Interchange Program Evaluation
Year Four Report

2011-2012 School Year

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Dr. Rekha Rajan

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INTRODUCTION

This report contains analysis, conclusions and recommendations from the fourth year of our evaluation of the Interchange program. Our first-year data collection was focused on investigating the perceptions of teachers and artists on potential program implementation and outcome variables, as we sought to isolate and define variables for continued study. In our second evaluation year, we sought to measure the most salient variables, and examined statistical and qualitative relationships between the process of partnership implementation and student/teacher outcomes. In our third year, we worked with a core group of teachers on documenting and assessing student learning in arts integrated residencies, while we continued to examine relationships among implementation and outcome variables. This past year we asked every participating teacher to assess each of their students on 11 dimensions of student learning. We then compared the student assessments with indicators of effective teacher professional development, collaboration between teachers and artists, and program implementation.

Principal methods of data collection in 2011-12 included: (a) site visits to participating schools; (b) interviews with participating teachers and artists (n = 19)\(^1\); (c) teacher surveys (n = 19), artist surveys (n = 26), and student assessments (n = 309). For the student assessments, teachers rated each of their students on 11 scales reflecting potential areas of impact determined through our prior research. Interviews were digitally recorded, transcribed and analyzed by looking for common or contradictory patterns and themes. The surveys included rating scales and open-ended questions. This report contains the statistical data from surveys and student assessments, as well as a comparative and correlation analysis.

\(^1\) Interviews were conducted by Rob Horowitz and Rekha Rajan.
LEARNING IN AND THROUGH THE ARTS

Participating teachers assessed their students on dimensions of learning in the arts, personal expression, social and personal development, and academic subjects. Overall results indicate improvement in each of these areas through participation in Interchange.

Personal Expression through the Arts

Teachers rated students’ growth in personal expression, creativity and learning in the arts. Results were very positive, with 86% to 89% of students showing improvement.²

Creativity and Expression – Student Assessments

<table>
<thead>
<tr>
<th>CREATIVITY AND EXPRESSION</th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>The student expressed himself/herself creatively and independently through participating in the Interchange residency</td>
<td>54.9%</td>
<td>32.5%</td>
<td>6.8%</td>
<td>5.5%</td>
<td>0.3%</td>
</tr>
<tr>
<td>The student demonstrated increased artistic expressive abilities through participating in the residency.</td>
<td>45.1%</td>
<td>41.2%</td>
<td>6.5%</td>
<td>5.8%</td>
<td>1.3%</td>
</tr>
<tr>
<td>The student demonstrated improvement in the arts objective of the residency.</td>
<td>61.6%</td>
<td>27.0%</td>
<td>6.2%</td>
<td>4.2%</td>
<td>1.0%</td>
</tr>
</tbody>
</table>

SA = strongly agree       A = agree       N = not sure       D = disagree       SD = strongly disagree

When aggregating positive ratings:

• 87% of students expressed themselves creatively and independently through Interchange.
• 86% of students demonstrated increased artistic expressive abilities.
• 89% of students demonstrated improvement in arts skills.

Artist ratings of student creativity and expression increased by four to eight percent in 2012.

Creativity and Expression – Artist Ratings

<table>
<thead>
<tr>
<th>EXPRESSION</th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Through the Interchange residency, students expressed themselves creatively and independently.</td>
<td>73.1%</td>
<td>26.9%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Through Interchange, students developed and expressed ideas that were important to them.</td>
<td>50.0%</td>
<td>38.5%</td>
<td>7.7%</td>
<td>3.8%</td>
<td>0%</td>
</tr>
<tr>
<td>Because of the Interchange residency students were more expressive.</td>
<td>64.0%</td>
<td>20.0%</td>
<td>16.0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Students developed new skills in the arts through the residency.</td>
<td>68.0%</td>
<td>24.0%</td>
<td>8.0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

SA = strongly agree       A = agree       N = not sure       D = disagree       SD = strongly disagree

² Rows may not total 100% due to rounding.
When aggregating “strongly agree” and “agree” ratings:

- 100% of artists reported that students expressed themselves creatively and independently.
- 89% of artists reported that students developed and expressed ideas that were important to them.
- 84% of artists reported that their students were more expressive.
- 92% of teachers reported that their students developed new skills in the arts through the residencies.

The integration of arts activities engaged students by presenting a new format for learning. Students were invited to wiggle, move, model, act, and imitate during activities. Arts learning was interactive which made the experiences memorable and meaningful for children.

_I think dance is universal. It’s not like when I teach math, or when I teach science, especially at a little age. These kids don’t [usually] get to take dance class. This is their time. They loved it._ – Teacher

_They modeled and did a lot of acting. The kids really enjoyed it. They learned a lot. They were able to place all of the continents on the map afterwards. They were able to look at a blank map, and be able to tell where the continents were._ – Teacher

**Social and Personal Development**

The Interchange program supported growth in students’ social and personal development. Students were more engaged, and demonstrated increased self-confidence and collaborative skills. Artist ratings of students’ social and personal development increased in 2012.

