	0.627
	General Education	7.20	2.781	8.45	2.697	
My students care about the quality of their work	Special Day Class	5.20	2.168	7.20	1.483	0.534
	General Education	5.91	1.514	8.30	1.160	
My students participate in class discussions	Special Day Class	5.20	1.789	7.40	1.817	0.572
	General Education	5.18	1.779	7.82	1.250	
My students are engaged learners	Special Day Class	5.00	2.000	6.80	2.280	0.401
	General Education	6.18	1.662	8.64	1.120	
My students learn new information quickly	Special Day Class	2.80	1.304	4.20	2.280	0.824
	General Education	6.36	1.912	7.91	1.700	
My students are reflective about their work	Special Day Class	3.60	.894	5.00	1.581	0.192
	General Education	5.27	1.618	7.64	1.433	



Survey item		Pre-test Mean	Pre-test Standard Deviation	Post-test Mean	Post-test standard deviation	T-test
My students are receptive to feedback	Special Day Class	4.60	2.191	6.00	1.871	0.048
	General Education	5.64	1.120	8.27	1.009	
My students work well in teams	Special Day Class	3.40	1.517	5.20	.447	0.141
	General Education	5.64	1.567	8.36	1.433	
About how often is dance/creative movement used in your lesson plans?	Special Day Class	2.40	1.140	3.80	1.789	0.851
	General Education	1.64	.809	2.91	1.578	
About how often is theater used in your lesson plans?	Special Day Class	2.80	.837	4.00	1.414	0.476
	General Education	2.55	1.572	4.27	2.533	
How comfortable do you feel using dance/creative movement in your classroom?	Special Day Class	4.00	2.739	5.20	1.789	0.978
	General Education	3.55	2.423	4.73	2.412	
How comfortable do you feel using theater in your classroom?	Special Day Class	5.00	2.236	6.00	1.225	0.341
	General Education	4.36	2.420	6.09	2.468	



Table A16: Teacher survey results for Special Day Class (n=3) and General Education classrooms (n=5) in comparison classrooms

Survey item		Pre-test Mean	Pre-test Standard Deviation	Post-test Mean	Post-test standard deviation	T-test
The performing arts have a positive impact on my students' overall classroom behavior	Special Day Class	5.00	2.000	5.33	2.517	0.588
	General Education	5.40	3.847	6.20	3.564	
The performing arts have a positive impact on my students' overall attitude toward learning	Special Day Class	4.33	2.082	5.00	3.000	0.665
	General Education	6.20	3.633	6.60	3.647	
I am comfortable assessing the quality of my students' dance or theater work	Special Day Class	2.00	1.732	2.00	1.732	0.281
	General Education	3.40	2.608	4.40	3.435	
I am comfortable trying new techniques in the classroom	Special Day Class	5.67	4.041	5.67	4.041	0.304
	General Education	5.00	1.581	5.60	2.302	
My students are respectful of their classmates	Special Day Class	8.00	2.000	8.67	1.155	0.180
	General Education	6.40	1.673	8.60	.548	
My students are respectful of the adults in our school	Special Day Class	7.33	2.309	9.00	1.000	0.328
	General Education	8.20	1.483	9.00	1.000	
My students are rarely disruptive during class	Special Day Class	7.67	2.082	8.67	1.155	0.411
	General Education	7.60	1.140	8.00	1.414	
My students rarely fight in my classroom	Special Day Class	8.33	2.082	9.33	1.155	0.304
	General Education	9.20	1.095	9.60	.548	
My students care about the quality of their work	Special Day Class	6.67	1.528	7.67	1.155	0.702
	General Education	7.60	.548	8.40	.894	
My students participate in class discussions	Special Day Class	6.67	2.309	8.00	2.000	0.855
	General Education	6.40	1.673	7.60	2.074	
My students are engaged learners	Special Day Class	6.67	2.082	7.67	2.517	0.635
	General Education	6.80	1.095	8.20	1.304	
My students learn new information quickly	Special Day Class	4.33	1.528	5.33	2.082	0.635
	General Education	7.80	.447	8.40	.894	
My students are reflective about their work	Special Day Class	4.00	2.000	5.00	3.606	0.702
	General Education	6.80	1.304	8.20	1.304	
My students are receptive to	Special Day Class	8.33	2.082	9.00	1.000	0.244



