Beverley Taylor Sorenson Arts Learning Program
Year 2 Implementation Evaluation 2009-2010

Technical Report December 2010

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Program Overview

This report provides an update on the findings from the Year 2 implementation evaluation of the Beverley Taylor Sorenson Arts Learning Program (BTSALP).

In March of 2008, Senate Bill 02, §§53A-17a-162 was passed, which authorized the Beverley Taylor Sorenson Elementary Arts Learning Program. Implementation began during the 2008-09 school year.

The BTSALP model includes four primary areas of focus, as illustrated in Figure 1. These foci are explained below.

Figure 1. BTSALP Model

- **Integration of Arts** core into core subject areas, as a strategy for improving the social, emotional, core academic, and arts learning of students in elementary schools.

- **Collaborative Planning** time in which arts specialists and classroom teachers collaboratively design lessons that intentionally integrate the art core standards with other core subject matter.

- **Side-by-Side Teaching**, which occurs when the arts specialist and classroom teacher conduct lessons together, blends expertise of the arts specialist in the art form and teachers in the core subject areas to improve student engagement and enhance students’ mastery of subject matter.

- **Professional Development**, as provided by Professional Development Partners (PDP) who are selected and hired by partnering universities—University of Utah, Brigham Young
University, Southern Utah University, and Utah State University—is designed to provide mentoring and on-site monthly visits in which PDPs observe classrooms and offer feedback about lessons, attend planning meetings, and provide additional resources related to arts integration. In addition, the four partner universities host regional and state level professional development meetings that provide training and resources to help schools implement the BTSALP model.

The BTSALP schools selected a primary art focus as part of their grant application. Figure 2 illustrates the distribution of the various art forms across all 53 BTSALP schools in Year 2.

Figure 2. BTSALP Schools by Art Form, Year 2

As indicated in Table 1, student demographics are similar between BTSALP schools and all schools in Utah.

Table 1. Student Demographics in BTSALP Schools Compared to All Utah Public Schools

<table>
<thead>
<tr>
<th></th>
<th>BTSALP Schools</th>
<th>All Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian</td>
<td>1.9%</td>
<td>1.8%</td>
</tr>
<tr>
<td>African American</td>
<td>1.5%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>15.2%</td>
<td>14.4%</td>
</tr>
<tr>
<td>American Indian</td>
<td>2.3%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>1.2%</td>
<td>1.6%</td>
</tr>
<tr>
<td>White</td>
<td>77.0%</td>
<td>78.7%</td>
</tr>
<tr>
<td>Unknown</td>
<td>0.9%</td>
<td>0.6%</td>
</tr>
</tbody>
</table>

Source: USOE, October 1, 2009 Enrollment

Please note that for the purposes of this evaluation, data are analyzed across implementation sites and reported at the state level. Individual schools are not identified.
Overview of Evaluation Methods

A detailed description of the evaluation methods is presented in the appendix. Here we present a brief overview of the evaluation and data collection action activities.

The multi-year evaluation of the BTSALP addresses:

- The implementation of the state-wide initiative (e.g., are schools implementing the program as intended), including professional development and mentoring;
- Key school outcomes (including student achievement);
- Policy and practice implications generated from the findings;
- How achievement for students in schools which were selected for participation in the BTSALP program compare to demographically similar students in nonparticipating schools; and
- Among BTSALP schools, how student achievement varies with the extent of program implementation.

Data collection during the second year of implementation (2009-10) included monthly activity logs, interviews, focus groups, online school survey, and analysis of student achievement data. Participation rates are listed below by data source.

**Monthly Activity Logs:**
- Art Specialists (8 months; n=358)
- PDPs (8 months; n=388)

**Interviews and Focus Groups:**
- District Arts Coordinators (n=15)
- School Administrators (n=41)
- BTS Specialists (n=39)
- Professional Development Partners (n=12)
- Classroom Teachers (n=7)

**End of Year School Survey:**
- Total (n=391)
  - Respondents represented 18 districts, 43 schools, and 1 charter school.
  - Administrators (n=30)
  - Teachers (n=343)
  - (18 respondents did not indicate their position)

A statistical analysis of student achievement in BTSALP schools was also conducted. This analysis included statistical controls for differences between schools so that the impact of BTSALP could be more clearly evaluated. It measured whether school participation in BTSALP was associated with a (1) positive or negative, (2) small or large, and (3) statistically significant or non-significant effect on student achievement. However, it does not and cannot definitively determine whether BTSALP and academic achievement are causally related.

In the following section, we provide a summary of findings across each of the four BTSALP model elements and discuss student achievement outcomes relative to BTSALP implementation.
Arts Integration

A central principle of the BTSALP model is the integration of arts with other core subjects to enhance student learning across core subjects. Year 2 findings indicate that BTSALP schools:

- **Engage in arts integrated lessons at all grade levels and across subject areas, including language arts, mathematics, science, and social studies.**
- **Vary in the perspectives and approaches to arts integration along a continuum of arts learning, both within and across schools.**
- **Continue to develop and refine arts integrated lessons through intentional planning and collaboration to increase student engagement.**

Continuum of Arts Integration Approaches

Arts integrated lessons provide students with additional pathways to learning beyond those that may otherwise be available in a non-arts integrated classroom, which provides access to core concepts and knowledge in versatile ways. Year 2 findings continue to illustrate how the BTSALP includes schools with various perspectives and approaches to arts integration along a continuum of arts learning, both within and across schools. This continuum includes both arts-integrated lessons as well as lessons focused on teaching a specific art standard and/or art mediums on their own (i.e., visual arts, music, dance, drama).

The variation in arts integration within and across schools includes the following types of approaches or emphases as reported by arts specialists, principals, PDPs, and teachers in the BTSALP schools:

- Students’ mastery of the non-art core standards (i.e., language arts, mathematics, science, and social studies) through an artistic experience or art project. (e.g., using the arts to enhance students’ understanding of core concepts).
- Students’ mastery of the art core curriculum as the priority (e.g., learning about art for arts’ sake as an important goal; art is one of the Utah state core content areas and deserves attention on its own).
- Intentional integration of art and non-art core curriculum where each discipline (e.g., academic non-art core and art core) is a priority and neither is compromised for the sake of teaching the other.
- Loosely connected arts and non-arts curriculum (e.g., singing a song about the four seasons, reading a book).
Below is a discussion with examples of the four types of approaches to arts learning.

**Learning Through the Arts**
A number of specialists describe their approach to arts integration as a collaboration with the classroom teachers to develop lessons focused on academic core subjects using the various art forms. In these schools the focus is on students’ mastery of the academic core subjects, while incorporating art core concepts as well. The arts specialists plan with the classroom teachers to determine what core concepts are the focus. Then they design lessons to supplement what is covered during regular classroom lessons. Most commonly reported was the art specialists’ role as the lesson designer, sometimes with input from the classroom teachers.

For example, a specialist explained how classroom teachers request art lessons on specific topics for which students need additional support—in this case geology:

> [The classroom teacher] gave me a core-specific topic where she felt the kids needed some serious practice. I tried really hard to utilize that and find activities that will work with that – art projects that will work with those. We did a geologic profile because the kids weren’t getting deposition of sediments and stuff, so we did that. So I try and make that like that, and work with this core, and meet with the teachers to discuss what they need. (Art Specialist, Focus Group)

Specialists and classroom teachers explained how this approach to supplementing classroom instruction with art lessons enhances students’ learning and mastery of the academic core concepts. For example, a specialist shared an incident in which the students were able to recall their learning about microorganisms that were also covered in the dance class, but had difficulty recalling the other topics that were not covered in the dance class.

> Another fun thing that happened this year was, when I went to make my video for the portfolio, I went back to a sixth grade teacher and had her videotape a little clip of what she had done with microorganisms since we danced all of that, and as she reflected back, she was kind of re-teaching for the video. The kids did not remember anything about protists ... We didn't do that. We didn't dance that one. That's why I don't know it either, but they remembered everything that we had danced, and they had forgotten the one area where we hadn't danced it. So that was kind of fun. They just looked at her and stared at her and didn't answer any questions. (Art Specialist, Focus Group)

**Arts for Arts Sake**
In some BTSALP schools, the approach to arts integration tends to be more focused on the art core curriculum than the approach described above. While arts integration is still a goal, the priority is often on the art form and ensuring that students develop mastery in the art core concepts. In many of these instances, mastery of key art core concepts is perceived as a necessary requisite before integration between the arts curriculum and core subject curriculum.
can occur. In other cases, the art form is deemed a priority as a core content area, regardless of how it is integrated. For example, a number of arts specialists made pointed comments regarding the fact that the art core is required curriculum in Utah, albeit not tested.

Often, this approach was referred to as “arts for art’s sake” approach. The following description, which was provided in a monthly activity log regarding an arts specialist’s primary responsibilities, illustrates this view:

"Prefacing all of my BTS work is an understanding I have (with myself) that children (especially in the K-3 world) need some basic drawing, painting and materials skills before any art lesson can integrate with any other curriculum area. The new art core addresses this nicely, but it is not reflected in our BTS goals. It is very difficult to have kids paint or draw within a curriculum integration context if they don't have those basic skills, which to me, are important stand-alone lessons that are pretty basic to seeing - observation skills, etc. (Art Specialist, Activity Log)"

Some art specialists discussed the need for student to master art core standards prior to combining art core standards with other subject areas. For example, an art specialist explained the importance of teaching mastery of the art form as her priority:

"Sometimes I feel like I've got to teach these kids a whole new language. I have to teach them notation. I have to teach them listening skills. Are you hearing that rhythm? In-tune singing? I mean, I feel like the myriad of skills just related to my art form is so expansive that that has to be my first priority, and it is. (Art Specialist, Focus Group)"

Again, some art specialists see this priority as a phased approach in which they focus first on students’ mastery of key concepts in the art form at the beginning of the year, then move to more integrated lessons once students have mastered the “basics,” as illustrated in the following example:

"I have found that I needed to start the year off by teaching some basic skills to all kids in all classes, because it's hard, with the time allotment, to build a lot of the skill developments specific to drawing or painting while you're also doing these integrated lessons. So, I view as part of my job integrating art into the art first, and then the kids have an understanding of some of those basic skills, and then we move into the level or the curriculum integration. (Art Specialist, Focus Group)"

**Mutual Integration of Academic and Art Core Concepts**

A third approach to arts integration is the attempt by a number of schools to design lessons that integrate the art core and other academic core subjects equally. In this approach, the art core concepts and the academic core concepts are given equal priority. This approach seems to require a somewhat heightened level of planning and deliberate/conscientious effort on the part of the art specialist in collaboration with the classroom teachers to maintain the integrity
of the core concepts in the art and academic disciplines. The following example illustrates this process:

As I was meeting with the second grade team in November, I said, "So, in December, what do second graders struggle with in the month of December?" So then they said they all seem to struggle with story sequencing. So then I went back and thought about that for a little bit, and then I came up with a lesson - an art lesson that reinforces story sequencing in four different ways. Also, the second grade art core concept is build healthy relationships while working together on a mural. So we did a great big mural, and we put assessment components in there. Like we wrote some student generated rubrics, and so I asked them, "So if we're going to work on this mural together, how can we build healthy relationships?" So they came up with “be nice, share stuff, and do your best.” So they put it in second grade language, and those were written on the board. So we tried to tie self-assessment into their rubrics, and then we - the whole second grade worked on the mural together. But the point of the mural was to reinforce the story of “Joseph Had a Little Overcoat,” which is a very good story for sequencing, but then the art projects tied to sequencing too. (Art Specialist, Focus Group)

This attempt to mutually integrate the art core and academic core concept with equal priority was observed by a number of PDPs who reported the growth in this effort in the monthly activity logs. For example, one PDP reported this as a success from a mid-year visit:

[The art specialist] is doing a great job with the students. She is very clear and detailed and the kids just love her approach. We are seeing deep integration in dance and the art form is not being sacrificed which is nice to see that she has found this balance. (PDP, Activity Log)

One of the major challenges to this approach reported by arts specialists and PDPs was the ability to balance the art and academic core integration. Specialists and PDPs reported challenges in maintaining high standards for both the art core and the other subjects during integrated lessons. The following description given by another PDP illustrates this challenge in maintaining mutual integration:

I think the thing that most of my art specialists struggled with the most was integrating the main core and then also still maintaining teaching the art core and making sure that those are balanced. I think that a lot of the teachers at times felt like they were doing so much to try to teach or to reinforce the main core concepts that they were maybe letting some of the arts core fall by the - you know, kind of you're not emphasizing it as much and maybe not focusing on it as much as they would like. I have one of my art specialists, she felt like the first year she focused on the main core way too much, so this year she made a real effort into trying to do more with the arts core, and she even had through the course of the year a handful of projects that solely focused on the arts core
and didn't tie in, and so I think that was a hard thing for them to balance. They were kind of unclear on exactly to what extent they were being asked to integrate, whether it was 100 percent integration or 80 percent of 50 percent, so I think that they struggled with that definitely. (PDP, Interview)

Entry-Level Connections

Finally, there were a number of schools in which arts integration was attempted, but the lessons tended to be somewhat superficial in nature. In this approach, simple connections between the art form and core subject areas were the extent to the integrated lessons. For example, a common art lesson was to have students draw a picture of a story they read in the regular classroom. The art specialists’ or teachers’ descriptions of these lessons did not indicate a clear focus on students’ mastery of a specific art core standard, nor a language arts core standard. The following example illustrates this type of entry-level connection:

I know our art teacher at our school will sometimes take things that the kids are reading about in like our basal reader stories, and they'll do an art project on them. They kind of reinforce what they're doing in reading during their art time. The second graders, last year they read The Tale of Two Mice, like the city mouse and the country mouse or something. And they got to make a little box apartment, and they cut it in half and they got to decorate one like a country mouse would’ve had and one like a city mouse would’ve had. And it was a really neat thing for those kids - I don't think they'll ever forget that story. And whether or not they keep their art project, I think they'll always remember doing that. (Teacher, Focus Group)

Several arts specialists highlighted the limitations of these types of entry-level connections and the importance of maintaining high standards for the integration of the art core and academic core concepts. The following description provided by art specialist illustrates this point:

Here's a loose connection. I teach the ABC song so they can sing the ABCs. What's my musical goal? I don't have a musical goal. ABCs. In that case, the art form is the handmaiden to somebody else’s curriculum. So if I run across a cute song that maybe teaches the times tables, but I don't think it's musically deep or rich or anything I want to spend time with, I'll give that song to the classroom teachers and if they choose to use it in their room, fine. But I'm not going to spend my time, my precious music teaching time, doing something that I think is superficial, just so I can say I taught the science curriculum. That's why I've ended up writing so much of my own material because I want kids to be playing instruments. I want kids to be creating and improvising. And I'm afraid there's this impression that, oh, gee, if I just do a song about water when we're studying water that I've integrated. Oh, no, no.
Despite the limitations noted above, even those who reported simple connections described the experiences as positive for students and enhanced the learning experiences and student engagement.