**Social and Personal Development – Student Assessments**

<table>
<thead>
<tr>
<th>SOCIAL AND PERSONAL DEVELOPMENT</th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>The student was more engaged and motivated to participate in class activities through participating in the Interchange residency.</td>
<td>52.3%</td>
<td>29.2%</td>
<td>8.8%</td>
<td>8.8%</td>
<td>1.0%</td>
</tr>
<tr>
<td>The student demonstrated increased self-confidence or an ability to take positive risks through participating in the Interchange residency.</td>
<td>48.7%</td>
<td>36.0%</td>
<td>10.4%</td>
<td>4.2%</td>
<td>0.6%</td>
</tr>
<tr>
<td>The student demonstrated increased collaborative and cooperative learning skills through participating in the Interchange residency.</td>
<td>42.3%</td>
<td>37.1%</td>
<td>12.1%</td>
<td>7.8%</td>
<td>0.7%</td>
</tr>
<tr>
<td>The student demonstrated increased ability to persevere and stay on task through participating in the Interchange residency.</td>
<td>36.7%</td>
<td>45.8%</td>
<td>6.8%</td>
<td>10.1%</td>
<td>0.6%</td>
</tr>
<tr>
<td>The student demonstrated increased ability to focus through participating in the Interchange residency.</td>
<td>39.0%</td>
<td>39.9%</td>
<td>13.0%</td>
<td>7.1%</td>
<td>1.0%</td>
</tr>
</tbody>
</table>

SA = strongly agree  A = agree  N = not sure  D = disagree  SD = strongly disagree
When aggregating positive ratings:

- 82% of students were more engaged and motivated to participate in class because of their participation with Interchange.
- 85% of students gained self-confidence through Interchange.
- 79% of students gained collaborative and cooperative learning skills.
- 83% of students improved their ability to persevere and stay on task.
- 79% of students improved their ability to focus through participating in Interchange.

### Social and Personal Development – Artist Ratings

<table>
<thead>
<tr>
<th>SOCIAL AND PERSONAL DEVELOPMENT</th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students were engaged and motivated by the residency.</td>
<td>61.5%</td>
<td>30.8%</td>
<td>3.8%</td>
<td>3.8%</td>
<td>0%</td>
</tr>
<tr>
<td>The Interchange residency helped students gain self-confidence.</td>
<td>57.7%</td>
<td>34.6%</td>
<td>7.7%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>The Interchange program helped students work cooperatively.</td>
<td>38.5%</td>
<td>50.0%</td>
<td>7.7%</td>
<td>3.8%</td>
<td>0%</td>
</tr>
</tbody>
</table>

SA = strongly agree  A = agree  N = not sure  D = disagree  SD = strongly disagree

When aggregating “strongly agree” and “agree” ratings:

- 92% of artists reported that students were more engaged and motivated because of Interchange.
- 92% of artists reported that students gained self-confidence through Interchange.
- 89% of artists reported that Interchange helped students work cooperatively.

Teachers observed personal growth in their students during and after the arts-integrated activities. The artistic experiences provided children with opportunities to express themselves, connect individually with music and art, be confident, and gain self-control.

_They learned how to express themselves. They learned to be more creative. They gained confidence in themselves in that they could put words together, and make poems, and it didn’t matter if they really made sense._ – Teacher

_It was like a release. Things that they thought about they found a way to express, on paper, movement, with each other. They would move to the motions, move to the sounds, look at pictures and tell what they thought, what they saw. Just get in touch with their own bodies, their own five senses._ – Teacher
The arts provided students with a venue for exploring and sharing their feelings through self-expression.

[The artist] said, “How could we be lightning?” And [a student] was one of the first ones that got into the rhythm of the music. He was the one that leaped through the air several times when the music was going. And he was like, “I’m lightning. I’m lightning.” I actually watched him exude a lot of anger out of his body in movement. And that was one of the first times that I’ve ever seen him realize an appropriate outlet of how to let this out. That was a really big breakthrough for him. – Teacher

Some students greatly benefited from the opportunity to explore and express their ideas and feelings through the arts. They were enabled, sometimes for the first time, to fully engage in classroom activities.

I’ll tell you about this little girl. She was very quiet, and her mother asked if we could have her evaluated for special education. But when [the artist] came in with her program the little girl started opening up. It was like a flower blossoming. – Teacher

It surprised me a lot, because I had two little people who were challenged from the beginning of second grade and it helped them open up. It helped them to relax and enjoy what they were doing. They felt good about sharing and expressing themselves. – Teacher

One student has struggled a lot, and she’s starting to really get things. You can see it. She doesn’t just sit there and not do things and wait for someone to help her. She really got to work. – Teacher

Teachers observed students engaging in positive collaboration. For instance, in one residency, students danced in pairs and small groups, learned to wait, be patient and take turns, and discussed the meaning of being a part of a community. Students worked well together and took initiative to be supportive of one another.

Teachers noted that the program effectively engaged special needs students.

Some of my kids are autistic. Some of them have special needs, hearing aids, the whole nine yards. So, I was a little nervous because sometimes I have a hard time keeping them contained in my classroom. But when we started they all responded amazingly. I actually have never seen my class work together that well. – Teacher
Learning through the Arts

Interchange supported development of English language skills, as well as skills in other academic areas, such as science, math and social studies.