Survey item		Pre-test Mean	Pre-test Standard Deviation	Post-test Mean	Post-test standard deviation	T-test
feedback	General Education	6.80	1.095	8.40	.548	
My students work well in teams	Special Day Class	4.67	1.528	6.00	2.646	0.804
	General Education	6.20	1.643	7.80	1.643	
About how often is dance/creative movement used in your lesson plans?	Special Day Class	2.67	1.528	3.33	2.517	0.855
	General Education	3.00	3.082	3.80	3.347	
About how often is theater used in your lesson plans?	Special Day Class	3.67	2.082	4.33	3.215	0.263
	General Education	3.00	2.000	4.80	2.490	
How comfortable do you feel using dance/creative movement in your classroom?	Special Day Class	4.00	1.000	5.00	2.000	0.674
	General Education	3.20	2.387	3.80	3.271	
How comfortable do you feel using theater in your classroom?	Special Day Class	5.33	2.517	5.33	2.517	0.160
	General Education	3.60	2.074	4.40	2.793	



Table A17: Treatment teacher survey results on individual students from Special Day Classrooms (n=18) and General Education classrooms (with inclusion students and students with no special needs; n=237)

Survey item		Pre-test Mean	Pre-test Standard Deviation	Post-test Mean	Post-test standard deviation	T-test
Approaches Problems Creatively	Special Day Class	3.29	1.649	4.83	2.007	0.001
	General Education	6.93	1.821	7.71	1.596	
Adapts to new situations with ease	Special Day Class	3.83	1.948	5.61	1.914	0.000
	General Education	6.83	1.709	7.58	1.594	
Respects cultural differences	Special Day Class	5.94	2.155	7.22	1.734	0.210
	General Education	7.23	1.452	7.97	1.426	
Considers the pros/cons of ideas	Special Day Class	3.17	1.249	4.28	2.191	0.267
	General Education	6.90	1.701	7.65	1.549	
Appreciate the work of others	Special Day Class	3.00	1.029	4.44	1.790	0.087
	General Education	7.28	1.618	8.08	1.397	
Is enthusiastic about learning	Special Day Class	3.78	2.045	5.61	2.593	0.018
	General Education	7.49	1.782	8.32	1.504	
Volunteers to answer questions during class	Special Day Class	3.00	1.940	5.33	2.990	0.006
	General Education	6.63	2.031	7.49	1.848	
Shows comfort with expressing ideas	Special Day Class	3.17	2.007	5.11	2.928	0.033
	General Education	6.45	1.977	7.36	1.730	
Stays on task	Special Day Class	3.67	2.301	5.22	2.290	0.001
	General Education	7.29	1.952	8.04	1.709	
Perseveres through challenges	Special Day Class	3.44	2.093	4.94	2.461	0.089
	General Education	7.28	1.820	8.01	1.518	
Displays feelings of success	Special Day Class	4.00	1.970	6.11	2.139	0.000
	General Education	7.18	1.696	8.00	1.432	
Is respectful of others' ideas	Special Day Class	3.11	1.367	4.44	2.064	0.152
	General Education	7.55	1.617	8.30	1.472	



Table A18: Comparison teacher survey results on individual students from Special Day Classrooms (n=11) and General Education classrooms (with inclusion students and students with no special needs; n=88)