**School-wide Arts Integration**

While a central component of the BTSALP model is arts integration during side-by-side lessons, there are a number of schools in which arts integration is a systemic approach to instruction. This school-wide incorporation of the arts seems to have happened in several ways:

- Incorporation of arts school-wide due to BTSALP and other school-wide initiatives or individual teachers’ inclination.
- An increase in the degree to which arts are incorporated into classrooms as a result of the collaboration with the BTSALP art specialist.
- A decrease in the use of arts in regular classrooms as a result of the perception that the new arts specialist has now taken over responsibility for teaching the arts core curriculum.

In many schools, arts were already incorporated into regular classrooms, but not necessarily because of the BTSALP. In these schools arts specialists and teachers report that arts have historically been a focus schoolwide, as there was widespread recognition of the value of arts in education. For example, a principal explains their history as an “arts school.”

> [Our school] has been an arts rich school for years and years with teachers that have taken the lead on making sure arts are alive and well over these years. And so as we applied for this art grant to be implemented beginning last year, we were very grateful for the opportunity, and we were looking for someone with incredible skill and expertise to come in and work with our teachers who are also very strong in the arts. (Principal, Focus Group)

In schools, such as the one described above, arts integration has occurred because of the value placed on arts in general. In other schools, arts integration has occurred less holistically. In these schools arts integration seems to occur not because of a schoolwide focus necessarily, but rather because of the degree to which certain teachers who have an inclination or interest in the arts incorporate it into their own classrooms. In such schools, the classroom use of arts is still intermittent, and more dependent on individual teachers’ inclinations. An arts specialist explains this mixed level of arts integration in regular classrooms:

> I'm the only Arts Specialist at my school. So the other teachers that do the art in the other forms are just forms that have an interest in it and feel like they have the ability. So it's pretty patchy. Some of them do it kind of consistently when they've got some free time. Others never touch it. (Art Specialist, Focus Group)
Regardless of their history, a number of schools reported that arts integration by classroom teachers has increased as a result of the BTSALP. In these schools the specialists and teachers reported that teachers are including more arts in the classroom because they’ve observed and participated in the lessons during side-by-side sessions. This has also prompted non-arts teachers to incorporate arts, in some instances, into their own lessons independent of the arts specialist. For example, an art specialist explains how teachers have adopted some of the approaches they have learned in the arts integrated lessons:

“I’ve watched the teachers as I’ve taught these last two years, taught the arts, and I’ve watched them kind of feel a little more okay to try some of these projects that I do as opposed to just those dry cut-and-paste things. I have actually seen them take notes on what I’m doing and make an example so that they can pull it back. (Art Specialist, Focus Group)

Another art specialist explains how she encourages the classroom teachers to incorporate more arts into their own lessons, resulting in greater confidence on the part of the classroom teachers in “doing” the art lessons on their own:

“I encourage the teachers at the beginning of the year, and I told them it was my purpose to help them so they could integrate the arts more fully in their classroom. And so they do share with me when they do something. And I think it’s happening a lot more often. I just had one teacher come and show me an integration she did and it was really cool, and another one did their own mural with a social studies project that didn’t have anything to do with our lesson, that they’re just feeling more confident in doing the arts themselves, the teachers are. And so I really like that. [Laughs] And I think we’ve really improved that this year because I see the teachers feeling a lot more confident in doing that on a daily basis which is really what I hope they will do. (Art Specialist, Focus Group)

For a few schools that reported a decrease in the use of arts in regular classroom as a result of the BTSALP. In these schools teachers reported that they now have a sense of relief because the BTSALP arts specialist is in place and now has the responsibility to teach the art core curriculum. In other words, the classroom teachers are no longer responsible for covering the art core and allowed to focus solely on the academic core subjects.

“You know, our school is a Title I school, and so we have a lot of things that teachers are required to do here. I find that over time it’s almost been not really the opposite, but just I’ve noticed that the teachers rely solely on me to teach the art because they are just overwhelmed with everything, and so I’m not seeing necessarily improvement as far as teaching it on their own, without me at all, but I’ve seen a lot of improvement in the support of the arts and the way that we put together our program at the end of the year, how everybody gets invested and involved in it, and this year was wonderful. So, I do see
that kind of improvement, but as far as time spent outside of art, not so much. (Art Specialist, Focus Group)

This approach is not consistent with the intent of the BTSALP model.

Factors Influencing the Approach to Arts Integration

There were several factors that influenced the various approaches to arts integration:

- The school’s history as an arts school;
- The presence of multiple art forms in the school;
- The background and expertise of the arts specialist and classroom teachers;
- Leadership support for arts integration.

History as an Arts School

As noted above, school’s history as an “arts school” seems to have influenced the degree to which arts integration in the side-by-side model has occurred. In many instances, these were not previously Art Works for Kids Schools. For those with a history of arts initiatives and/or staffing, the transition to the side-by-side approach for arts integration was not as drastic as those without this type of history. A principal with a history of arts integration explains this transition after receiving the BTSALP grant:

I will just preface all of my comments by saying that we’re not an emerging school. This is not a new school for us. We’re 10 to 12 years into it. We have a very established program, so very little of this is brand new, I mean if anything. The whole focus of our school with the arts has always been on an integrative model. So it’s - that’s just the norm. So in the - whether that’s visual - our BTS person is a visual arts person but we also have regular dance classes one semester each and for each grade or each class and we also have K6 music. So that’s just the norm. (Principal, Focus Group)

Multiple Art Forms

Just as having a history of arts in the school seemed to increase the ability to integrate arts during side-by-side lessons, the schools that included multiple art forms also seemed more receptive to the BTSALP approach. These schools placed a priority on the arts through the support for arts specialists in multiple art forms. While the presence of multiple art forms did not necessarily mean more arts integration schoolwide, this receptiveness to the arts seemed to have influenced the BTSALP specialists’ implementation of the model, as illustrated by the following description of the support for the multiple art forms:

As far as them doing it on their own, my teachers are really supportive of coming to Dance and helping me with the side-by-side during Dance time. But we also have a Music and Art Specialist for all the grade levels. And so honestly, the teachers don’t do a lot of art in the art classrooms. And they’re really supportive. Each grade puts on their
own program every year, and so they’re in charge of that, which usually includes Music and Dance. And then - but other than that I don't think there's a ton for most - for the majority of teachers I don't think there's - at my school - a ton of art integrated into the curriculum. (Art Specialist, Focus Group)

However, others reported how the use of multiple art forms, supported by the BTSALP grant, was a strategic approach to integrate the arts schoolwide. Here a principal explains:

*It changes over time but we went after all four arts disciplines to integrate in the curriculum. Although we've gotten a Sorenson Grant and we focus on drama that’s because we can integrate dance and the visual and the music into it very nicely. So when we set things up, all the specialists combine to work on the process during a trimester and at the end of each trimester the product is what we call a town meeting would be like performances in other schools that the kids work on the scenery with a visual arts specialists and the costumes. The music teachers help write the music script and work with the kids. (Principal, Focus Group)*

**Experience and Expertise**

In addition to the history as an arts school or the inclusion of multiple art forms, the art specialists’ expertise in the non-art core subject areas, as well as the classroom teachers’ expertise in the art form, also seemed to have influenced the success with developing arts integrated lessons. For example, some specialists had been elementary classroom teachers prior to their appointment as the BTSALP arts specialists. These specialists reported greater familiarity with the academic core curriculum, leading to somewhat easier time planning with the classroom teachers to develop arts integrated lessons. In contrast, specialists with less classroom experience or less experience with certain subjects described challenges in designing arts integrated lessons focused on academic core subject areas. This challenge is illustrated in the following description taken from an end-of-year activity log:

*We also get subjects from the teachers that we have never taught before and coming up with lessons is often very time consuming and mind-boggling...the teachers are constantly looking at me when they suggest a concept that they'd like us to work with them on and they smile and say..., work your magic. If only it was that easy!*

Likewise, specialists reported that the classroom teachers who were more familiar or comfortable with the particular art form had an easier time engaging with the arts specialist to teach the arts integrated lessons. The experience of the classroom teachers with the art form was

**Leadership Support for Arts Integration**

Finally, the support from school principals to promote the importance of the arts, as well as the implementation of the BTSALP model, were reported to have considerable influence over the
success of the arts integration in the BTSALP schools. Leadership support for arts integration appeared in multiple ways. For instance, many principals stipulated expectations for arts integration and side-by-side teaching and provided for collaborative planning time to occur. For example, the leadership from the principal was described by a PDP who serves multiple BTSALP schools:

[The school] is an arts oriented school. I mean they have art permeate the school, and so it’s what we would say is an arts rich school... So all of those entities - the principal, this arts booster club, the arts group within the grade levels - all of them contribute to this really rich environment. So everybody’s playing a part, but of course, the principal is the leader. In other schools that I work in - they don’t have, the principal sets the tone. There’s no question that the principal provides the leadership. In fact, at one school where I’ve been they have complained that their principal just doesn’t provide the leadership, and therefore, the arts aren’t valued. (PDP, Interview)

Taken together, these factors indicate some of the influences on approaches to arts integration across the BTSALP schools. In addition to the approaches to arts integration, the evaluation study also gathered information about the number and types of arts integrated lessons that were reported during Year 2 of implementation, which is described below.

**Arts Integrated Lessons**

Year 2 findings indicated that the BTSALP schools engaged in arts integrated lessons at all grade levels, including lessons in language arts, mathematics, science, and social studies. They continued to develop and improve arts integrated lessons through intentional planning and collaboration.

The BTSALP specialists reported a total of **22,671 arts integrated lessons** during the 8-month data collection period, as illustrated in Figure 3.

Figure 4 shows the average number of arts integrated lessons by grade level across four subject areas. Arts are more often integrated with language arts in grades K-3 while arts are integrated more often with social studies in grades 4-6.

Figure 5 shows the average number of lessons that were integrated but not taught as a side-by-side lesson, as well as the average number of lessons that addressed only the arts core curriculum.
Figure 3. Total Number of Arts Integrated Lessons (Year 2), Art Specialist Activity Log

Source: 2009-10 Arts Specialist Activity Log, N=358

Figure 4. Average Number of Arts Integrated Lessons per Month by Subject Area (Year 2), Art Specialist Activity Log

Source: 2009-10 Arts Specialist Activity Log, N=358
Figure 5. Average Number of Integrated Lessons Not Taught Side-by-Side and Lessons Addressing Only Arts Standard per Month (Year 2), Art Specialist Activity Log

![Bar chart showing average number of integrated lessons not taught side-by-side and lessons addressing only arts standard per month by grade level.](image)

Source: 2009-10 Arts Specialist Activity Log, N=358

Figures 6-10 show the perceptions of teachers and administrators regarding the frequency students have opportunities to learn through arts integrated strategies, as reported on the end of year survey. Teachers and administrators perceive students to “almost always” have opportunities to learn the art core concepts. Although the percentage of teachers and administrators reporting opportunities for students to learn other core subject areas (language arts, mathematics, science, and social studies) “almost always” increased in Year 2, these opportunities are perceived as significantly fewer.

Figure 6. Perceptions of Students’ Opportunities to Learn Art Core Concepts (Year 1 & Year 2), End of Year Survey

![Bar chart showing perceptions of students’ opportunities to learn art core concepts.](image)

Source: 2008-09 End of Year Survey, N=245; 2009-10 End of Year Survey, N=391

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Figure 7. Perceptions of Students' Opportunities to Learn Language Arts Core Concepts through the Arts (Year 1 & Year 2), End of Year Survey

Source: 2008-09 End of Year Survey, N=245; 2009-10 End of Year Survey, N=391

Figure 8. Perceptions of Students' Opportunities to Learn Mathematics Core Concepts through the Arts (Year 1 & Year 2), End of Year Survey

Source: 2008-09 End of Year Survey, N=245; 2009-10 End of Year Survey, N=391
As indicated above, arts were integrated across subject area and grade levels. Year 2 findings also suggest that schools have continued to develop and refine their instructional approaches to integrating arts into the other core subject areas. The table below provides a summary of the most common instructional approaches used for arts integration as reported by the arts specialist in the monthly activity logs.