Learning through the Arts – Student Assessments

<table>
<thead>
<tr>
<th>ACADEMIC LEARNING</th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Interchange residency helped the student develop English language skills.</td>
<td>39.3%</td>
<td>41.6%</td>
<td>9.1%</td>
<td>9.7%</td>
<td>0.3%</td>
</tr>
<tr>
<td>The student demonstrated improvement in the academic objective of the residency.</td>
<td>55.5%</td>
<td>30.5%</td>
<td>9.1%</td>
<td>3.9%</td>
<td>1.0%</td>
</tr>
</tbody>
</table>

SA = strongly agree   A = agree   N = not sure   D = disagree   SD = strongly disagree

When aggregating positive ratings:

- 81% of students developed English language skills through Interchange.
- 86% of students demonstrated improvement in the academic objective of the Interchange residency.

Learning through the Arts – Artist Ratings

<table>
<thead>
<tr>
<th>ACADEMIC LEARNING</th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Interchange program helped students understand academic concepts.</td>
<td>53.8%</td>
<td>34.6%</td>
<td>11.5%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

SA = strongly agree   A = agree   N = not sure   D = disagree   SD = strongly disagree

When aggregating “strongly agree” and “agree” ratings:

- 88% of artists reported that Interchange helped students understand academic concepts.

Teachers observed students’ growth in their writing ability, use of descriptive language, rhyme identification, English language acquisition, and mathematics. Teachers believed that connecting academic subjects with the arts helped a majority of their students grasp abstract concepts that would have been more difficult to learn without an arts integrated approach.

Students became more confident in their ability to write.

In the beginning of the school year this child just sat quietly, no words. When it was time to write he just sat like he did not know what to write. We had to help him a little bit the first time, and then he got more confidence. At the end of school year this child just looked at the pictures and would write, write, write. – Teacher

I think they got a lot of confidence in their writing. We, unfortunately, don’t have a lot of time for writing this year with our new reading series. So it gave them a chance to write.
They were able to just be creative and use their own ideas. You see a lot of kids that struggle get to do stuff that they don’t normally get to do. So I think it builds their confidence up a whole lot. – Teacher

Well, I was really excited to see how well they latched on to different kinds of writing. We had observational, photojournalistic, and we also had a creative writing piece.
– Teacher

Poetry residencies empowered students to be creative in their application of English skills, as they expressed ideas that were important to them.

The kids who had been with [the artist] were way more prepared for poetry than the kids who had not. So, they were more excited about it, whereas all the rest of them were groaning and complaining that they had to do poetry. But the rest of them were like, “Oh, no. We love poetry.” “This is gonna be awesome.” And they were more comfortable writing poetry. Because you know, they’re 11 and 12, and a lot of kids have this block in their head, like, “I don’t know how to write a poem. I can’t write poetry. I don’t know what that is.” But the kids that we had been working with all year were there immediately. That was a huge thing. – Teacher

Arts integrated approaches helped with English language acquisition.

They can express their ideas by using the arts... Suppose you have to write a simile. That’s hard for second language people to do. But [the artist] helped them... The kids like animals so... it comes out. “I’m as loud as a lion.” – Teacher

Some students were able to make significant breakthroughs from engaging in academic subjects through the arts. The relevance of the artistic experience helped break down impediments to engaged learning.

There was a little girl in my class, and she was having a hard time with math, and [the artist] taught us about taking away something and putting it back together, and the difference between addition and subtraction. One day we were sitting in the classroom and doing simple subtraction problems. And she said, “Well, just like [the artist] taught us. We take away this, and then we only have this left because we took it away.” And I was floored. – Teacher

The residencies helped students develop literacy and language skills.

I had assessed them before, with their letter identification. There were several students that couldn’t tell me one letter out of the alphabet. But after Interchange, they were really picking up on the letters. – Teacher

The artists helped make history come alive and seem relevant to students.

They responded to it really well because what we were trying to teach them, rather than a specific set of facts, was give them a sense of the historic past. Because when I first met with my artist that was something I felt my students were really lacking. They didn’t
understand the difference between the times when their parents were kids versus their grandparents, versus hundreds of years ago when the Pilgrims were here. – Teacher

[Theater] helped because it was very interactive. They got to get up. They got to move around. Like, when they were on the Oregon Trail, we talked about how the pioneers had to work together or they couldn’t have reached their goal, so they did a human knot game. – Teacher

Teachers noticed that their students were most engaged when artists were present. Students who did not normally participate in school activities were often motivated to join in with the group. Students were focused on finishing their work and proud of their accomplishments.

They were 100 percent engaged. From the minute she walked in, until she left, they were focused on her and everything that she was trying to do. They would look at the picture that she had up on the smart board and ten minutes later they would still be finding new things in the picture that they hadn’t noticed at first. They just were excited to share the things that they had written. Every single child in my class was just completely engaged in what she was doing. – Teacher

She would say, “Write six lines”, and they would write ten lines. Just because they were really excited about what she was doing with them. – Teacher

The artists often brought a different, active, dynamic to the classroom that was engaging and that motivated students to participate.

It was really hard at first because that was a tough group. At the beginning of the year, and they weren’t really so much into doing theater stuff. But the more comfortable they got, the more into it they got, and then it started becoming really fun and something that they all looked forward to. – Teacher

When she was there, we were doing something completely out of the realm of what we would do on an everyday basis. I think that in itself was motivating to the children and then, with her personality on top of it, it just sucked them in. – Teacher
TEACHERS AND INTERCHANGE

The role of teachers continued to improve during the 2011-2012 school year. A core group of experienced teachers collaborated effectively with visiting artists, identifying learning objectives and refining the curriculum. Teachers were more likely to identify and sustain connections between the arts and other subjects.