Survey item		Pre-test Mean	Pre-test Standard Deviation	Post-test Mean	Post-test standard deviation	T-test
Approaches Problems Creatively	Special Day Class	6.27	2.412	7.18	2.562	0.440
	General Education	5.93	1.780	7.08	1.815	
Adapts to new situations with ease	Special Day Class	7.09	2.166	8.00	1.789	0.456
	General Education	6.11	1.991	7.25	1.877	
Respects cultural differences	Special Day Class	8.09	2.427	8.27	2.867	0.010
	General Education	7.32	1.810	8.33	1.319	
Considers the pros/cons of ideas	Special Day Class	5.64	2.730	6.82	2.786	0.831
	General Education	6.19	1.530	7.31	1.711	
Appreciate the work of others	Special Day Class	6.09	2.663	6.82	2.442	0.374
	General Education	6.81	1.741	7.80	1.613	
Is enthusiastic about learning	Special Day Class	6.82	3.573	6.82	3.573	0.000
	General Education	6.68	1.866	7.59	1.904	
Volunteers to answer questions during class	Special Day Class	6.00	3.376	7.45	3.110	0.473
	General Education	5.33	2.513	6.46	2.614	
Shows comfort with expressing ideas	Special Day Class	5.91	3.360	6.18	3.516	0.027
	General Education	5.72	2.023	6.65	2.187	
Stays on task	Special Day Class	6.00	3.578	6.36	3.613	0.216
	General Education	6.36	2.240	7.25	2.047	
Perseveres through challenges	Special Day Class	6.27	2.936	7.22	3.032	0.156
	General Education	6.34	1.875	7.30	1.805	
Displays feelings of success	Special Day Class	8.55	2.018	8.73	1.954	0.006
	General Education	6.61	1.979	7.54	1.891	
Is respectful of others' ideas	Special Day Class	6.91	2.737	7.36	2.541	0.188
	General Education	7.24	1.875	8.08	1.628	



Artist survey results

Table A19: Artist survey results in Special Day Class (n= 20) and General Education classrooms (with inclusion students and students with no special needs; n=173)

Survey item		Pre-test Mean	Pre-test Standard Deviation	Post-test Mean	Post-test standard deviation	T-test
Approaches Problems Creatively	Special Day Class	5.21	2.740	6.79	3.293	0.783
	General Education	6.21	1.476	7.69	1.366	
Adapts to new situations with ease	Special Day Class	4.55	2.585	6.20	3.002	0.512
	General Education	5.92	1.642	7.37	1.382	
Respects cultural differences	Special Day Class	5.71	1.829	6.47	1.807	0.972
	General Education	6.51	1.331	7.29	1.111	
Considers the pros/cons of ideas	Special Day Class	4.46	2.787	4.92	3.095	0.111
	General Education	6.37	1.428	7.34	1.190	
Appreciate the work of others	Special Day Class	4.25	2.468	6.00	2.938	0.140
	General Education	6.43	1.382	7.73	1.297	
Is enthusiastic about learning	Special Day Class	4.90	2.447	6.80	2.840	0.222
	General Education	6.45	1.705	7.94	1.512	
Volunteers to answer questions during class	Special Day Class	4.21	2.637	5.68	3.417	0.993
	General Education	6.05	1.784	7.53	1.749	
Shows comfort with expressing ideas	Special Day Class	4.53	2.632	6.21	3.084	0.897
	General Education	5.84	1.797	7.49	1.602	
Stays on task	Special Day Class	3.85	2.323	5.20	2.783	0.374
	General Education	6.17	2.036	7.23	1.734	
Perseveres through challenges	Special Day Class	3.94	2.043	5.06	2.689	0.601
	General Education	5.75	1.695	7.03	1.478	
Displays feelings of success	Special Day Class	4.55	2.564	6.10	3.323	0.662
	General Education	6.13	1.670	7.54	1.432	
Is respectful of others' ideas	Special Day Class	4.22	2.184	5.56	2.791	0.313
	General Education	6.33	1.535	7.35	1.646	



Residency observation results

Table A20: Residency observation results at beginning, mid-year and year-end (n=6) of residency