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### Table 2. Examples of Arts Integration Lessons

<table>
<thead>
<tr>
<th></th>
<th>Language Arts</th>
<th>Mathematics</th>
<th>Science</th>
<th>Social Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dance</strong></td>
<td>Stories from the language arts curriculum are read in connection with a dance activity</td>
<td>Math concepts addressed through movement and using the body or placing students in patterns to represent numerical concepts</td>
<td>Scientific concepts are addressed through dancing and using bodies to represent changes (e.g., the water cycle)</td>
<td>Students learn dances of other cultures</td>
</tr>
<tr>
<td><strong>Drama</strong></td>
<td>Students act out a story or use drama elements to reinforce language arts concepts (e.g., script writing for persuasive writing and performances) for fluency</td>
<td>(Limited examples) Clapping to represent the commutative property of addition</td>
<td>(Limited examples) Addressing scientific concepts with pantomimes and dramatizations</td>
<td>Dramatization of historical events through the use of puppets, pantomime and, role playing</td>
</tr>
<tr>
<td><strong>Music</strong></td>
<td>Use of lyrics in music to reinforce LA core concepts, and vocabulary</td>
<td>Connecting rhythm and beat concepts to math concepts</td>
<td>Singing songs about science concepts and representing the concepts through the instruments (sound vibration)</td>
<td>Learning/playing/singing music from other cultures and historical events</td>
</tr>
<tr>
<td><strong>Visual Arts</strong></td>
<td>Visual arts used to draw or represent language arts concepts or to illustrate a story</td>
<td>Visual representations of math concepts mostly dealing with patterns and shapes. Relationships through perspective was also addressed</td>
<td>A large number of scientific concepts are explored through variety of visual art specialists; more visual art mediums beyond just painting (e.g., use of clay and pottery)</td>
<td>Visual art depictions of other cultures, ancient cultures. History of US and Utah. Techniques of art from other cultures use of different mediums clay.</td>
</tr>
</tbody>
</table>

Source: 2009-10 Arts Specialist Activity Log, N=358
To better understand the variations in topics covered across the four art forms, we gathered information through the interviews, surveys, and activity logs about the ways in which arts integrated lessons addressed the academic core subject areas. We found the following variations and patterns:

- Some core subject areas lend themselves more readily to arts integrated lessons for certain art forms.
- Arts specialists use different strategies for deciding which topics to cover during arts integrated lessons.
- A few schools have chosen to focus on one subject area to make the most of the arts specialists time with students.

**Variations in Subjects by Art Form**

As indicated in Figures 3-5 above, there was variation in the total number and monthly average of lessons by subject area and by grade level. A number of schools reported that some topics covered are more easily integrated with certain art forms. For example, several schools reported strong connections with language arts and drama, as illustrated by the following description:

> I think it's a little bit different, contingent on which art form you're doing. For example, with drama, drama's a natural tie-in with language arts. With literature, with reading. That's a natural tie-in there. And so I can see that some more specific teach - classroom teacher, drama coach kind of can go on there. (Art Specialist, Focus Group)

This variation in subjects addressed during arts integrated lessons is presented below in Figures 12-15.

Consistent with the higher average language arts lessons per month (as reported above in Figures 3-5), Figure 12 shows relatively higher average lessons in language arts than for the other subjects shown in Figures 13-15.

Notably, drama and music specialists reported higher monthly averages for arts integrated lessons in Language Arts than visual arts and dance specialists. This seems to support the reports that certain art forms, such as drama, lend themselves to integration with other core subjects, such as language arts more easily.

Regarding mathematics, Figure 13 shows overall lower averages for mathematics than for language arts. However, music specialists reported higher monthly averages for arts integrated lessons in mathematics compared to the other art forms, particularly in the grades 3-6.

Figure 14 shows a relatively more even distribution of arts integrated lessons in science across art forms compared to the other subject areas. Further, the monthly averages by art form varied across grade levels, compared to the other subject areas where one or more art forms showed higher averages.

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Finally, with regard to social studies, Figure 15 shows that music specialists reported the highest monthly average for arts integrated lessons across all grade levels. The average number of arts integrated lessons in social studies was highest in grades 4-6.

**Figure 11. Average Number of Arts Integrated Lessons in Language Arts per Month by Art Form (Year 2), Art Specialist Activity Log**

![Bar chart showing average number of arts integrated lessons per month by art form and grade level.]

Source: 2009-10 Arts Specialist Activity Log, N=358
Figure 12. Average Number of Arts Integrated Lessons in Mathematics per Month by Art Form (Year 2), Art Specialist Activity Log

Source: 2009-10 Arts Specialist Activity Log, N=358

Figure 13. Average Number of Arts Integrated Lessons in Science per Month by Art Form (Year 2), Art Specialist Activity Log

Source: 2009-10 Arts Specialist Activity Log, N=358
As will be further addressed in the findings sections on collaborative planning and side-by-side teaching, art specialists reported differences in their approach to determining which subject areas to focus on during arts integrated lessons.

Some arts specialists have focused less on certain subjects if they determine that the subjects are already covered thoroughly in the regular classrooms. In contrast, they may focus on a particular subject as a way to augment the curriculum that might be covered less in the regular classroom. For example, the following description illustrates how the arts specialists can work with classroom teachers to augment what may not be covered as well in the regular classrooms:

One thing that was interesting to me, I’m moving to a new grade next year and I’m talking to some of the teachers. I realize they don’t really teach science, and in second grade the science is kind of like what they do in fourth grade again, but it’s not the biggest part of their core. They’re not tested. Teachers can do it - kind of they should do it, but they kind of don’t. And I was kind of concerned about that because I like teaching...
science. But as I got to hear more about the restrictions of things that I had to do as a second grade teacher versus what I do as a third grade teacher, I realized there probably wouldn’t be a whole lot of time for science. So the second grade teachers in my school - all ten of us - have kind of come together and decided we would really like to use our art time to help us with science. That we could teach concepts and ideas and things in our classrooms, and then just completely reinforce it every time we went to art. And we’d only get art like every other week maybe for 45 minutes - half an hour to 45 minutes. So we didn’t get a lot of time with our art specialist, but the time that we did have would be helping us teach core concepts and teach things that would help the kids with remembering those science concepts. (Teacher, Focus Group)

Other specialists use student data in collaboration with the classroom teachers to determine which areas students are in most need of support. This information typically comes from student assessment data or from classroom teachers’ observations of which core subject areas students have not yet mastered. The following description of how data are used to determine the focus area for arts integrated lesson illustrates this latter approach:

We’ve done a lot of work with fractions when kids are having a hard time learning fractions, or like geometric shapes, things that are really important for the students to learn if the teachers find that they’re not really learning it very well, then that’s usually when I step in. I think that’s really the only way we’ve utilized student assessment is like they would take a test in class and then if they didn’t do well then I would step in to just reinforce. (Art Specialist, Focus Group)

Finally, several schools have chosen to focus in on one subject area each year as a way to make the most of the arts integrated lessons. For example, a principal explained their progression of focus areas each year:

The first year we did visual arts side by side model with science and this year it was math. Next year it will be visual arts and language arts, integrating both together. (Principal, Focus Group)

**Summary of Arts Integration**

Year 2 findings indicated a range in the approaches that BTSALP schools use to integrate the arts into the core curriculum. This continuum of arts learning included (1) a focus on students’ mastery of the non-art core curriculum through the arts, (2) students’ mastery of the art core curriculum as the priority, (3) an intentional integration of art and non-art core curriculum where neither discipline is compromised for the sake of teaching the other, and (4) making simple connections between arts and non-arts curriculum.

Year 2 findings further revealed how schools have incorporated the arts schoolwide, not just in the side-by-side lessons, and a range of factors that seemed to have influenced the approaches

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to arts integration. These factors include the schools’ history as arts schools, the presence of multiple art forms in the schools, the background and expertise of the arts specialist and classroom teachers, the arts specialists’ access to resources and lesson plans, and the leadership in place to support arts integration.

Finally, this section provided a comprehensive overview of the types of arts integrated lessons that were reported during Year 2 implementation, including the variations in lessons by subject area, grade level, and art form. Several patterns were highlighted. For example, some core subject areas lend themselves more readily to arts integrated lessons for certain art forms, and that arts specialists use different strategies for deciding which topics to cover during arts integrated lessons.

Given these findings, we offer the following suggestions for further consideration:

- Develop clarity about the goals and purpose of arts integration, which can lead to improved role clarification and collaborative planning for side-by-side instruction.
- Develop a clearinghouse of resources for arts integration, including sample lesson plans by art form, subject area, and purpose (e.g., arts focus, subject focus, or both) to facilitate the delivery of effective arts integrated lessons and increase availability and accessibility of these lessons.
- Identify common patterns and themes across art core and academic core subjects to increase the effectiveness of the arts integrated lessons. For example, arts specialists and classroom teachers could identify common broad concepts that are similar across subjects (e.g., patterns, ratio-proportion, symmetry). These common concepts could be used at the beginning of the year to plan for arts integrated lessons throughout the year. In combination with more focused, student driven needs assessment, these could become the organizing principles for planning and implementing arts integration.
Collaborative Planning

Collaborative planning between the art specialist and the classroom teacher for arts integration is an essential element of the BTSALP model. Year 2 evaluation results indicated that BTSALP schools:

- Evolved in their use of collaborative planning.
- Increased utilization of collaborative planning to support and supplement arts integration, side-by-side teaching and arts teaching.
- Employed formal (e.g., school support) and informal processes to facilitate collaborative planning.

All art specialists are expected to collaboratively plan with other subject area teachers. Variation in how often and how long collaborative planning occurs is permitted. Year 2 results indicate that collaborative planning is a dynamic and fluid process that has developed differently based on unique circumstances at each site.

In this section, we describe (1) the evolution of the collaboration practices, including the importance of relationships in the collaborative planning process, (2) collaborative planning utilization, including purpose and frequency, and (3) the use of both formal and informal processes to collaboratively plan. Following our discussion of general use, we discuss the challenges to increased collaborative planning in BTSALP schools.

Evolution of Collaborative Planning

Collaborative planning provides an established time for the art specialists and the classroom teachers to design arts integrated lessons, including those that will be taught in side-by-side lessons. Principals, specialists, and teachers described in multiple ways the evolution of schools’ collaborative planning efforts from prior to BTSALP implementation through Years 1 and 2. For example, a principal reflects how the collaborative planning evolved at their school:

*I [got] reports back from our classroom teachers that our specialists would go in and say, “Okay, what are you teaching? So what project would you like me to work with the kids on?”... We want someone who can look at the curriculum and say, “... I could do a project with the students this way and help kind of lead the way with the ideas and with the planning,” rather than waiting for the classroom teacher to come up with it.*

(Principal, Focus Group)
Familiarity with the specialist and the program has aided collaborative planning. For instance, an arts specialist described this evolution of collaborative planning in her school as the development of mutual sharing.

*I noticed the difference in the collaboration with the teachers. The first year was just kind of - I was an island unto myself, just kind of this new entity into their lives, they didn't know how to really take me. But this year it's been very exciting. As far as collaborating and coming up with really great ideas and a more of a give and take with the teachers. So, that's been really nice.* (Art Specialist, Focus Group)

As will be highlighted in the discussion of informal and formal approaches, BTSALP sites vary in how teachers plan for arts integration. The following response provided on the teacher end-of-year survey is illustrative of how some schools use variations of planning.

*So far our planning has involved giving [the art specialist] a list of upcoming curriculum in math, science, language, and social studies. She then comes to our collaboration meetings on Fridays to see which part of the curriculum we would like her to focus on. She usually plans the remainder of the lessons.* (Teacher, End-of-Year Survey)

**Building Relationships**

While schools are welcoming to the arts program, a certain degree of persistence is needed to increasingly engage more teachers. In part, creating buy-in is attributed to relationships, both building them and maintaining them. This also contributes to the ability of collaborative planning to evolve. To build relationships, specialists have to build rapport. Building rapport was a significant factor in efforts to increase and improve collaborative planning.

*She is a veteran there. So it’s real natural for the teachers to collaborate and just ask her and her to talk to them. I guess it’s maybe not as formal as some of the other ways that are being described but it works for our school because she has some rapport, a lot of rapport.* (Principal, Focus Group)

Another principal described their school’s art specialist’s role in increasing buy-in:

*But [our art specialist], the one we have this year, is especially expert in curriculum, designing curriculum, analyzing curriculum and helping. She has a gift with those teachers that may be available or reluctant and those teacher teams that see this as another addition to an already full plate. She has helped them and worked with them so closely that that’s a gift that she has—bringing maybe some reluctant teachers onboard—and the collaboration is a critical piece of that.* (Principal, Focus Group)

These examples underscore the importance of establishing good rapport, especially because of the interdependent nature of the work between art specialists and classroom teachers.
Collaborative Planning Utilization

Collaborative planning is recognized as an imperative to art integrations. As one principal indicated, collaborative planning is a “top priority...not only at grade level but also as a school.” Many BTSALP sites reported requirements for collaborative planning and expectations that collaborative planning for arts integration occur. Table 3 provides an overview of the opportunities currently used for collaborative planning. For instance, a district administrator describes how the collaborative planning component of BTSALP is integrated into their other efforts.

I think part of it because it is a necessary part of the program then obviously it takes place but as part of our ESL endorsement we've done a lot with collaboration, professional learning communities, peer coaching, etc. So it's just been kind of a natural and has come about naturally but I'm very grateful that it is a required component of the program because it probably wouldn't happen if it weren't even though we're doing more of that. I mean it's just - I think sometimes you have to require things. (District Administrator, Interview)

Again, a teacher reiterates how the requirement and expectation for collaborative planning is pronounced at their school and the changes from Year 1 to Year 2.