Half of the Interchange teachers had at least 10 years of teaching experience. They averaged 14.6 years of teaching experience. Teachers had an average of 2.4 years of experience with arts integration.

### Teacher Experience

<table>
<thead>
<tr>
<th>EXPERIENCE</th>
<th>1 TO 2 YEARS</th>
<th>3 TO 5 YEARS</th>
<th>6 TO 10 YEARS</th>
<th>OVER 10 YEARS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years of teaching experience</td>
<td>16.7%</td>
<td>22.2%</td>
<td>11.1%</td>
<td>50%</td>
</tr>
<tr>
<td>Years of experience with arts integration</td>
<td>72.2%</td>
<td>16.7%</td>
<td>11.1%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Most Interchange teachers reported that they developed their ability to integrate the arts through Interchange. Ratings improved again in 2012, indicating teacher growth in applying the arts. 74% of teachers “strongly agreed” that they would continue to apply instructional approaches gained through Interchange throughout their career. 74% of teachers “strongly agreed” that they gained a new understanding of what students can accomplish through the arts.

### Teacher Professional Development – Teacher Ratings

<table>
<thead>
<tr>
<th>PROFESSIONAL DEVELOPMENT</th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have a better understanding of what it means to teach using an art form because of Interchange</td>
<td>73.7%</td>
<td>26.3%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Through the Interchange residency, I gained new insight into what children can accomplish through the arts</td>
<td>73.7%</td>
<td>26.3%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Through Interchange I’ve learned new teaching techniques or approaches that I expect to use throughout my career</td>
<td>73.7%</td>
<td>26.3%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Professional development through Interchange was effective in preparing me for the Interchange residency</td>
<td>31.6%</td>
<td>47.4%</td>
<td>15.8%</td>
<td>0%</td>
<td>5.3%</td>
</tr>
<tr>
<td>Professional development through Interchange was effective in developing my ability to integrate the arts</td>
<td>42.1%</td>
<td>47.4%</td>
<td>10.5%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

SA = strongly agree   A = agree   N = not sure   D = disagree   SD = strongly disagree
When aggregating “strongly agree” and “agree” ratings:

- 100% of teachers reported that they have a better understanding of how to teach through an art form because of Interchange.
- 100% of teachers reported they gained new insight into what children can accomplish through the arts.
- 100% of teachers reported that they learned new teaching techniques or approaches that they will continue to use.
- 79% of teachers reported that professional development through Interchange was effective in preparing them for the Interchange residency.
- 90% of teachers reported that professional development through Interchange was effective in developing their ability to integrate the arts.

Teaching artists reported that classroom teachers improved in their ability to integrate the arts.

**Teacher Professional Development – Artist Ratings**

<table>
<thead>
<tr>
<th>PROFESSIONAL DEVELOPMENT</th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>The teacher gained new skills in integrating the arts.</td>
<td>38.5%</td>
<td>38.5%</td>
<td>15.4%</td>
<td>3.8%</td>
<td>3.8%</td>
</tr>
</tbody>
</table>

SA = strongly agree       A = agree       N = not sure       D = disagree       SD = strongly disagree

When aggregating “strongly agree” and “agree” ratings:

- 77% of artists reported that teachers gained new skills in integrating the arts.
Collaboration between Teachers and Artists

Teachers responded very positively to survey items about collaboration with artists, with no negative responses. Collaboration ratings improved in 2012, indicating progress in teachers’ instructional relationship with the artists. Teachers reported that they planned effectively, participated in classroom instruction, and extended the instruction after the artist visits. These scores have steadily improved each year.

Collaboration – Teacher Ratings

<table>
<thead>
<tr>
<th>COLLABORATION</th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Interchange teaching artist and I were effective in collaboratively planning the residency.</td>
<td>89.5%</td>
<td>5.3%</td>
<td>5.3%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>I had regular and meaningful communication with the artist during the residency.</td>
<td>89.5%</td>
<td>10.5%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>The artist and I made adjustments to the residency curriculum to ensure effective instruction.</td>
<td>89.5%</td>
<td>10.5%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>I participated in classroom instruction when the artist was present in my classroom.</td>
<td>77.8%</td>
<td>22.2%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>I continued teaching the residency content between, and after, the artist visits.</td>
<td>50.0%</td>
<td>44.4%</td>
<td>5.6%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

SA = strongly agree      A = agree      N = not sure      D = disagree      SD = strongly disagree

When aggregating “strongly agree” and “agree” ratings:

- 95% of teachers reported that they effectively planned the residency with the artist.
- 100% of teachers reported that they had regular and meaningful communication with the artist.
- 100% of teachers reported that they made adjustments to the residency in collaboration with the artist.
- 100% of teachers reported that they participated in classroom instruction with the artist.
- 94% of teachers reported that they continued teaching residency content between, and after, artist visits.
A large majority of teaching artists reported effective collaboration with classroom teachers. Artists’ ratings of collaboration were approximately the same as 2011.