In the classroom...	Time in residency	Strongly displayed	Somewhat displayed	Somewhat not displayed	Not at all displayed	N/A
Students used vocalization to express emotion and feelings.	Beginning	33%	50%	0%	17%	0%
	Middle	0%	50%	0%	50%	0%
	End	50%	33%	17%	0%	0%
Students used facial expression to express emotion and feelings.	Beginning	33%	50%	0%	17%	0%
	Middle	17%	50%	0%	33%	0%
	End	50%	33%	17%	0%	0%
Students used body poses/gestures/movements to express emotion and feelings.	Beginning	33%	33%	0%	33%	0%
	Middle	17%	50%	0%	33%	0%
	End	50%	33%	0%	0%	17%
Students demonstrated different scales/ranges of performance (large/small movements, varied intensity, high/low space).	Beginning	17%	67%	0%	17%	0%
	Middle	20%	80%	0%	0%	0%
	End	50%	33%	0%	0%	17%
Artist gave students instruction on good audience behaviors.	Beginning	50%	33%	0%	17%	0%
	Middle	33%	33%	17%	17%	0%
	End	17%	33%	50%	0%	0%
Students displayed appropriate audience behaviors (sitting still, paying attention, etc.).	Beginning	67%	33%	0%	0%	0%
	Middle	50%	50%	0%	0%	0%
	End	50%	33%	17%	0%	0%
Artist used/taught cultural perspectives within their lesson.	Beginning	20%	20%	0%	0%	60%
	Middle	0%	0%	0%	0%	100%
	End	0%	0%	0%	0%	100%
Artist encouraged taking creative risks and making non-stereotypic choices.	Beginning	0%	17%	0%	83%	0%
	Middle	17%	0%	0%	83%	0%
	End	33%	0%	0%	33%	33%
Students took creative risks and made non-stereotypic choices.	Beginning	0%	33%	0%	67%	0%
	Middle	17%	0%	0%	83%	0%
	End	33%	0%	0%	33%	33%
Artist taught students aspects/skills of preparation (physical and vocal warm-ups, how to project, facing audience, etc.).	Beginning	33%	33%	0%	33%	0%
	Middle	0%	67%	0%	33%	0%
	End	40%	40%	0%	20%	0%
Students verbalized or demonstrated examples of the concepts being taught.	Beginning	33%	50%	0%	17%	0%
	Middle	33%	50%	0%	17%	0%
	End	100%	0%	0%	0%	0%



In the classroom...	Time in residency	Strongly displayed	Somewhat displayed	Somewhat not displayed	Not at all displayed	N/A
Artist reflected with students on the activities and lessons learned.	Beginning	33%	33%	0%	33%	0%
	Middle	17%	50%	0%	33%	0%
	End	67%	17%	0%	17%	0%
Students reflected on what worked and what could be improved in their performance.	Beginning	20%	40%	0%	40%	0%
	Middle	17%	67%	0%	17%	0%
	End	33%	33%	17%	0%	17%
Students made revisions to their work based on reflections.	Beginning	0%	33%	0%	67%	0%
	Middle	0%	67%	0%	33%	0%
	End	0%	33%	0%	50%	17%
Artist used drum, clapping, modulated voice and/or other sound cue to begin, end or change tempo of activities.	Beginning	67%	33%	0%	0%	0%
	Middle	67%	33%	0%	0%	0%
	End	83%	17%	0%	0%	0%
Artist modeled activities/movements for students.	Beginning	17%	50%	0%	33%	0%
	Middle	33%	0%	17%	50%	0%
	End	0%	83%	17%	0%	0%
Students modeled activities/movements for their peers.	Beginning	50%	33%	0%	17%	0%
	Middle	33%	67%	0%	0%	0%
	End	83%	0%	0%	0%	17%
Classroom teacher/aides helped to model lesson activities.	Beginning	17%	0%	0%	83%	0%
	Middle	0%	0%	0%	100%	0%
	End	0%	17%	0%	67%	17%
Artist connected one activity or exercise to the next to expand on the lesson being taught.	Beginning	33%	17%	0%	50%	0%
	Middle	0%	83%	0%	17%	0%
	End	33%	17%	17%	33%	0%
The artist used teaching methods appropriate to age and ability levels of students.	Beginning	33%	67%	0%	0%	0%
	Middle	50%	50%	0%	0%	0%
	End	67%	17%	0%	17%	0%
The lesson had sufficient content for the time allowed.	Beginning	17%	67%	0%	17%	0%
	Middle	50%	50%	0%	0%	0%
	End	67%	0%	0%	33%	0%
Students participated fully in group activities.	Beginning	67%	33%	0%	0%	0%
	Middle	50%	33%	17%	0%	0%
	End	100%	0%	0%	0%	0%
Students participated fully in individual activities	Beginning	67%	33%	0%	0%	0%
	Middle	50%	33%	0%	0%	17%
	End	50%	0%	0%	0%	50%