Yeah, at our school we don't have an option. It is happening, so that's probably what's the difference. So as far as I know, all the grade levels are collaborating. I think collaboration is just huge here, and so it's just not an option not to collaborate or not to integrate. So that does help; it's our best expectation I think from our principal, so I think that is going well at all the grade levels. Probably the first year a little more iffy but definitely on the second year. Definitely that planning is occurring. He's looking for that. He's looking for documentation of that happening, so that probably helps. (Teacher Focus Group)

Given the expectations about and promotion of collaborative planning, these efforts continue to evolve in practice. Participants reported that art specialists in Year 2 have increased their role as initiator for arts integration and side-by-side lessons. A principal in a focus group described the school's expansion of collaborative planning to include arts integration.

Collaborative planning is in place at our school, and it’s been in place for quite some time. The change has been, now we’re not just talking about math and reading, and kids who are struggling. You know the arts and what we’re doing in arts, and how those art concepts can help accentuate what’s happening in the regular classroom, you know, those come into conversation when we have those collaborative meetings. The music specialist is a part of each one of the grade level teams and meets collaboratively with the grade level teams. (Principal, Focus Group)
As illustrated in Figure 16, the average number of planning hours increased approximately an hour from Year 1 (4.89 hours) to Year 2 (5.61).

**Figure 15. Average Hours of Monthly Collaborative Planning for Arts Integration, Art Specialist Logs**

![Bar chart showing average collaborative planning hours](chart.png)

Source: 2008-09 Art Specialist Activity Log, N=299, 2009-10 Art Specialist Activity Log, N=358

**Figure 16. Frequency of Collaborative Planning, End of Year Survey**

![Bar chart showing frequency of collaborative planning](chart.png)

Source: 2008-09 End of Year Survey, N=245; 2009-10 End of Year Survey, N=391
Figure 17 reports the frequency of collaborative planning as indicated by school faculty and administrators. Importantly, as noted in Figure 17, the percentage of those faculty and administrators in the end-of-year survey reporting that collaborative planning occurs "almost always" increased from 12 percentage points for a change of 46% while those reporting that they "never" use collaboratively planning decreased 8 percentage points for a change of 73%.

Figure 17. Average Number of Monthly BTSALP Planning Meetings, Art Specialist Logs

As Figure 18 illustrates, the average number of monthly BTSALP collaborative planning meetings changed by 17% from Year 1 to Year 2. A majority of school faculty and administrators in Year 1 and Year 2 reported that there was "almost always" school support for collaborative planning, as indicated in Figure 19.

Figure 18. School Support for Collaborative Planning for Arts Integration, End-of-Year Survey
Table 3 provides a summary of collaborative planning opportunities that has occurred in the BTSALP schools, including examples of grade level team meetings, professional learning community meetings, arts team meetings, curriculum mapping, individual planning, and ad hoc planning.

Table 3. Collaborative Planning Opportunities

<table>
<thead>
<tr>
<th>Collaborative Planning</th>
<th>Description</th>
<th>Representative Examples</th>
</tr>
</thead>
</table>
| Grade-Level Team Meetings                  | • Specialist attends grade-level team meeting; varies by site  
• Used to promote consistency across grade levels  
• Permits focus on the curriculum concepts that are important for a particular grade level and/or subject | • ...things would change continually. And so I tried to staff three grade levels and I tried to stay doing the same with all of the third grade classes. It was too hard to do a lesson for every single one. And so I would try to do the same lesson with each, and I tried to implement something out of language arts, something out of math, something out of science, something out of social studies into every single lesson. (Specialist, Focus Group)  
• I attended two grade level team meetings [with the art specialist] this past month. In attendance at these meetings were the first grade teachers. We discussed creating drama lessons that reinforced the different vowel sounds. They asked [art specialist] to create lessons using word walls, rhyme, and pantomime to reinforce these literary elements. (PDP, Log)  
• Ours just really tries to get clear with the team what core concepts will be taught during that week. Then they plan together a way that they can – how they can incorporate a dance component into that and she goes back and prepares that lesson and teaches it. |
| Professional Learning Community (PLC) Meetings | • Plan for various grade levels and content areas  
• Specialist attends PLC meeting to engage with teachers and plan | • She attends the PLC meetings and then she collaborates with the teachers on what lessons she’s going be teaching and how that fits in with their science, or they tell her, "Okay, we’re going to be studying this” - a water cycle. We need to have you help us do a project with water cycle. (Principal, Focus Group) |
| Art Leadership Team Meetings (Note: Art Leadership Teams are a required feature of BTSALP) | • Plan for arts integration school-wide  
• Coordinate the informance and performance schedule | • Our planning is all done at the arts committee meeting and it’s just once a month but there’s a grade level representative and they bring the things that they are studying and talk about how that could be integrated… (Principal, Focus Group) |
<table>
<thead>
<tr>
<th>Collaborative Planning</th>
<th>Description</th>
<th>Representative Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>schools. The Art Leadership Team is made up of the art specialist, school administrator, teachers, and may include community members.)</td>
<td>within the school</td>
<td>…that [Arts Learning Team] also plans any performances, because that is a huge part of our program is the performance element. And, maybe the second grade might do a musical, and the fifth graders may do a Shakespeare presentation. So, that team is a major part of planning those, and then of course our big arts night. They were instrumental in planning that, what each grade would do and how it would all happen so that parents that had children in multiple grades wouldn’t miss anything, and so it became pretty intricate on - on - and that’s kind of what our - what our group does. (Principal, Focus Group)</td>
</tr>
</tbody>
</table>

| Curriculum Mapping | • Outlines a scope and sequence for the classroom over a period of time  
• Art specialist plans arts integrated lessons based on the other subject core scope and sequence. | • “[Art specialist] also has a curriculum map for each grade level, and knows what we are working on in this class. This way her art lessons are integrated with our core lessons” (Teacher, Survey).  
• But for the most part that really helped me at least kind of get a broad outline. Then what I would usually do is I would look at their curriculum and then brainstorm privately, personally, on my own time, what suggestions might fill that. I would then take that to them, and I never had a single person go, “No, let’s not do that.” It was more like, “That’s great. Let’s do that. Okay, thanks. Bye.” “Oh, that sounds nice. Oh yeah, that’s great. That’d be fun.” (Specialist, Focus Group) |

| Individual Planning | • Art specialists and other core subject area teachers plan individually for arts integrated lessons and arts lessons | • And in order to get to know all the teachers - and it seems to be the style that everyone enjoys - is I individually meet with each teacher quickly. It’s just short mini meetings that I have. I actually walk to the classrooms. We talk. I can see what’s going on inside their classroom because I’m right there on the ground with them, and they tell me what they want to study next. (Specialist, Focus Group) |

| Ad-hoc Planning | • Meetings and communication, as | • Our music specialist finds us during lunch, after school or whenever possible and requests |
Informal and Formal Collaborative Planning Approaches

BTSALP schools vary in whether they rely on informal or formal collaborative planning; many used a combination of formal and informal approaches to collaborative planning. Ultimately, elements of both formal and informal planning approaches were incorporated together to accomplish the goals of the BTSALP arts integration and side-by-side teaching.

Formal approaches to collaborative planning included structured planning time daily, weekly, or monthly. With such formal approaches, art specialists typically used existing formal planning times such as grade and/or subject level meetings, professional learning community meetings, and art leadership team meetings as well as individual planning time to engage in short-term and long-term planning.

In addition to the formal planning meetings, most specialists also relied on informal ad-hoc mechanisms, such as impromptu meetings, hallway conversations between classes, electronic communication tools such as emails and wikispaces, or meetings before or after school, to collaboratively plan for arts integration and/or side-by-side lessons. The ad-hoc planning meetings are reported as a useful and successful technique, especially given art specialists reported time restraints.

While there were overall increases in the frequency of planning reported from Year 1 to Year 2, it appears that the familiarity with the program has led some sites to increase their informal meetings as the BTSALP progressed into Year 2. As a school principals noted, “...the teachers don’t have more time to give. It takes something away from the teachers in order to do [collaborative planning]” (Principal, Focus Group). Some principals have opted to not enforce absolute requirements for collaborative planning. As one principal indicated:

    ...for me, as an administrator, it’s a battle I’ve chosen not...to force teachers to take time... so I’ve allowed it to be wherever you can and how much they will, but I haven’t come in with a heavy hand...” (Principal, Focus Group)

Others have scheduled times for collaborative planning. For instance, some schools use early-out days, PLCs, and art team meetings.
We, along with [another school] have created an early out day for an hour. Every Wednesday, it’s collaboration time, and our – from our arts specialist to our speech teachers to our resource teachers, there’s a few that work with a number of teams during that period of time. (Principal, Focus Group)

The following excerpt from a specialist log also illustrates the multiple ways in which planning occurs—in this case taking advantage of time before the school year starts, as well as throughout the year.

I did a lot of the planning for the year in August and September. A lot of the correspondence is done through email and at lunch. I use Friday afternoons (early release) to meet with grade level teams more formally to plan lessons. (Specialist, Log)

Another principal highlights the need for the formally scheduled individual and collaborative planning time.

I think the specialist is in a unique situation because there’s one of them and however many teams....You do need to provide that time for that individual to really do justice to all the groups and provide that time. (Principal, Focus Group)

While a few schools noted offering planning time prior to the beginning of school, another principal explained why it would be advantageous to have planning in the summer.

The other thing I think would help our campus is I’d like for our teachers to sit down before school starts and kind of have a broader timeline of what the school year’s going to look like. Not that we’re going to hash out every week prior to school starting but to have a better understanding of what the year as a whole is going to look like so that when we get together in those meetings we’re not starting from scratch. We have a frame of reference and a plan of action. (Principal, Focus Group)

Reportedly, the limited amount of time for collaborative planning led to restrictions on side-by-side teaching and arts integration.

So if our intent is teaching other classroom teachers the artistic instructional process then we do it because of that. If it’s - the point next to that is that you do a richer, more in depth process because two professionals are coming together and more than - I mean I think initially it’s sort of like they’re just kind of an aide, they’re just kind of there. They’ve kind of said, "Well here’s what we’re doing in our class." The specialist takes that and runs with it. But then when you get to the point that it truly - I mean like I was watching our kindergarten teachers and our music teacher and they happened to be having this instantaneous little planning session right outside my room one day. But they ended up for 15 or 20 minutes just - and it was just total interwoven, "Well we could do this, we could do this, we could - well what if we and let’s - what about." So then that whole - then your - the point of it was not to teach those classroom teachers because
they brought almost equal even artistic expertise to the setting but then it just built the depth of the instruction even higher. (Principal, Focus Group)

This comment suggests that it is not necessarily the type of planning process or structure, but rather the quality of the planning that makes the difference.

**Supplementing Instruction**

Despite the variation in frequency and type of collaborative planning, art specialists and school faculty indicate that collaborative planning offers opportunities for the arts core and subject core to supplement one another. In part, the evolution of planning in the BTSALP schools included a growing awareness of the ability of arts to supplement student learning through arts integrated instruction. During collaborative planning times, many art specialists and the core teachers discuss and share content, standards, and ideas for arts integration. Here a specialist describes the “added dimension” of arts in schools.

> And, so - so it hasn’t made it so we’re having more of it, because we already had that in place, but it adds a different dimension, because the arts have certainly become a conversation on how that can impact student learning.

In the following example, a specialist describes how their planning for an arts-integrated lesson focuses on reinforcing what is already taught in the other core subject area.

> I meet, usually weekly, with the grade level team and then I say, "Well, you know, this is on your agenda for this month," and they'll say, "Well, we haven't gotten to it yet," or "We feel the kids have a pretty good understanding of that; however, could you focus on this?" So then we narrow it down. Or sometimes they just say, "We'd just like to do something with dance this week." And so it's – you know, and then it becomes more specific. But it's usually to reinforce what they have taught but to almost re-teach. (Specialist, Focus Group)

Many specialists maintain a high degree of flexibility in their lesson planning with regard to how the arts classes supplement the regular classroom instruction, as illustrated below.

> ...I kind of just map out projects that go along with [what they are doing], and it’s really flexible and it changes a lot, and sometimes they’ll come and ask me you know, “Can you do fractions next month because kids aren’t getting it?” And then I’ll just do projects that go along with that, and the teachers help out or do the project. (Specialist, Focus Group)

The following example further illustrates this flexibility and responsiveness as a PDP discusses how a specialist is working to meet the specific needs of both teachers and students.

> [The art specialist] has motivated the teachers to trust her enough to get them to tell her what they could truly need as support for classroom curriculum...She has begun to work
very specifically on the needs the teachers express to her. I find this a change in school culture, and a very positive one. (PDP, Log)

Classroom teachers correspondingly highlighted the role of collaborative planning and the core curriculum. The following statement is illustrative of the use of collaborative planning for arts integration.

Our specialist meets with us during weekly collaboration. We discuss the Utah State Core for our grade level to determine how dance objectives can be integrated with other areas of the core curriculum. (Teacher, End-of-Year Survey)

Specialists noted that supplementing the other academic core areas has also fostered the collaborative relationships between the art specialists and classroom teachers, which was discussed above as an important factor to the success of collaborative planning.

For me anyway I mean it’s gotten to be a comfortable relationship with the teachers where they’re going to say, “See if you can find something about mammals, we’re working on that.” Or I can say to them, “Okay, generally, in language arts what are you working on?” “Okay, we’re working on action verbs.” “Great! I’ll do something within my lesson – doesn’t have to be the whole lesson even. Just a little tiny piece of it that I can touch back to what you’re working on in your room, make a connection for the kids, and have them be thinking about it twice in the day and have fun while they’re doing it.” (Specialist, Focus Group)

Importantly, teachers indicated that the collaborative planning activities, as illustrated above, helped them to develop lessons that would help students learn core concepts and support instruction of the Utah core. For example, the following discussion of planning illustrates the goal of improved student learning.