**Collaboration – Artist Ratings**

<table>
<thead>
<tr>
<th>COLLABORATION</th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Interchange teacher and I were effective in collaboratively planning the residency.</td>
<td>34.6%</td>
<td>50.0%</td>
<td>7.7%</td>
<td>7.7%</td>
<td>0%</td>
</tr>
<tr>
<td>I had regular and meaningful communication with the teacher during the residency.</td>
<td>19.2%</td>
<td>57.7%</td>
<td>3.8%</td>
<td>15.4%</td>
<td>3.8%</td>
</tr>
<tr>
<td>The teacher and I made adjustments to the residency curriculum to ensure effective instruction.</td>
<td>46.2%</td>
<td>50.0%</td>
<td>3.8%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>The teacher participated in classroom instruction during my visits.</td>
<td>61.5%</td>
<td>23.1%</td>
<td>0%</td>
<td>15.4%</td>
<td>0%</td>
</tr>
<tr>
<td>The teacher continued teaching the residency content between, and after, my visits.</td>
<td>23.1%</td>
<td>34.6%</td>
<td>30.8%</td>
<td>11.5%</td>
<td>0%</td>
</tr>
<tr>
<td>The classroom was set up appropriately for my visits.</td>
<td>65.4%</td>
<td>26.9%</td>
<td>0%</td>
<td>7.7%</td>
<td>0%</td>
</tr>
</tbody>
</table>

SA = strongly agree   A = agree   N = not sure   D = disagree   SD = strongly disagree

When aggregating “strongly agree” and “agree” ratings:

- 85% of artists reported that they effectively planned the residency with the teacher.
- 77% of artists reported that they had regular and meaningful communication with the teacher.
- 96% of artists reported that they made adjustments to the residency in collaboration with the teacher.
- 85% of artists reported that the teacher participated in classroom instruction.
- 58% of artists reported that teachers continued teaching residency content between, and after, their visits.
- 92% of artists reported that the classroom was set up appropriately for their visits.

Teachers enjoyed collaborating with the artists and believed that arts integration was successful because of the artists’ knowledge base and preparedness to teach. Most important to the teachers were opportunities to plan ahead and meaningfully connect the arts to academic subjects. Open communication and effective planning were essential components for successful collaborations.

[The artist] was just absolutely wonderful and I hope I get to work with her again. She used music and associated it with weather, and then related it to our emotions, and our feelings, and how to express ourselves. Once we got them to the proper environment, oh, my goodness. – Teacher
I met with them before the residency to plan, which was very helpful to me because I knew that there were some things that I was going to need some support with, and that worked out very well. – Artist

Arts Integration in the Classroom

Almost all teachers used arts integrated teaching strategies at least once a week (95%).

<table>
<thead>
<tr>
<th>Frequency of Arts Integration by Participating Teachers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Less Than Twice a Month</td>
<td>0%</td>
</tr>
<tr>
<td>At Least Twice a Month</td>
<td>5.3%</td>
</tr>
<tr>
<td>At Least Once a Week</td>
<td>73.7%</td>
</tr>
<tr>
<td>Almost Daily</td>
<td>21.1%</td>
</tr>
</tbody>
</table>

Almost all teachers reported that Interchange helped them integrate the arts (95%).

<table>
<thead>
<tr>
<th>ARTS INTEGRATION</th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Interchange residency helped me integrate the arts into my classroom.</td>
<td>63.2%</td>
<td>31.6%</td>
<td>5.3%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>The Interchange residency helped me teach academic subjects in new and productive ways.</td>
<td>57.9%</td>
<td>36.8%</td>
<td>5.3%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

When aggregating “strongly agree” and “agree” ratings:

- 95% of teachers reported that the Interchange residency helped them integrate the arts into their classroom.
- 95% of teachers reported that the Interchange residency helped them teach academic subjects in new and productive ways.

Teacher Buy-In and Support

We asked teachers to identify the most valuable components of the Interchange residencies. Teachers valued the program’s impact on student learning in the arts, their collaboration with the artists, and the opportunity for their own professional development.

Teacher Survey Question: What was the most valuable component of the Interchange residency?

Teachers valued the opportunities that the residencies offered for student learning in the arts and other academic areas, for self-expression, and for social and personal development.
• The students heightened their personal confidence. They seemed to be able to stand up in front of a group and speak more effectively. They learned all about Shakespeare (researched on computer). They felt special because of this residency.
• Students learned to express themselves better in writing by integrating arts and poetry. Students gained self-confidence. Other students wanted to know if they could participate in the program next year.
• This year the children increased their skill level and their ability to express themselves in their writings and orally while in the authors chair.
• The excitement and enthusiasm our students gained during the program is priceless. Seeing some of my students’ confidence grow is worth every minute of the program.
• Gets kids excited about writing in a more creative way.
• It allowed students to create their own poems through their senses while using the poetry tools (similes, metaphors, onomatopoeia, and personification).
• My students’ growth academically with letter recognition. The students had fun while learning new concepts.
• It provided the children wonderful opportunities for movement and free expression. It reminded me to continue to incorporate more movement activities paired with academic concepts to better engage children in their learning.

Teachers valued their collaboration with the visiting artists. They appreciated the artists’ ability to engage their students with their energy and authentic connection to the arts and academic curriculum.

• Our teaching artist did an amazing job engaging and interacting with my students. They were so engaged and invested in our residency!
• The opportunity to work with an artist with such care and energy for the students.
• Having an “authentic” musician working with our students.
• It taught me new ways to add art, specifically dance, into my classroom to aid academics.

Teachers voiced strong support for Interchange. They believed that the arts integrated approaches were uniquely engaging for their students and facilitated learning, both in and through the arts. Throughout observing students in their residencies, teachers noted growth in their student’s personal and social development, and learning in the arts and other academic subjects.