In the classroom...	Time in residency	Strongly displayed	Somewhat displayed	Somewhat not displayed	Not at all displayed	N/A
Students displayed enthusiasm through smiling, volunteering, clapping, etc.	Beginning	33%	67%	0%	0%	0%
	Middle	33%	50%	17%	0%	0%
	End	80%	20%	0%	0%	0%
Students could adapt to changing activities and tempos.	Beginning	67%	33%	0%	0%	0%
	Middle	25%	75%	0%	0%	0%
	End	50%	17%	33%	0%	0%
Students remained focused on the teaching artist throughout the lesson.	Beginning	67%	17%	0%	17%	0%
	Middle	17%	17%	33%	33%	0%
	End	33%	33%	33%	0%	0%
Students showed support for each other's work (Clapping, positive words, etc.).	Beginning	67%	0%	0%	33%	0%
	Middle	50%	50%	0%	0%	0%
	End	50%	17%	17%	0%	17%
Artist and classroom teacher showed support for students' work (clapping, positive words, etc.).	Beginning	50%	33%	0%	17%	0%
	Middle	17%	33%	17%	33%	0%
	End	33%	17%	17%	17%	17%
Artist and classroom teacher/aides worked as a team to monitor and correct student behavior.	Beginning	50%	33%	0%	17%	0%
	Middle	17%	17%	0%	67%	0%
	End	0%	33%	0%	67%	0%
The artist alone monitored and corrected class behavior.	Beginning	17%	17%	0%	67%	0%
	Middle	33%	33%	0%	33%	0%
	End	50%	0%	17%	33%	0%
The classroom teacher/aides alone monitored and corrected class behavior.	Beginning	0%	0%	0%	100%	0%
	Middle	0%	0%	0%	100%	0%
	End	0%	0%	0%	100%	0%
Artist or classroom teacher/aides gave individual instruction to students who struggled with the lesson	Beginning	50%	50%	0%	0%	0%
	Middle	33%	50%	0%	17%	0%
	End	50%	17%	0%	17%	17%

Note: Percentages may not add up to 100% due to rounding.



Table A21: Residency observation results (excluding not applicable ratings) at beginning, mid-year and year-end (n=6) of residency

In the classroom...	Time in residency	Strongly displayed	Somewhat displayed	Somewhat not displayed	Not at all displayed
Students used vocalization to express emotion and feelings.	Beginning	33%	50%	0%	17%
	Middle	0%	50%	0%	50%
	End	50%	33%	17%	0%
Students used facial expression to express emotion and feelings.	Beginning	33%	50%	0%	17%
	Middle	17%	50%	0%	33%
	End	50%	33%	17%	0%
Students used body poses/gestures/movements to express emotion and feelings.	Beginning	33%	33%	0%	33%
	Middle	17%	50%	0%	33%
	End	60%	40%	0%	0%
Students demonstrated different scales/ranges of performance (large/small movements, varied intensity, high/low space).	Beginning	17%	67%	0%	17%
	Middle	20%	80%	0%	0%
	End	60%	40%	0%	0%
Artist gave students instruction on good audience behaviors.	Beginning	50%	33%	0%	17%
	Middle	33%	33%	17%	17%
	End	17%	33%	50%	0%
Students displayed appropriate audience behaviors (sitting still, paying attention, etc.).	Beginning	67%	33%	0%	0%
	Middle	50%	50%	0%	0%
	End	50%	33%	17%	0%
Artist used/taught cultural perspectives within their lesson. ⁺	Beginning	50%	50%	0%	0%
	Middle	-	-	-	-
	End	-	-	-	-
Artist encouraged taking creative risks and making non-stereotypic choices.	Beginning	0%	17%	0%	83%
	Middle	17%	0%	0%	83%
	End	50%	0%	0%	50%
Students took creative risks and made non-stereotypic choices.	Beginning	0%	33%	0%	67%
	Middle	17%	0%	0%	83%
	End	50%	0%	0%	50%
Artist taught students aspects/skills of preparation (physical and vocal warm-ups, how to project, facing audience, etc.).	Beginning	33%	33%	0%	33%
	Middle	0%	67%	0%	33%
	End	40%	40%	0%	20%
Students verbalized or demonstrated examples of the concepts being taught.	Beginning	33%	50%	0%	17%
	Middle	33%	50%	0%	17%
	End	100%	0%	0%	0%

⁺ Using cultural perspectives within their lesson was rated as not applicable for all middle and end-of-year residency observations.