We meet with the arts teacher to plan the art that will take place during the year. We give our ideas and she gives hers. We plan specific projects that will better help children understand both art and math, science, social studies, etc. concepts which will be tested on the state CRT. (Teacher, End-of-Year Survey)

Challenges to Collaborative Planning

Some of the art specialists have taught previously in other grade and/or subject areas. As such, several were familiar and comfortable with the language arts, math, social studies, and/or science core. A few other art specialists, who did not have other teaching experiences, reported spending time becoming more acquainted with the academic core. The following example illustrates the efforts and frustrations of some art specialists for meeting expectations that the arts be integrated with all subjects in all grade levels.
...I spent hours and hours digging around and reading their core and going to the USOE site and reading that core, and then looking at my own core. And trying to come up with something that would work that would time out right, and there were some that I just felt were home runs, where you just go, “Oh my gosh, this is what it’s supposed to be.” But to be able to deliver that every single week – Not possible (Art Specialist, Focus Group)

Another specialist, who highlights the current lack of previously prepared materials, described further how limited time affects the ability of specialists to plan for integrated lessons.

There is NO text to assist in planning and creating drama lessons (let alone INTEGRATED ones), which means that HUGE amounts of time are spent creating curriculum. I am good at that, but the teaching demands are so rigorous, that preparation of suitable material is often shorted. (Specialist, Log)

In a focus group of specialists, this issue was addressed as well. Another specialist compared the nature of their role in trying to develop a range of arts integrated lessons to that of the other subject core teachers.

The classroom teacher has a wealth of curriculum materials previously developed and available to her or him that they are teaching from, and they have five or six people or two or three people with which they are collaborating on the dissemination of those materials within their classrooms. The specialist has no curriculum materials previously prepared. (Specialist, Focus group)

Importantly, art specialists are not the only ones to report difficulties with collaborative planning. A teacher describes the difficulty of expectations for collaborative planning. She notes a concern regarding the “added burden” of such an arrangement:

I thought it was the art specialist who was to plan and prepare lessons. I felt like it put added burden on us [classroom teacher] to plan and integrate with the specialist. We had to come up with the ideas, I didn't like that. (Teacher, End-of-Year Survey)

Another art specialist describes the difficulty of collaboratively planning and side-by-side teaching due to the differences in timing of content across grade levels and subjects.

There’s three different teachers there teaching three different things at three different times. They are not on the same page whatsoever, and it’s that way with probably all of my grades...honestly I cannot have something different for every single class...teachers are very, very busy and they don’t have time to sit down and help us plan what we’re going to teach. So, basically I take care of all of that. (Specialist, Focus Group)

The above examples illustrate the art specialists’ difficulty in meeting the demand to collaboratively plan with each teacher, particularly due to availability of time. In part, these difficulties were related to size and grade span of school and number of teachers. A principal
captured the struggle for many art specialists to collaborative plan due to size of school and grade spans.

...we have 30 teachers in our building, so that’s really tough for the specialist to get to every one of them and actually plan out each week what the teachers, you know, what the teacher will do during the lesson, and what the specialist will do... (Principal, Focus Group)

A DAC reiterated that size of school impacted ability of art specialists to collaborative plan. Moreover, the DAC highlighted the concern for the other academic core teacher’s planning time.

...For a specialist to try and meet the needs of a school with 1,200 kids or 800 kids is a lot different than a school with 300 kids, yet the requirements are the same. Oh, meet with all grade levels. Meet this many hours a week. Well, there's a discrepancy that does not account for school population size. So those specialists are - and I'm speaking generically - but those specialists who are in larger elementary schools are just scrambling to try and meet with those teachers. You think well, the teachers all have the planning time - collaboration time - where they're supposed to meet with the grade levels, but they can't use up all of that time for art. They still have to have that collaboration time to talk about every subject. And so that's probably the biggest thing that needs to get ironed out is the allocation of time and taking into account school population size. (DAC, Focus Group)

Specialists, principals, and teachers alike noted that the lack of available and focused time to plan collaboratively was a hindrance for arts integrated lessons. As a teacher indicated in the end-of-year survey:

Easier said than done. Trying to find time with all team level teachers and art specialist is difficult. But when it happens, the lessons are great. (Teacher, End-of-Year Survey)

Others reiterated the constraints for collaborative planning when sufficient time to do so did not exist.

It’s a great idea in theory, but the toughest thing about it is the time it takes for each teacher to do some kind of planning with the specialist on how the side-by-side is going to work. (Principal, Focus Group)

Another specialist emphasizes how time constraints restrict collaborative planning.

That’s a big burr under my saddle with the planning time and the time that we need to try to meet with each teacher. I don’t have the time available during the week to sit down with each teacher and plan out what they're going to do. What we did at the beginning of the year was I met with each team leader once a week, and we were able to do that because we could not sit down logistically with the PLCs every week. If I tried
to do that, I would be there until 6-7:00 every Wednesday, and the teachers aren’t there. (Specialist, Focus Group)

Despite the reports of time as the biggest challenge to collaborative planning, as noted in Figure 20, faculty and administrators perceived arts specialists to have adequate time for collaborative planning. Of the faculty and administrators who responded to the end-of-year survey, 61% perceived that arts specialists either “often” or “almost always” had adequate time to plan for side-by-side teaching. Comparatively, 45% of this group reported that teachers “often” or “almost always” had adequate time to plan. On the survey open-ended comments, a principal reported that adequate planning time is difficult for both art specialists and core academic teachers. “At the elementary level we are always short of time! Collaborative planning is always an issue - not just for art. [The art specialist] is also short of time especially to attend seven different grade level meetings.”

Figure 19. Perceived Adequacy of Time for Collaborative Planning for Side-by-Side Teaching, End of Year Survey

Source: 2009-10 End of Year Survey, N=391
Summary of Collaborative Planning Implementation

Year 2 findings indicate that BTSALP schools use collaborative planning to supplement the other academic core areas and further plan for arts integration with other core subject area content. Although collaborative planning in schools continues to face challenges such as sufficient availability of time, collaborative planning use was reported as higher than Year 1 and occurs with more consistency through the use of both formal and informal approaches. To date, much of the collaborative planning appears to be focused on content (e.g., fractions, rock cycle) as without attention to standards, objectives, instruction, pedagogy, and (most importantly) student learning outcomes.

Given the findings described in this section, we offer the following suggestions for further consideration.

- Clarify expectations and responsibilities for scope of collaborative planning (e.g., what should be planned and by whom).
- Provide allocated time for collaborative planning (e.g., summer).
- Increase availability and accessibility of art integrated lessons based on core subject, standards, and concepts to make planning both more efficient and productive.
- Develop and implement strategies to promote purposeful planning tied to the school’s student learning goals. This type of planning may have more impact than the current planning approaches aimed at content.
- Plan for not only content, but also how instruction will occur, what student learning outcomes are expected, and how specialists and teachers will assess those outcomes to inform practice and continuous improvement.
- Provide support and professional development on how to plan collaboratively.
Side-by-Side Teaching

A hallmark of the BTSALP is the collaboration between art specialists and classroom teachers during side-by-side teaching to integrate the arts across the curriculum. Year 2 evaluation results indicated that BTSALP schools:

- Established facilitators for side-by-side teaching.
- Continued to clarify expectations and understanding about how to conduct side-by-side teaching.
- Experienced an increase in the willingness and support of classroom teachers to engage with the arts specialists in side-by-side teaching.

In this section we describe (1) the facilitators of side-by-side teaching, (2) variations in overall configurations of side-by-side teaching (i.e., side-by-side teaching frequency and schedules), (3) the different types of roles and responsibilities of the art specialists and classroom teachers during side-by-side teaching, including the reported benefits and goals of side-by-side teaching, (4) the challenges to side-by-side teaching, and (5) the ways in which the BTSALP schools have remained flexible in their implementation of this side-by-side teaching component.

Facilitators

Principals, art specialists, and classroom teachers reported that the implementation of the side-by-side teaching was facilitated when

- Classroom teachers were more familiar or comfortable with the art form,
- The art specialist established good rapport with the classroom teachers (e.g., compatibility of teaching approaches),
- The school principal promoted and supported the side-by-side teaching approach, and
- Teachers experienced the benefits of side-by-side teaching.

Comfort with the Art Form

Art specialists and classroom teachers reported having an easier time transitioning to the side-by-side teaching approach if the classroom teacher was more comfortable with the art form. This happened by chance (e.g., some teachers happened to have experience or expertise in a certain art form) or by supportive practices that helped the classroom teachers become more comfortable engaging in the art lesson. For example, a principal explained how the differences in teacher participation levels often depended on their familiarity with or affinity for the particular art form:
Part of it, I think, is it’s a teacher comfort zone with music and those that are less comfortable find it a little harder to jump right in. So [the art specialist] has tried to find ways that those teachers can be involved. For example, she’ll do a music thing and the teacher will read the story and every couple of pages she has inserted a piece of music they’re working on. And so the teacher will be able to be involved without actually having a whole lot of musical background. So she’s gone the extra mile to try and get teachers to feel comfortable and to want to be involved more. (Principal, Focus Group)

**Rapport**

As noted above, art specialists were often successful in overcoming classroom teachers’ anxieties about participating in the side-by-side teaching sessions by starting out with smaller roles for the classroom teachers, then building up to more active participation in the lessons. Similar to building relationships for collaborative planning, this rapport-building was reported to enhance the effectiveness of the side-by-side teaching and contributed to increased levels of commitment and buy-in on the part of the classroom teachers. A number of teachers explained that the art specialist had treated them as equal partners in the side-by-side teaching endeavors, resulting in increased levels of collaboration. For example, a teacher explained how they have developed a sense of teamwork around the art program:

*Sometimes if for some reason something comes up and [the art specialist] is not able to do our art class, she'll always give us the lesson she was going to do or give us an idea. And she's really good about saying, "Hey, if you need paint come and get it." I think it's just - it really feels like we're all a part of the program and it's not just [the art specialist’s] thing, you know? I don't think it's just me, but the rapport between me and the teachers and just everyone involved is a really a positive one.*

**Principal Support**

An additional factor that was reported to have contributed to the collaborative relationships was the principals’ promotion of the side-by-side teaching approach and their commitment to establishing it schoolwide. For example, a number of principals described their increased attention to side-by-side teaching implementation in Year 2 as they saw pockets of lackluster implementation. A number of principals also described that as they hired new teachers, they discussed the side-by-side teaching arts integration goal to ensure that job candidates were aware of and committed to the goal if hired, as illustrated by the following discussion:

*When I interview teachers for job replacements, like, we have three openings this year. That’s one of our focus is, how will you integrate the arts into the core curriculum, and are they interested in arts. Because, I think you have to have total buy in from the faculty before it will ever work.* (Principal, Focus Group)
**Overall Configurations**

Side-by-side teaching has been implemented in the BTSALP schools in a variety of ways. One aspect of side-by-side teaching is the frequency with which it occurs. Another aspect of side-by-side teaching is the way in which schedules are arranged to accommodate the collaboration between the art specialists and classroom teachers across grade levels. Each of these is discussed below.

**Frequency of Side-By-Side Teaching**

The BTSALP art specialists reported a total of 16,705 hours in side-by-side teaching between October 2009 and May 2010. The average number of hours spent monthly in side-by-side teaching sessions was 48.9 (compared to 48.00 hours in Year 1). Because this is an average, the actual number of hours spent in side-by-side teaching varied widely across schools.

As indicated in Figure 21, the majority of arts specialists reported teaching side-by-side lessons three or more times per day. While the total monthly average in Year 2 was comparable to Year 1 findings, the art specialists reported a slightly higher frequency of side-by-side teaching at least one or more times a day in Year 2 compared to Year 1. Likewise, specialists reported a slightly lower frequency of teaching only once or only several times a week in Year 2 compared to Year 1.

These reports from the monthly activity logs suggest that there was not necessarily an increase in total hours of side-by-side teaching, but rather a small but relatively greater frequency of daily side-by-side teaching compared to weekly or less often.

**Figure 20. Frequency of Side-by-Side Teaching, Art Specialist Activity Log**

![Frequency of Side-by-Side Teaching](chart.png)

Source: 2008-09 Specialist Activity Log, N=299; 2009-10 Specialist Activity Log, N=358
Schedules

As noted above, the large majority of specialists reported teaching side-by-side sessions three or more times a day. However, the configuration of side-by-side teaching schedules developed across the BTSALP schools varied somewhat more than the frequency of sessions.

As part of the technical assistance from the multi-university partners and professional development partners, BTSALP schools were recommended to teach weekly 30-40 minute sessions with each class in the school. While this was the recommended goal, all of the BTSALP schools did not completely adhere to this side-by-side teaching schedule. Rather, the side-by-side teaching schedules typically fell into two types of schedules: consistent for all classrooms across grade levels and staged blocks. (See Table 4)

In the consistent schedule, students attend SBS art lessons at least once a week throughout the entire year. In the staggered schedule, every student may attend the same number of side-by-side teaching sessions but they are broken up into blocks of time throughout the year. The perceived benefits and weaknesses of each type of schedule are compared below.