_It was wonderful. The children were as anxious to meet her every week as I was. They had a chance to exercise their imagination and creativity. They got to loosen up, move around, and put down on paper some things that they probably would not have had an opportunity to do had it not been for that program._ – Teacher

_The kids really, really like it. It opened up their eyes to a lot of new things from her own experiences that they were totally interested in._ – Teacher
Teachers described how the residencies helped them understand how to better motivate and engage their students. Some teachers incorporated new instructional techniques that they learned from the artists.

*I used almost everything she did with me, and it’s really helped me a lot. I think it’s authentic.* – Teacher

*It was incredible. I found that you can go farther outside the box then I really thought you could with second graders.* – Teacher

### Challenges for Teachers

**Teacher Survey Question: What was most challenging about the Interchange residency?**

We asked teachers to identify challenges to Interchange implementation. Some teachers struggled to balance scheduling, planning and implementing all of the program’s activities. Other teachers needed to adjust the pacing or content of the residency curriculum to more effectively engage their students. Teachers also mentioned their preference for longer residencies or sessions. Some teachers responded positively, endorsing the effectiveness of the program.

- It is difficult at times to remain on track to fulfill all goals and plans of the residency, especially when those goals are so ambitious (we have generated a lot of great ideas). It may help (and we did much better this year) to more concretely plan session to session plans.
- The most challenging was getting the students to complete the academic writing tasks.
- The younger students were sometimes not able to continue because of their attention span. Dividing the groups helped us.
- Running short of time was the biggest challenge. But the artists and staff were flexible and trying to work with this problem.
- We alternated weeks. I don’t think that model worked well. Next year we’re planning to go back to 1 full semester poetry and 1 full semester art.
- This year we learned that the children had a difficult time when trying to follow multiple step directions.
- I would like to see the program last longer than 10 weeks (like all year).
- Not enough time each session.
- We had not one problem. I believe [the artist] was the best thing that could have happened to our class.
- I had an excellent experience.
- The program is outstanding
SCHOOLS AND INTERCHANGE

Interchange helped improve teachers’ ability to engage students through authentic arts integrated instruction. Ratings on student relations increased in 2012.

**Teachers-Student Relations**

<table>
<thead>
<tr>
<th>Working with Interchange has improved my relationship with my students.</th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>47.4%</td>
<td>31.6%</td>
<td>15.8%</td>
<td>5.3%</td>
<td>0%</td>
</tr>
</tbody>
</table>

**School Leadership**

<table>
<thead>
<tr>
<th>SCHOOL LEADERSHIP</th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our school administration strongly supports the arts.</td>
<td>68.4%</td>
<td>26.3%</td>
<td>5.3%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Our school administration strongly supports our participation in Interchange.</td>
<td>68.4%</td>
<td>31.6%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

When aggregating “strongly agree” and “agree” ratings:

- 79% of teachers reported that Interchange improved relationships between teachers and students.

Almost all teachers reported that their administration supports the arts and their participation with Interchange. Ratings on school leadership were higher than in 2011 and have increased each year.

**PROGRAM IMPLEMENTATION**

The implementation of the Interchange program continued to improve in 2011-2012. Interchange staff was effective in planning curriculum with teachers and artists, and communicating schedules and expectations.
Teachers and artists responded positively to survey items about program implementation. They believed that Interchange clearly communicated schedules and expectations and felt they had received adequate support for the residencies. Teachers’ responses improved in 2012.

Program Implementation – Teacher Ratings

<table>
<thead>
<tr>
<th>PROGRAM IMPLEMENTATION</th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interchange staff clearly communicated schedules and expectations for the residency.</td>
<td>78.9%</td>
<td>21.1%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>I received adequate and effective support from Interchange in planning and implementing our collaboration.</td>
<td>78.9%</td>
<td>21.1%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

SA = strongly agree  A = agree  N = not sure  D = disagree  SD = strongly disagree

When aggregating “strongly agree” and “agree” ratings:

- 100% of teachers reported that Interchange staff clearly communicated schedules and expectations.
- 100% of teachers reported that they received adequate and effective support from Interchange.

Program Implementation – Artist Ratings

<table>
<thead>
<tr>
<th>PROGRAM IMPLEMENTATION</th>
<th>SA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interchange staff clearly communicated schedules and expectations for the residency.</td>
<td>65.4%</td>
<td>34.6%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>I received adequate and effective support from Interchange in planning and implementing our collaboration.</td>
<td>69.2%</td>
<td>23.1%</td>
<td>7.7%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

SA = strongly agree  A = agree  N = not sure  D = disagree  SD = strongly disagree

- 100% of artists reported that Interchange staff clearly communicated schedules and expectations.
- 92% of artists reported that they received adequate and effective support from Interchange.

Artists felt strongly supported by Interchange staff.

- The staff is consistent in making sure I have what I need to plan and implement the residency.
- Considering that Interchange is run by a staff of two, I felt quite supported throughout this process.
- [The Interchange staff] was fantastic. I was offered both moral and instructional support, giving good ideas on how to deal with a tricky situation.
- [The staff] was there each step of the way and was very helpful.
Artists and Interchange

Artist Survey Question: What was the most valuable component of the Interchange residency?

Artists felt that teacher support, buy-in to the program, preparation and involvement was essential for making the residency a success.