In the classroom...	Time in residency	Strongly displayed	Somewhat displayed	Somewhat not displayed	Not at all displayed
Artist reflected with students on the activities and lessons learned.	Beginning	33%	33%	0%	33%
	Middle	17%	50%	0%	33%
	End	67%	17%	0%	17%
Students reflected on what worked and what could be improved in their performance.	Beginning	20%	40%	0%	40%
	Middle	17%	67%	0%	17%
	End	40%	40%	20%	0%
Students made revisions to their work based on reflections.	Beginning	0%	33%	0%	67%
	Middle	0%	67%	0%	33%
	End	0%	40%	0%	60%
Artist used drum, clapping, modulated voice and/or other sound cue to begin, end or change tempo of activities.	Beginning	67%	33%	0%	0%
	Middle	67%	33%	0%	0%
	End	83%	17%	0%	0%
Artist modeled activities/movements for students.	Beginning	17%	50%	0%	33%
	Middle	33%	0%	17%	50%
	End	0%	83%	17%	0%
Students modeled activities/movements for their peers.	Beginning	50%	33%	0%	17%
	Middle	33%	67%	0%	0%
	End	100%	0%	0%	0%
Classroom teacher/aides helped to model lesson activities.	Beginning	17%	0%	0%	83%
	Middle	0%	0%	0%	100%
	End	0%	20%	0%	80%
Artist connected one activity or exercise to the next to expand on the lesson being taught.	Beginning	33%	17%	0%	50%
	Middle	0%	83%	0%	17%
	End	33%	17%	17%	33%
The artist used teaching methods appropriate to age and ability levels of students.	Beginning	33%	67%	0%	0%
	Middle	50%	50%	0%	0%
	End	67%	17%	0%	17%
The lesson had sufficient content for the time allowed.	Beginning	17%	67%	0%	17%
	Middle	50%	50%	0%	0%
	End	67%	0%	0%	33%
Students participated fully in group activities.	Beginning	67%	33%	0%	0%
	Middle	50%	33%	17%	0%
	End	100%	0%	0%	0%



In the classroom...	Time in residency	Strongly displayed	Somewhat displayed	Somewhat not displayed	Not at all displayed
Students participated fully in individual activities.	Beginning	67%	33%	0%	0%
	Middle	60%	40%	0%	0%
	End	100%	0%	0%	0%
Students displayed enthusiasm through smiling, volunteering, clapping, etc.	Beginning	33%	67%	0%	0%
	Middle	33%	50%	17%	0%
	End	80%	20%	0%	0%
Students could adapt to changing activities and tempos.	Beginning	67%	33%	0%	0%
	Middle	25%	75%	0%	0%
	End	50%	17%	33%	0%
Students remained focused on the teaching artist throughout the lesson.	Beginning	67%	17%	0%	17%
	Middle	17%	17%	33%	33%
	End	33%	33%	33%	0%
Students showed support for each other's work (Clapping, positive words, etc.).	Beginning	67%	0%	0%	33%
	Middle	50%	50%	0%	0%
	End	60%	20%	20%	0%
Artist and classroom teacher showed support for students' work (clapping, positive words, etc.)	Beginning	50%	33%	0%	17%
	Middle	17%	33%	17%	33%
	End	40%	20%	20%	20%
Artist and classroom teacher/aides worked as a team to monitor and correct student behavior.	Beginning	50%	33%	0%	17%
	Middle	17%	17%	0%	67%
	End	0%	33%	0%	67%
The artist alone monitored and corrected class behavior.	Beginning	17%	17%	0%	67%
	Middle	33%	33%	0%	33%
	End	50%	0%	17%	33%
The classroom teacher/aides alone monitored and corrected class behavior.	Beginning	0%	0%	0%	100%
	Middle	0%	0%	0%	100%
	End	0%	0%	0%	100%

Note: Percentages may not add up to 100% due to rounding.