Table 4. Differences in side-by-side teaching Schedules

<table>
<thead>
<tr>
<th>Schedule Type</th>
<th>Perceived Benefits</th>
<th>Perceived Weaknesses</th>
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<tr>
<td>Consistent schedules for all classrooms across grade levels (e.g., all grades, once a week)</td>
<td>Every student has art class at least once a week throughout the entire year</td>
<td>Less dosage at one time</td>
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<td></td>
<td>Reportedly better for accommodating lessons that can be done in fewer sessions</td>
<td>Not adequate for projects requiring more intensive experiences</td>
</tr>
<tr>
<td>Staggered blocks of side-by-side teaching (e.g., certain grades or classrooms for a block of time meeting more regularly, then switching blocks)</td>
<td>Larger dosage at one time (e.g., for a few weeks or entire trimester)</td>
<td>Students do not have access to the art lessons consistently throughout the year</td>
</tr>
<tr>
<td></td>
<td>Reportedly better for projects that require multiple class sessions, such as preparing for and performing a play or musical production</td>
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In addition, although the BTSALP schools generally developed set schedules for side-by-side teaching, as described above, these were not routine. On any given month, a variety of events or activities interfered with the regular side-by-side teaching schedules, including CRT testing, SEP conferences, holiday performances, field trips, professional development activities, among

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others. Art specialists reported that these interruptions sometimes limited the ability of classes to complete projects or complete them in a quality manner.

While a number of art specialists described feeling frustrated with such interruptions, they also demonstrated creativity in their accommodation to these conflicts. The following description illustrates the challenges to side-by-side teaching when routines are interrupted and the ways in which art specialists adapt to the myriad of scheduling conflicts they face each month.

One of our sixth grade classes just produced Macbeth. We messed around with that, 30 minutes once a week on their assigned time, for I’m going to say 3 ½, 4 months. The computer lab would steal some time, and then there would be an assembly, testing – finally we just said, “We’ve got to get this thing done.” Plus the students would forget what they had learned six days before, or worse, two weeks before if there’d been an assembly that took out their class time. So what did we do? We ended up rehearsing the first two scenes of that play for weeks, because they forgot. Finally the sixth grade teacher said, “Let’s just meet every day,” and I said, “Let’s clear it – let’s do it.” We did, and it was a phenomenal experience – phenomenal. If I were still trying to meet once a week, it wouldn’t have been as good. Never would’ve gotten those results. (Art Specialist, Activity Log)

Together, these findings suggest that the large majority of BTSALP schools have been successful in scheduling side-by-side teaching on a daily basis, although some have been flexible in how they schedule classes by allowing certain grade levels or classrooms to schedule their time with the art specialists in blocks of time, rather than every day throughout the year.

Side-by-Side Roles and Responsibilities
Just as arts integration provides a tool for enhancing student learning, side-by-side teaching (also known as co-teaching) offers a vehicle for bringing together the expertise of the art specialist and classroom teacher in a way that extends or improves what either could do on their own. This relationship between the art specialists and the classroom teachers is discussed below with respect to the types of collaboration and relationships between the art specialist and classroom teachers, as well as the perceived progress in side-by-side teaching from Year 1 to Year 2.
**Types of Collaboration/Relationships**
The Year 2 activity logs asked arts specialists to report the percent of lessons across the continuum of collaboration with the classroom teachers. Year 2 findings further indicated that while there is a continuum of collaboration types, the primary was still reported to be the art specialists leading the lessons while the classroom teachers assist.

The variation in teaching configurations is presented in Figure 22. Importantly, conducting side-by-side lessons equally increased 10 percentage points from 4% in Year 1 to 14% in Year 2.

**Figure 21. Year 2 Reported Teaching Configurations, Art Specialist Activity Log**

Perceptions of how side-by-side teaching occurs across the BTSALP schools were also addressed in the end of year survey. As indicated in Figure 23, the large majority of survey respondents reported that the classroom teachers remain with the art specialist during art lessons. Likewise, survey respondents reported that classroom teachers were often or almost always actively involved in the art lessons, as indicated in Figure 24.
Figure 22. Perceptions, "Classroom Teachers Remain With the Arts Specialist During Art Classes", End of Year Survey (Year 1 & Year 2)

Source: 2008-09 End of Year Survey, N=245; 2009-10 End of Year Survey, N=391

Figure 23. Perceptions, "Classroom Teachers are Actively Involved in the Arts Lessons", End of Year Survey (Year 1 & Year 2)

Source: 2008-09 End of Year Survey, N=245; 2009-10 End of Year Survey, N=391
Roles
As indicated in the figures above, it is clear that the classroom teachers are participating with the art specialists during side-by-side teaching in the majority of BTSALP schools. Further, the schools reported a relatively higher degree of consensus that there are clear expectations about side-by-side teaching in year 2 as compared to Year 1. Notably, there was an increase in the perception that BTASLP schools set clear expectations for side-by-side teaching, as indicated in Figure 25.

Figure 24. Perceptions, "Our School Sets Clear Expectations About Side-by-Side Teaching", End of Year Survey

While the reports from the monthly activity logs and the end-of-year survey indicated a greater sense of clarity regarding the expectations about side-by-side teaching, there remains a variety of roles that classroom teachers play as they assist the art specialists during the side-by-side teaching sessions. Table 5 shows the variation in the types of collaboration and the roles that the classroom teachers take on during side-by-side teaching. These were the two most prevalent types of collaboration, as reported by arts specialists, principals, PDPs, and teachers in the BTSALP schools.

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Table 5. Descriptions of the Two Most Prevalent Side-by-Side Teaching Collaboration and Roles

<table>
<thead>
<tr>
<th>Type of Collaboration</th>
<th>Role of the Classroom Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art specialist leads the lesson with assistance from the classroom teacher</td>
<td>Participates in the lesson alongside the students.</td>
</tr>
<tr>
<td></td>
<td>Assists with classroom management</td>
</tr>
<tr>
<td></td>
<td>Helps students to make connections between the integrated art lesson and previous discussions of core content. This is mostly done during the arts integrated lesson but can also be done as follow-up in the regular classroom</td>
</tr>
<tr>
<td></td>
<td>Present but involved in other activities (e.g., grading papers)</td>
</tr>
<tr>
<td></td>
<td>Not present (e.g., drops off the students or leaves the classroom)</td>
</tr>
<tr>
<td>Art specialist leads the lesson and the classroom teacher is not actively involved or not present</td>
<td></td>
</tr>
</tbody>
</table>

When asked to describe the roles and responsibilities during side-by-side teaching, art specialists described the various ways in which they collaborated with the classroom teachers. For example, the following description illustrates the most typical type of collaboration:

*Side-by-side teaching, I guess just includes collaborating with the teacher, planning together, and then the teacher participates in Dance, whether it's dancing with the students or supervising and helping with discipline, or adding comments here or there about the shapes the children are making or reinforcing what they learned in class through what I'm teaching.* (Art Specialist, Focus Group)

This description illustrates how classroom teachers are actively involved in lessons, although they are not equally leading the lesson as might occur in a truly mutual co-teaching arrangement. Nevertheless, this type of arrangement was viewed positively by teachers, who described their active roles in the side-by-side teaching lesson, as illustrated by the following example:

*When we go into the classroom we’ll immediately go sit down at the rug, and she’ll talk about the lesson for the day, give examples. If I have any input on knowing about what's going on, then - like if I’d been to the monthly meeting I would chip in and help with that. And then as she’s instructing I would be a model. Sometimes I would sit by troubled students and do exactly what the teacher was doing just sitting right next to one of the*
students rather than helping the whole class. And other times I would be around helping the class doing different things, modeling different ideas, showing different examples, and trying to help the kids be successful. (Teacher, Focus Group)

The positive views of side-by-side teaching were further emphasized in the reports of progress implementing this component in Year 2 as compared to the attempts at side-by-side teaching in Year 1. The progress was attributed to a greater awareness of the expectations, familiarity with the practice, and expectations from the administration or art specialist as illustrated below:

*I think at the very first they weren’t - the regular classroom teacher wasn’t quite sure what she needed to do, or he needed to do when they went to the music room. A lot of times they just ended up, you know, participating with the students, or you know, helping you know, assisting our art specialist with the lesson, you know, in minimal ways. And, we’ve really tried to push them this year, especially the last half of this year to, you know, to bring something from the classroom, especially when you have a specific target of integrated lesson, that they’re bringing something from the classroom that they’ve already taught to review before, you know, before they begin with the music lesson. (Principal, Focus Group)*

Similarly, the following discussion illustrates how the art specialists also needed time to adjust to the model and improve their own practice and confidence in directing the side-by-side teaching sessions:

*I’ve noticed with my side-by-side teaching the teachers have really gotten better as I’ve had more experience doing it. At first it was like - it was very uncomfortable for me just because I didn’t really know the role of the classroom teacher. It felt sort of like she was just there to observe or something. But then as I started involving them more and giving them kind of a part to play in the room or something actually to do then it really got better. So for me I think it was me actually that led the way on the side-by-side more than it was my teachers just because I was more comfortable with it. (Art Specialist, Focus Group)*

The reports of improvements to side-by-side teaching were accompanied by descriptions of more detailed roles that classroom teachers adopted as they became more involved in the side-by-side teaching sessions and as they experienced noted benefits. For example, while the collaboration between the art specialists and the classroom teachers occurs primarily during the side-by-side teaching lesson, specialists and classroom teachers also reported that classroom teachers make further connections in their own classrooms outside of the side-by-side teaching sessions as follow-up to the art lesson or as a preview ahead of time. The following example illustrates this additional aspect to the side-by-side teaching arrangements:

*Side-by-side can be done physically side by side when you’re in the room, but it can also be done prior to coming to the room and then reviewing it in the room. And that’s*
worked the best for us, where I meet with the teacher, they teach a concept in the classroom, then I review it with them. Mostly me, but they add their little points – back in the classroom. Then kids get two versions of it, or views of the core, and we just find it’s better than repeating the same thing over and over. So that’s kind of how we integrate it. (Art Specialist, Focus Group)

In addition, the art specialists reported a number of benefits to having the classroom teacher present to assist with the art lesson. In particular, specialists reported that the classroom teachers helped to facilitate sessions that were focused on preparation for performances, as illustrated in the following example:

And then when we get to this part of the year where we’re actually working on informances or performances or whatever, and the teacher is not out of the loop but is not involved in the same way I am with the kids. They’re still in the classroom; they’re helping. Well, this year I got smart – this is when they do all their design work. So they have a costume design that they have to do for the play, so they’re busy working on that while I’m working with whoever’s on the stage for that scene. And the teacher’s going around and making sure that they’re working and all that sort of stuff, or following the guidelines, the rubric, whatever, for what that is. So they are engaged in the same way, but not in the same way. (Art Specialist, Focus Group)

In some cases, art specialists explained that their taking the lead was indeed more acceptable because of their expertise in the art form. For example, in the following description of side-by-side teaching, the art specialist acknowledges that she collaborates with the classroom teachers, but the emphasis is on the art lesson and the artistic expertise of the art specialist rather than equal participation:

I think the side-by-side model that’s being described in this pilot is not what we do. I’m the lead teacher. Other people assist me in the classroom, but we collaborate. I would never ask them to teach music, any more than I’d expect them to come ask me to go to their classroom and teach their science. (Art Specialist, Focus Group)

Finally, a number of art specialists, teachers, and principals reported that there still exist a few classroom teachers (almost one or two at each school) who are not as committed to side-by-side teaching as hoped. The following description illustrates this evolution in commitment on the part of classroom teachers:

As first grade we are all on board. Our drama teacher loves us. She says, "You guys are always willing and everything." I guess with other grades, though, it’s not the same. They’re like, "No," or "We don’t have time" or things like that. So I think we have to get a buy-in too from all the teachers, and I don’t know how you guys do that. I’ve actually gone to some of these workshops for the arts stuff, and I’ve been involved in seeing how
important it is you know in a kid's life. So we're really good at collaborating, but not all grade levels are. (Teacher, Focus Group)

This evolution seems to be facilitated by thoughtful attention to the complementary roles and responsibilities of the art specialist and classroom teachers, including time for planning lessons so that the co-teaching pair can maximize their contributions to the lesson, and ultimately student learning. The following example highlights the importance of such planning and role clarification, especially what happens in its absence:

**Because, pushing the button to the CD player or turning the pages of a book, is not side-by-side teaching. And, neither is behavior management. And, that’s what we’re finding happens is the specialist pretty much does everything and the teacher is only in there to help manage behavior and maybe occasionally will turn on the CD player, or turn the pages of a book. And, it’s not that they don’t want to be involved, or that the specialist doesn’t want them involved, it’s that - that takes some planning ahead of time to say, okay this is what you’re going to cover. This is what I’m going to cover. (Principal, Focus Group)**

### Professional Benefits of Side-by-Side Teaching

As art specialists and teachers were asked to provide feedback about roles they enact in the implementation of the side-by-side teaching component, they shared a number of professional benefits associated with side-by-side teaching. Namely, increased learning about effective teaching strategies they gained from collaborating with other teachers in a side-by-side teaching arrangement and increased awareness and insights about their students.