- The teacher and I worked as a team during the residency. Because she made it a priority, the students saw that it was important, as well. We were able to really get to both artistic and academic concepts this way.
- The appropriately time-intensive planning meetings in the beginning with the teaching artists, classroom teacher and interchange staff member really set us up to succeed in making sure we were planning curriculum that was helpful, relevant and engaging for the students. The constant communication with our teacher was wonderful.
- The high degree of collaboration and planning with the teacher and the fact that she continued the residency work with them outside of the residency hour, in part because we'd integrated the arts learning with the content she had to teach.
- The teacher and her assistant always being there and helping the students with independent writing.
- The teacher's enthusiasm, support, and joy about poetry and the writing process. Her joy shared with students over the work they did. Her classroom management was excellent.
- Getting to work with [the teacher] again and to see how much she'd grown since last year.
- The relationship I had with the teacher and the fact that she used my tools when I wasn't there. It reinforced the work.
- I think students met the challenges because the teaching team was all on the same page in terms of the academic and arts goals, behavior management, and the social dynamics of the classroom. The support of our amazing classroom teacher was a powerful force in this residency.

The artists valued the program’s benefits for students. They noted how the activities positively impacted students’ self-confidence, self-expression, creativity and achievement.

- I found the connections that the students made between history and their own lives to be one of the most valuable components. The times during which we make connections are the times when we often take away the most.
- I loved seeing our students learn to suspend their disbelief and really invest in the imaginary circumstances we created in each lesson. We followed up each imaginary trip with a writing-based class that helped to solidify their experiences and put them in context.
- Those students who became passionate about writing.
- The students that were thrilled to participate.
- There was a real cross between the academics and the imagination and the arts. We danced the alphabet!
- I think it was really helpful for them to have more space, so being able to use the dance room was key for this residency. When we got into a good open space the kids had enough room to adequately express their emotions and interpret the music without running into one another.
- The kids saw real use of math and art in everyday life and in their future. Also, the kids who were leaders learned how to teach the kids who struggled.
Artist Survey Question: What was most challenging about the Interchange residency?

Some artists cited classroom management issues as most challenging.

- It took a lot of planning and preparation time, but it was worth it in that the students soared.
- Scheduling.
- There was one younger group in the class who was disruptive but they finally came on board towards the end.
- What was most challenging about this Interchange residency was finding conventions that would keep a class of 30 engaged for most of class. While I do think we became successful in our ability to effectively manage and create buy-in with the class, the sheer number of students was a challenge in and of itself. We discovered that partner and small group work proved challenging in terms of focus and behavior, but we didn’t want to avoid it altogether as we felt strongly about the need to put students in situations where they would hopefully experience positive growth. Finding the balance between using the structures we knew they would be successful in and pushing them to explore working and learning in situations that were more difficult for them was a challenge.
- Behavior management within this residency was a real challenge. However, it is important to note that the students showed real improvement over time.
- Not sure, it actually went pretty well.

OVERALL ANALYSIS

Average scores were calculated for each student development and teacher participation variable. Because we used a 5-point rating scale (from “strongly disagree” to “strongly agree”) average scores could range from 1 to 5. The following tables show average scores for each variable.

Student scores were highest in Creativity and Expression, followed by Social and Personal Development and increases in English Language Skills.

<table>
<thead>
<tr>
<th>Student Assessment by Category – Teacher Ratings</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creativity and Expression</td>
<td>4.34</td>
<td>.80</td>
</tr>
<tr>
<td>Social and Personal Development</td>
<td>4.16</td>
<td>.84</td>
</tr>
<tr>
<td>English Language Skills</td>
<td>4.08</td>
<td>.88</td>
</tr>
</tbody>
</table>
Artists gave the highest ratings to students’ Arts Learning, followed by Creativity and Expression. Artist ratings increased in 2012.

### Student Development – Artist Ratings

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts Learning</td>
<td>4.60</td>
<td>.65</td>
</tr>
<tr>
<td>Creativity and Expression</td>
<td>4.50</td>
<td>.60</td>
</tr>
<tr>
<td>Academic Learning</td>
<td>4.42</td>
<td>.70</td>
</tr>
<tr>
<td>Social and Personal Development</td>
<td>4.41</td>
<td>.61</td>
</tr>
</tbody>
</table>

We also obtained average scores for teacher participation variables. Teachers gave the highest ratings to Collaboration, indicating that they valued their work with the artists and thought it was effective. Ratings for Arts Integration Self-Concept and the effectiveness of Professional Development were also high. Ratings increased in 2012.

### Teacher Participation – Teacher Ratings

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaboration</td>
<td>4.76</td>
<td>.29</td>
</tr>
<tr>
<td>Arts Integration Self-Concept</td>
<td>4.55</td>
<td>.55</td>
</tr>
<tr>
<td>Professional Development</td>
<td>4.50</td>
<td>.39</td>
</tr>
</tbody>
</table>

Artists’ ratings of Collaboration and Professional Development increased in 2012, indicating that the artists observed improvements in teachers’ participation and instruction using the arts.