California Standards Test results

Table A22: California Standards Test (CST) results in English Language Arts, by treatment and comparison classrooms

	Comparison 2009	Comparison 2010	Treatment 2009	Treatment 2010
N	102	102	229	229
Far below basic (1)	3 (3%)	3 (3%)	5 (2%)	0 (0%)
Below basic (2)	7 (7%)	4 (4%)	10 (4%)	5 (2%)
Basic (3)	27 (26%)	23 (23%)	46 (20%)	37 (16%)
Proficient (4)	26 (25%)	30 (29%)	79 (34%)	65 (28%)
Advanced (5)	39 (38%)	42 (41%)	89 (39%)	122 (53%)

Table A23: California Standards Test (CST) results in English Language Arts, by treatment and comparison classrooms

	Comparison students			Treatment students			Chi-square test
	2009	2010	Change from 2009 to 2010	2009	2010	Change from 2009 to 2010	
N	102	102	-	229	229	-	Chi-square= 0.929 ⁶ Degrees of freedom = 1 P-value = 0.335
Passing (4 or 5)	65 (64%)	72 (71%)	+7%	168 (73%)	187 (82%)	+9%	
Not passing (1, 2 or 3)	37 (36%)	30 (29%)	-7%	61 (27%)	42 (18%)	-9%	

Table A24: California Standards Test (CST) results in Mathematics, by treatment and comparison classrooms

	Comparison 2009	Comparison 2010	Treatment 2009	Treatment 2010
N	104	104	232	232
Far below basic (1)	1 (1%)	3 (3%)	0 (0%)	0 (0%)
Below basic (2)	6 (6%)	4 (4%)	6 (3%)	8 (3%)
Basic (3)	14 (13%)	23 (23%)	21 (9%)	13 (6%)
Proficient (4)	27 (26%)	30 (29%)	38 (16%)	39 (17%)
Advanced (5)	56 (54%)	42 (41%)	167 (72%)	172 (74%)

⁶ Preacher, K. J. (2001, April). Calculation for the chi-square test: An interactive calculation tool for chi-square tests of goodness of fit and independence [Computer software]. Available from <http://quantpsy.org>.



Table A25: California Standards Test (CST) results in Mathematics, by treatment and comparison classrooms

	Comparison students			Treatment students			Chi-square test
	2009	2010	Change from 2009 to 2010	2009	2010	Change from 2009 to 2010	
N	104	104	-	232	232	-	Chi-square= 0.201 ⁷ Degrees of freedom = 1 P-value = 0.654
Passing (4 or 5)	83 (80%)	84 (81%)	+1%	205 (88%)	211 (91%)	+3%	
Not passing (1, 2 or 3)	21 (20%)	20 (19%)	-1%	27 (12%)	21 (9%)	-3%	

⁷ Preacher, K. J. (2001, April). Calculation for the chi-square test: An interactive calculation tool for chi-square tests of goodness of fit and independence [Computer software]. Available from <http://quantpsy.org>.



Attendance data

Table A26: Attendance data, by treatment and comparison classrooms

	Comparison students	Treatment students
Absences per 100 school days	4.1	2.9
Tardies per 100 school days	3.0	1.3

Table A27: Attendance data, by treatment and comparison classrooms

	Comparison students	Treatment students	Chi-square test
Total number of days students were absent out of all student days	1,161	1,897	Chi-square= 85.60 ⁸ Degrees of freedom = 1
Total number of days students were not absent out of all student days	27,233	63,118	P-value = 0.000

Table A28: Attendance data, by treatment and comparison classrooms

	Comparison students	Treatment students	Chi-square test
Total number of days students were tardy out of all student days	847	837	Chi-square= 320.967 ⁹ Degrees of freedom = 1
Total number of days students were not tardy out of all student days	64,178	27,547	P-value = 0.000

⁸ Preacher, K. J. (2001, April). Calculation for the chi-square test: An interactive calculation tool for chi-square tests of goodness of fit and independence [Computer software]. Available from <http://quantpsy.org>.

⁹ Preacher, K. J. (2001, April). Calculation for the chi-square test: An interactive calculation tool for chi-square tests of goodness of fit and independence [Computer software]. Available from <http://quantpsy.org>.