A number of specialists and classroom teachers in particular reported gaining professional knowledge about effective instructional strategies as a result of their participation in the side-by-side teaching sessions. For example, a specialist explained this mutual professional benefit:

**It’s been neat the way that it’s setup that the teachers stay in the classroom with me because I feel like I learned a lot watching them because they’re in – I mean, those are their kids, and they discipline them still while they’re in there. And it’s – I don’t know. I’ve watched so many different teaching styles that I think that has helped me to see what’s effective and what’s not so effective. And I just feel like I always get to observe. Even though I’m teaching I’m still in there with other teachers. And it’s sometimes harder but sometimes it’s – I mean, it’s still good for me to see what works and what doesn’t. (Art Specialist, Focus Group)**

Other teachers reported specifically on the individual growth as artists and teachers and the effectiveness of revealing their own vulnerability to students as they engage in the arts lessons:

**It’s also fun to do art. I’ve never felt like I was an artist until - and I don’t know that I am an artist still. I’m more into the music and other things, but working with a visual artist**
it’s fun to just try things out. And I’ve learned over the years it’s okay, and whatever we try is good and we may try again with another - and I think that's something that the kids need to see too. You know that the teacher doesn’t know everything and can’t do it perfectly either. But I think like she said that the kids get excited to see us doing the project as well. (Teachers, Focus Group)

In addition, classroom teachers and specialists also reported how the side-by-side teaching has helped them to gain insights about their own student. For example, a number of teachers reported that observing their students during the art lessons helped them to see their students in new ways or learn about their students’ strengths they hadn’t seen before. This type of awareness is illustrated in the example below:

I had some teachers who were helping me cast a show, and I left – usually I’m pretty involved, but in this one case I said, “Well, here are the requirements. You know your children better. You plug them in this case, if you would please.” And they were happy to do it. It was unthinkable to them to do anything other than use their best students. However, very often in the arts it is that student that’s on the edge – it’s not the best student. The fringe student, the one who’s struggling, who’s maybe not reading so well, but in my case they love acting. Therefore the acting drove the fluency as they worked on their script. But the teacher didn’t see that ahead of time. ... We had a lot of situations where students shone where they hadn’t before; where they impressed teachers that were now realizing hey, this student does have a type of intelligence that’s really significant, and I had missed that because they’re so low in their math and their reading. But this student is very special in this way, and that’s often an avenue into other types of traditional learning when they can just be championed. (Art Specialist, Focus Group)

Another art specialist relayed a classroom teachers’ appreciation of the arts lesson for giving him better insights into his students. Notably, this demonstrated the benefit of co-teaching regardless of the level of classroom teacher’s involvement:

After a teacher watched his class in dance he was impressed to see some of his students take the leadership roles in the creative dance group work. He said he learned a lot about his students by watching the class. From this I learned that teachers do not always have to participate to learn things about their students. (Art Specialist, Activity Log)

Combined, the above descriptions of side-by-side teaching roles and professional benefits provide an overview of the general characteristics of the co-teaching that occurs in the side-by-side teaching sessions, which illustrates that while there is variation in the types of activities that classroom teachers engage in, the co-teaching relationship in the large majority of BSTALP
schools is characterized by the art specialist leading the lessons with assistance from the classroom teachers. These relationships are generally viewed favorably and perceived to contribute to professional learning.

**Goals and Purpose of Side-by-Side Teaching**

The discussions about the types of roles played by the art specialist and classroom teachers in the side-by-side teaching led to additional discussions about the ultimate purpose of implementing the side-by-side teaching model. Several questions were raised about the goals and purpose of this model. For example, are arts specialists expected to train the classroom teachers to use the arts in their own classrooms eventually, leading to the diminished need for an art specialist in the school? Or, in contrast, is the current model an indefinite arrangement where there is no expectation of transitioning the art specialist out once classroom teachers have developed their own capacity to integrate the arts? In other words, is this a co-dependent model, or a model intended to establish a division of labor and specialization, or a professional development model?

There were mixed views about the purpose of the side-by-side teaching model. For example, a PDP shared the perception a fear that had been expressed to her by art specialists. “Some of the specialists I think are trying to protect their job too, saying ‘If I teach the classroom teacher how to do this, and if it really was a side by side, then I’m going to be without a job too.’”

Other specialists expressed a more positive perception regarding classroom teachers increasing development of their own artistic capacity, as illustrated by the following example:

*But this year, there’s times that the teachers have totally taken over – I mean, totally taken over the class and with my blessing. It’s been so great to have them totally become so involved that they are doing this movement with the students, and I just sit in the background. And it’s been really fun. It’s like we’re trying to work our self out of a job. And if we do a proper job, that’s what we’re trying to do is work ourselves out of a job. And there’s been some fun and successful things this year with that.* (Art Specialist, Focus Group).

In contrast, others described their appreciation that the art specialist would always remain, as illustrated by the following discussion in a principal focus group:

*Well I’ll speak for dance. [Our PDP] has kind of helped us understand and that’s where some of the resistance came, the idea that eventually [our art specialist] will go away, our dance person will go away and you, classroom teacher will be doing it on your own. The teachers are going, “Wait, I don’t have ten years of dance experience. I didn’t major in it. I can’t do what she did.” But [our PDP] helped us understand that the goal is to have an arts person there all the time and to just be participating at the level you’re comfortable with but also do some teaching. So maybe I misunderstand that but that’s...*
made our teachers feel a lot more comfortable about doing what they can but not ever thinking they’ve got to be the dancer. (Principal, Focus Group)

Regardless of the expressed positions, these discussions suggest that as a statewide BTSALP community, there is less clarity about the ultimate goals and purpose of the side-by-side teaching model as there might be around the actual strategies that schools are expected to implement.

Challenges to Side-by-Side Teaching

As noted above, there were many professional benefits to side-by-side teaching. In this section, we discuss the factors that were viewed as challenges to side-by-side implementation.

Even as the BTSALP schools reported increased implementation and commitment to side-by-side teaching, there were still a number of challenges that hindered full implementation, including the following:

- Competing demands and scheduling conflicts (e.g., curriculum requirements and daily weekly schedules; finding time to fit in all the required programs).
- Limited or unclear expectations about classroom teachers roles in side-by-side teaching sessions.
- Specialists feeling as though they are spread too thin; burnout.
- Classroom teachers lack of engagement in the side-by-side teaching lessons (e.g., limited commitment or buy-in).
- Classroom teachers’ perception that the side-by-side teaching has taken away planning time that was previously afforded during art time.

Competing Demands and Scheduling Conflicts

The BTSALP schools reported a number of challenges with scheduling side-by-side teaching sessions given the various competing demands, such as district mandated programs that require set blocks of time during the day. The following example was a typical challenge described by principals, art specialists and teachers:

We have had a new program with English Language Learners where they have to have special interventions for 45 minutes a day. It has been hard to schedule that in so I have had to leave out art class to do it. We are working out schedules, but it is a hard thing to do. We WILL figure it out. These are things mandated by the state and district and we have no say as in adjusting schedules etc. (Art Specialist, Activity Log)
The art specialists grappled with the desire to increase involvement of classroom teachers in the side-by-side teaching sessions while also recognizing the multiple demands on teachers that may limit their involvement, as illustrated in the following discussion about the lack of classroom teacher involvement:

**Male:** *We all witness that a little bit, and it's understandable. You kind of wish it [teachers not getting involved] didn't happen, because it would be really good for them if they did get involved, and we have a lot of Title I, as well, and it's all that extra paperwork, by God, and I don't want my teachers taking all that extra work home, because they work hard enough during the day. The surrounding teacher requirements preclude some of the BTS stuff happening as well as it could, I guess.*

**Female:** *I think the fact that the elementary teachers have less planning time than any other school, like the secondary schools have more time than they do, they just have so much to do and so little time. That's why I see this happening, I think.* (Art Specialists, Focus Group)

A number of schools were concerned that the heavy demands on art specialists’ and classroom teachers’ time may even compromise the success of the BTSALP, as illustrated below:

*I am very concerned about the pressure on the teachers that I see and wonder if they will want the BTS program next year as it cuts down on their preparation time which they need so much. Who can I visit with about this?* (Art Specialist, Activity Log)

**Unclear Expectations**

In addition to competing demands, a number of art specialists still reported that they have questions about the BTSALP grant requirements and expectations of them as the art specialist leading side-by-side teaching in the schools. Part of this frustration was attributed to a lack of communication or opportunities to provide feedback about the program and concerns that art specialists’ voices were not being heard. The following quote illustrates a common voiced by a number of art specialist across the state:

*I feel very isolated and receive mixed messages about what is expected for this grant. We teachers need to be able to give you input as to what makes a successful program for our specific areas. I don't think we feel like our voice matters.* (Art Specialist, Activity Log)

**Time Constraints and Feeling Overwhelmed**

These types of frustrations about competing demands, heavy workloads, and lack of empowerment are compounded by (or contribute to) art specialists feeling tired and overwhelmed. Monthly activity logs are replete with art specialists noting that their key challenge is not having enough time to do all that they wanted or are required to do (e.g., “I can't find enough time to be me. I never seem to have any down time or feel like I am doing...”)

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enough of what I should” (Art Specialist, Activity Log). These sentiments are similar to the over-
burdened feeling expressed by teachers.

The following description from an art specialist further illustrates this point:

It is frustrating to hear comments at the DTAT meeting about how easy this job is. I
teach 10 classes in a row, skip lunch and stay till dark many nights since I do not have
adequate prep time. Our schedules are grueling. Regular teachers get down time all day
long. This job has no down time and is extremely difficult. It boggles my mind that this
job is conceived as easy. (Art Specialist, Activity Log)

Interestingly, while the art specialists reported similar frustration about time constraints and
feeling overwhelmed as described above, they also reported valuing their job and the
opportunity to serve as the art specialist.

Lack of Participation
As noted previously, classroom teachers’ willingness to participate in the side-by-side teaching
sessions was appreciated by art specialists. In contrast, they reported disappointment that not
all classroom teachers have “gotten on board” yet. Further, even if teachers are present in the
classroom, a number of arts specialists reported that the classroom teachers are not actively
engaged. The following is an extreme example, but illustrates (with a sense of humor) the
frustration that art specialists experience when the side-by-side teaching is not a collaborative
activity:

One time I was doing a presentation. I’m in the back of a room, and my computer’s
upfront. I’m on the projector, and I’ve got my remote, and my computer went to sleep.
And so I’m asking the teacher who was sitting on a stool next to my computer at her
desk, and she was asleep. And I was asking her to hit my computer, to get up. And one
of the kids turns around and says, "She's asleep." [Laughs] Like, oh, this is really sad.
(Art Specialist, Focus Group)

Indeed, in almost every school art specialists reported that one or two teachers still do not
participate in the side-by-side teaching sessions, as illustrated below:

I still have some that don't come to my room. There's like two people in my faculty that
never come in. They just drop their kids off. And my Principal's pretty lenient on this. So
it's kind of frustrating. But the others all will come in and participate. And this year I
started a wall for the teacher's art and that's really been something that motivates them
to actually do the artwork with their kids. So it's kind of a learning experience for
everybody. (Art Specialist, Focus Group)

The above example further illustrates the role that principals may play in setting clear
expectations about schoolwide implementation, as well as the incentives (or peer pressure)
that may encourage classroom teachers to increase their engagement.
Limited Collaborative Planning

Finally, there were a number of schools in which the BTSALP resulted in a shift in practice surrounding the art program, including limitations on previously secured planning time. This perception of perceived impeding on previously secured planning time led to some resentment and contributed to some of the resistance by classroom teachers to engage in side-by-side teaching, as reported in the following description:

One of the differences we have at our school I have been teaching music in this school for half a day for five or six years before I was on this program and that time was used basically by the teachers’ prep time at that time. They’re used to having me teach and having that prep time and I think sometimes they resent having to come in because they have no prep time. A lot of these other things, they don’t have it. This has been the prep time that they’ve had in previous years. (Art Specialist, Focus Group)

Although art specialists attributed some classroom teachers’ lack of engagement to this change in approach, they also recognized the importance of preparation time for teachers. For example, the following discussion illustrates this dilemma for art specialists and the underlying sentiment that side-by-side teaching is not an ideal approach for some schools:

The specialist really threw herself in to that and I felt like the teachers, after about four months, believed that she was really there to help them. They began to see some progress. She was on their side. She wasn’t just another thing, or thought that they were inadequate so she was brought in. The other end of that is the seductive idea that lingers in people’s mind about this is a specialist drop off, and wouldn’t that be nice if it was a specialist drop off program? Wouldn’t it be nice if I could just take my kids and drop them off? There are some specialists that would just as soon have that too because of all this other stuff. That balance almost sometimes makes it feel like this isn’t quite what we want, but we’re going to do it. (PDP, Focus Group)

Despite these frustrations, the majority of schools reported being committed to the side-by-side teaching approach and expect the resistance to decrease over time once faculty members understand that the school is committed to it. This point is illustrated below in a description of how staff turnover may contribute to increased commitment to side-by-side teaching:

I actually had a big hurdle to overcome in the beginning because when the teachers did the grant, they didn’t realize it was a side-by-side model. And so they thought this would be prep time, if you will. And so they were all on board, only to find out that it’s more work, not less work to do it. And so it’s had its frustrations. But the new year has been better. And I hate to say it, but it’s as much from turnover as anything because new teachers come in and they’re willing to work with the program. They don’t know any different. (Principal, Focus Group)
While the above challenges were considerable, they were not expressed as insurmountable. Rather principals, specialists, and teachers expressed a “can-do” attitude as they shared their experiences as they have continued to implement and improve side-by-side teaching in their schools.

**Summary of Side-by-Side Teaching Implementation**

Year 2 findings indicated that the BTSALP schools continued their commitment to implementing side-by-side teaching as a means to integrating arts into the curriculum. Side-by-side teaching occurred relatively frequently (e.g., at least 3 or more times a day) and occurred within different types of scheduling arrangements (e.g., every class, every week; blocks of times with certain grade levels).

Year 2 findings also indicated that side-by-side teaching roles and responsibilities continued to be defined and refined, with the large majority of schools reporting that the primary type of collaboration has been the art specialist leading the lessons while the classroom teachers assist. The schools reported a number of benefits and successes with side-by-side teaching and raised important questions about the long-term goals and purpose of this co-teaching model.