### Teacher Participation – Artist Ratings

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaboration</td>
<td>4.21</td>
<td>.65</td>
</tr>
<tr>
<td>Professional Development</td>
<td>4.22</td>
<td>.71</td>
</tr>
</tbody>
</table>
Comparison of Teacher Participation and Interchange Support Ratings

In 2010, teachers’ ratings of their own Collaboration and Professional Development were significantly higher than their ratings by the artists. In 2011, the scores were approximately the same, indicating more consistency in program implementation. In 2012, Collaboration and Professional Development ratings again diverged, with teachers having a higher estimation of their participation than the artists’.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaboration</td>
<td>Teacher</td>
<td>4.76</td>
</tr>
<tr>
<td></td>
<td>Artist</td>
<td>4.13</td>
</tr>
<tr>
<td>Professional Development</td>
<td>Teacher</td>
<td>4.51</td>
</tr>
<tr>
<td></td>
<td>Artist</td>
<td>4.04</td>
</tr>
<tr>
<td>Interchange Support</td>
<td>Teacher</td>
<td>4.79</td>
</tr>
<tr>
<td></td>
<td>Artist</td>
<td>4.64</td>
</tr>
</tbody>
</table>

School Participation and Interchange Support – Teacher Ratings

Teachers gave very high ratings to School Leadership and Interchange Support. Scores increased in 2012.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interchange Support</td>
<td>4.79</td>
<td>.42</td>
</tr>
<tr>
<td>School Leadership</td>
<td>4.66</td>
<td>.53</td>
</tr>
</tbody>
</table>

Interchange Support – Artist Ratings

Artists gave very high ratings for Interchange Support of their residencies.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interchange Support</td>
<td>4.63</td>
<td>.50</td>
</tr>
</tbody>
</table>

Relationships among Variables

A correlation analysis indicated that many program implementation and student outcome variables were significantly associated. This provides additional support for our conclusion that Interchange is having a positive effect on student engagement and development. The student ratings are based upon each teacher conducting an independent assessment of each of their students, providing more reliable correlation estimates than our previous analyses. However, there are still other possible explanations for the significant correlations. Some teachers may respond more positively to all rating scale items, either because they are interested in the arts,
they like the program and the staff, or through a personal bias towards positive responses. Other teachers may naturally identify with the program, due to interest or expertise, and be better partners, implementing more and noticing more effects. But at the very least, we know that those teachers who report the most successful participation in the program, and who have benefited most from professional development, also notice the most gains in student learning. It is also apparent from the data that teacher growth and the support of Interchange staff and school leadership are key elements for successful residencies.

**Correlation Analysis**

Teacher **Collaboration** ratings were significantly associated with ratings for students’ **Creativity and Expression** \((r = .60, p < .01)\), **Social and Personal Development** \((r = .52, p < .05)\), and **English Language Skills** \((r = .54, p < .05)\). This means that those teachers and artists who were most effective at collaborating also reported the most student gains in these areas.

Teacher **Professional Development** ratings were significantly associated with ratings for students’ **Creativity and Expression** \((r = .55, p < .05)\), **Social and Personal Development** \((r = .58, p < .05)\), and **English Language Skills** \((r = .49, p < .05)\). This means that those teachers who gained the most from professional development also reported the most student gains in these areas.

Teacher **Interchange Support** ratings were significantly associated with ratings for students’ **Creativity and Expression** \((r = .77, p < .01)\) and **Social and Personal Development** \((r = .67, p < .01)\). This means that those teachers and artists who benefited the most from staff support also reported the most student gains in these areas.

Teacher **School Leadership** ratings were significantly associated with ratings for students’ **Creativity and Expression** \((r = .54, p < .05)\) and **Social and Personal Development** \((r = .62, p < .01)\). This means that those teachers and artists who benefited the most from the support of the school administration also reported the most student gains in these areas.

Regression analyses indicate:

- The most significant predictor of students’ **Creativity and Expression** is **Interchange Support**.
- The most significant predictors of students’ **Social and Personal Development** are **Interchange Support** and **School Leadership**.
- The most significant predictor of students’ **English Language Skills** is effective **Collaboration** between teachers and artists.
CONCLUSION

Interchange solidified the progress it has made over the last several years. A core group of experienced teachers confidently collaborate with artists, articulating their students’ need and coordinating instruction. They are increasingly able to notice and document program effects. Interchange staff provided strong support for the residencies, matching artists and teachers, helping them refine instructional objectives, and resolving logistical and classroom issues. Students gained skills in the arts, improved English language and other academic skills, and developed social and personal competencies that should help them succeed in school. Interchange has grown considerably over the last several years, developing expertise for a sustained and effective partnership program that can enrich the St. Louis area for years to come.

Program Recommendations

• Continue to ensure adequate planning time between artists and teachers, before and during the residencies. Effective communication is essential for successful collaborations. Facilitate site-based individualized means for communication, which may vary according to different school needs and schedules.

• Develop mentoring relationships among experienced and newer Interchange teachers. Support inter-visitations, peer reviews, and facilitated conversations among Interchange teachers.

• Provide additional opportunities for Interchange teachers to share their experiences and their students’ work with other teachers in their schools, and with teachers in other schools.

• Strengthen the assessment component of the program. Develop teachers’ capacity for ongoing assessment of Interchange instruction. Development of a culture of inquiry and reflection within Interchange will help to strengthen and sustain the program.

• Work with the school districts to align Interchange instruction with district and school needs. Seek to embed Interchange within the instructional culture of the districts and schools.

• Collaborate with the schools to make the Interchange work more visible, through presentations, displays, performances by the artists, and through social media. Promote the identity of the schools as “Interchange Schools” that are part of a broader Interchange network.