Reports from participating schools in Year 2 highlighted a number of factors that have helped facilitate implementation of side-by-side teaching (e.g., classroom teachers’ comfort with the art form, good rapport between the art specialists and classroom teachers, principal support, and experiencing the benefits of side-by-side teaching). BTSALP schools also shared a number of challenges to implementing side-by-side teaching, including competing demands and scheduling conflicts, unclear expectations about how to conduct side-by-side teaching, time constraints on art specialists and feelings of being overwhelmed, lack of classroom teacher commitment to side-by-side teaching, and resentment that planning time was taken away and replaced by side-by-side teaching lessons. Despite the challenges, BSTALP schools reported generally positive attitudes about the benefits of side-by-side teaching and a commitment to continued implementation.

Finally, Year 2 findings underscored the importance of flexibility and adaptation to local context and needs to ensure the success of the side-by-side teaching approaches in schools. Providing for flexibility and local adaptation can be even more successful when coupled with some key “non-negotiables” or principles that guide practice, such as art specialist and classroom teachers collaboratively planning lessons and identifying mutual goals for the lesson, including a determination about their unique roles and contributions to student learning.

Given these findings, we offer the following suggestions for further consideration:
• Clarify and support roles and responsibilities, including the purpose, goals, and benefits of side-by-side teaching (especially as they relate to research-based evidence about co-teaching models).
• Promote divisions of labor and/or differential responsibilities based on the art specialists’ and classroom teachers’ unique strengths and areas of expertise.
• Provide professional development on side-by-side teaching strategies, including support for defining and clarifying roles and responsibilities. (e.g., how to strategically determine roles and responsibilities based on the art specialists’ and classroom teachers specific skills and areas of expertise).
• Provide ample time to collaboratively plan for side-by-side teaching, including how to clarify roles, responsibilities, and expectations for teaching and learning.
• Remain flexible, particularly by being responsive to logistical and administrative requests and local conditions.
• Evaluate the implementation and outcomes of side-by-side teaching to determine what strategies work best and how to make ongoing improvements. This may include possibilities for action research and greater engagement of classroom teachers in this side-by-side teaching approaches.
Professional Development

The final component of the BTSALP is the professional development to support arts integration and side-by-side teaching. A range of professional development is offered to schools. In addition, the arts specialists receive mentoring from the professional development partners (PDP). Year 2 evaluation results indicated:

- Continued collaboration between the arts specialists and the PDPs to support the implementation of the BTSALP, including support for arts integration and side-by-side teaching;
- Continued provision of additional professional development to BTSALP school staffs for arts integration, arts education, and other arts-related opportunities provided by the school, school district, and university partners.

A critical component of any educational initiative is the availability of high quality professional development opportunities that help implementers learn and apply new skills and strategies that result in improved student learning outcomes. In this section we describe (1) the overall BTSALP professional development framework, (2) how professional development opportunities are designed, (3) examples of the resources available to support professional development, (4) the content and topics of professional development, (5) the professional development delivery mechanisms, (5) the individuals and organizations that provide professional development, and (6) the impact of various professional development opportunities.

BTSALP Professional Development Framework

An assumption of the BTSALP model was that art specialists would require professional development opportunities to be successful in implementing the arts integration and side-by-side teaching components of the model. As such, faculty and staff members at each of the partnering universities with expertise in one of the art forms and previous art specialists were assigned to provide mentoring to the BTS art specialist once a month during on-site visits. In addition, the universities partners have hosted regional meetings with art specialists (and sometimes a principal and teacher representative) to provide workshops and training sessions to support the implementation of the BTSALP model.

While the mentoring and regional meetings were the primary professional development mechanisms that were formally built into the model, there have also been a range of additional professional development opportunities available to schools. Ideally, the art specialists and other classroom teachers would benefit from professional development on arts integration, collaborative planning, and side-by-side teaching. A comprehensive approach to professional development, which includes the classroom teachers, principals, specialists, and PDPs, would further enhance the implementation of the BTSALP.
With regard to the overall framework, the feedback about professional development to support BTSALP implementation was generally positive. For example, when asked how useful the professional development was for arts integration provided by the universities, districts, and schools, the majority of survey respondents reported that the professional development was moderately to extremely useful, as indicated in Figure 26.

**Figure 25. School Staff Ratings of Usefulness of Professional Development for Arts Integration, End of Year Survey**

The results in Figure 26 suggest that BTSALP schools find value in the professional development opportunities in which they are participating. However, it is also helpful to know how schools are planning for and designing the range of professional development approaches. Next, we address how professional development needs are determined.

**Planning for Professional Development**

Reports on Year 2 implementation indicated an increase in the universities’ responsiveness to provide relevant professional development opportunities, particularly those offered through the regional meetings. For example, several PDPs and specialists explained that they gave feedback to the universities during Year 1 implementation and that Year 2 activities demonstrated responsiveness to this feedback. The following description illustrates this responsiveness to requests for professional development opportunities:
I have appreciated that those that I’m working with through the [university] program, the ones that organize our professional development, they’re listening. And if we say, “We’d like help on this area,” then they’ll set up a special meeting just for the PDPs, or they’re also trying to make it work and make it apply to those who are participating. [The coordinator] has been constantly asking us, "How does this work?" and, "Is this - was that good," and then modifying. I think and that has been a strength this year as much as flexibility in that. (PDPs, Focus Group)

While there were a number of reports of how professional development responded to the needs of the various participants, it was not clear how these needs were determined, other than informal feedback about what type of professional development might be useful. For example, Year 2 findings indicated that there were a considerable number professional development opportunities that schools provided in order to help support and enhance the arts programs at their schools. Typically, schools reported a number of different types of arts workshops that were offered either on-site or through a local university or art organization, but there was little evidence that these were designed specifically for the school or based on an assessment of their BTSALP model implementation, as illustrated below:

Our specialists in our school have made all of our teachers aware of any possibilities for art in-service. We’ve had a drumming program that came… And there was also a big arts seminar this winter that we went to up at the [University] that my teachers went to. But it was not required. It was just made available, and we kept really good – we kept our teachers well informed of the possibilities of any in-service. (Principal, Focus Group)

Instead, the professional development opportunities tended to be somewhat more arbitrary, rather than systematically planned based on a thorough needs assessment. For example, reports of BTSALP school participation in professional development opportunities seemed to be based on the events or workshops available. Events and workshops appeared not to be designed specifically for the school needs, as illustrated in the following description shared by a PDP. This PDP shared their struggles with how to plan for professional development:

We had them up to [the] University and did a project, introduced them to people - it couldn't be too long because we only had an hour, but it was sort of an opening for the year, and here's what we're going be involved in, and they were pretty hip on that, so that went well. [The art specialist] tends to be a bit reluctant in terms of some professional development. So that's one of the things [the university coordinator] and I are always discussing - what would be the appropriate thing? How can we get some people involved? Is it worth spending money on it? (PDP, Interview)

Although the needs for professional development were not necessarily assessed in a purposeful or systematic manner, there were many reports about what makes the professional
development more beneficial. Namely, professional development benefits reported were related to the opportunities for tailored, practical, and immediately relevant professional development based on art specialists’ and teachers’ needs. For example, the reports of the best professional development opportunities were those that were directly tied to the specific art form and/or specific role-alike functions. A comment from a specialist reflects the relevance for tailored professional development experiences:

The best trainings I went to this year were the ones specifically for visual arts. It had specific sessions for elementary school art and when I went and observed the teacher. And the ones that had brainstorming sessions where we could network and talk and learn from each other. (Specialist, Focus Group)

Another specialist described the change in professional development approaches from Year 1 to Year 2, in which the university coordinators attempted to make the regional meetings more focused on the art specialists’ experiences. Here the need for tailored experiences is emphasized:

The smartest thing that [the university coordinators] did in year one was [offering] little mini conference at [the university]. The classroom teachers were invited as well. We kindly gave the feedback that as much as we wanted to be there and be supportive that the training for the classroom teachers and the training for the music specialists were really kind of a world apart. So they pooled the money together that they would have spent on those mini conferences and they’ve given us opportunity in the summer to go for either KODIA training, ORF or other music training where you can be taught from university professors and people who specialize in what we do. We’ve all done that. All of us have taken advantage of those summer professional development opportunities and when we turn in our hours because of that we –what do we do? Exceed our requirement usually by about 100 hours [laughs]. (Specialist, Focus Group)

A PDP relayed the experience of the art specialist she works with in the regional professional development meeting, illustrating the mismatch that often occurs between the professional development experience and the participant needs and experience levels:

My comments here reflect what [the art specialist] told me. She went only on the second day, which I did not attend. Also, she did not attend the full day. But, she felt that her time was not well spent. The mixture of the teachers with the specialists did not work for her. She yearned to sit with her art form colleagues and brainstorm, report and learn from them. The drama activities and art activities for this second day of training just did not do it for her. The Drama was below her experience level, and the art integration was not strong enough for her to feel that she would use the activities in her teaching. And, as far as the website portfolio assistance, she is so overwhelmed she is hiring someone to help her on her own schedule. (PDP, Activity Log)
In response to this feedback (which appeared to be mostly informal), the universities made adjustments and accommodations. For example, in one region, the resources were reallocated to individual specialists to attend professional development workshops that they selected on their own, as illustrated by the following description:

You know the first year our university planned professional development at the university, and that was nice, but we have such a smaller number of specialists that it was hard to make it a nice quality thing. So they’ve actually given us money to choose our own professional development and travel to it. I thought that was wonderful...I am really enjoying it because I’m going to a brick-making thing this whole week, and I’m going take a watercolor thing. So these are things that I’m really interested in, and I wouldn’t have been able to do it. (Specialist, Focus Group)

In addition to matching needs, there were also descriptions of PD opportunities that were not well coordinated. The following example suggests that there might be some benefit in more centralized coordination of arts PD in the state.

As far as coordinating it, it doesn’t always work. I mean the schedules overlap. There’s this month there is the Art Express happening, and some of the teachers are planning on getting their professional development hours from that, but there’s also through the Utah State Office of Education there’s also offered a pottery class, and so people - I have one specialist in particular that needs to really be at both, but she obviously can’t, so going to do one. (PDP, Focus Group)

Year 2 findings illustrate the heightened value that professional development participants place on opportunities or topics that they are particularly interested in learning more about.

Together, the above comments also highlight the importance of deliberate, purposeful planning for professional development that is based on a thorough assessment of the specific needs for each participant group, as well as the identified outcomes of the professional development experiences (e.g., teacher knowledge and skills, instructional practices, and student learning outcomes).

Resources for Professional Development

To ensure the success of the BTSALP implementation, the grant includes resources for the professional development in several ways, including funds for professional development providers (e.g., university coordinators, PDPs, DACs) and some of the costs associated with the delivery of professional development activities.

In addition, the schools contribute a number of resources for professional development. Schools provide resources for dedicated arts-related staff development during non-teaching contract days or providing substitutes when teachers are engaged in professional development opportunities during regular contract time. This section provides a brief overview of various
resources available to BTSALP schools to ensure that professional development occurs, as well as some of the challenges they have experienced in this effort.

First, time for art specialists and classroom teachers to engage in professional development activities to support arts integration and side-by-side teaching is a prime commodity. Some schools use the time they have during professional development days prior to the beginning of the school year. For example, a principal explained how professional development of arts integration can occur prior to the school year beginning:

I've had quite a few teachers go to the, I believe it's called Art Stream, and they've come back really excited about arts integration. And, then just on our professional development days we - we just make sure that there's some art component in each of those days. And, our art specialist usually takes, you know, a half hour of - of professional development days and - and does some activity. (Principal, Focus Group)

While time prior to the start of the school year is highly valued (and scheduled), schools reported a general shortage of funds for professional development due to budget cuts generally.

We used to have the first week before school we'd do a lot of training and in-service with the artists, but that's kind of gone with the wind, because of the budget cuts now. (Principal, Focus Group)

In addition to time prior to the school year, other schools took advantage of sharing professional development opportunities with each other in schools nearby to maximize economies of scale. This was particularly relevant for schools in rural areas.

I don’t know about you guys, but money is getting really short for people to go outside of the area and get training. And so I did the – that tri-county one, and I think we’ll do it again this coming fall. But it’s just getting hard to get money go anywhere and do something. So the more we can do on a local level, the better, I guess. (Specialist, Focus Group)

Although teachers valued the professional development opportunities they had, there were a number of reports from art specialists being frustrated with not having adequate access to PD during regular contract hours, noting that they are not willing to give up time with their families in the evenings or on weekends.

My principal is very supportive of everything. He really believes in professional development, but our district did some serious cuts, so I can’t go on …. I couldn’t go because I had to take personal days off and pay it myself and everything myself. And, you know, there is no way that I could do that. And if I have to take the days - it's one thing I could save up money or something like that and so I could pay the tuition, but if I have to take days off, you know, that's going to be really hard because then it's missing
on my paycheck... But the ones that I have been to most have been - it has been after-school hours, and I have a problem with that. I really do, because I end up in a real conflict because I give after-school classes here Monday, Tuesday and Wednesday as a service to my school, ... [As a parent] if I give my Saturday away to go on professional development, there it's really choose family or work. My family comes first. (Specialist, Focus Group)

Again, the limitations with scheduling professional development that would occur outside of teachers’ contracted time have been compounded by budget cuts. The following statement illustrates the challenges for classroom teachers engaging in professional development in light of their other duties and responsibilities:

*Contract time ends, and especially this year since there were all those budget cuts and stuff, and we lost our track change days and all that. So they come in for their three hours that they have to put in on those track change days and then they leave. And if they have to set up their classroom while the kids are walking in the door, then that’s what they’re doing – which I understand both sides of that. But if we keep on tending to give everything for free, then eventually we’re going to be – snap.* (Specialist, Focus Group)

The above comments raise important questions about what resources are brought to bear to support professional development and how they might be allocated differently to maximize cost-savings and economies of scale.

**Content/Topic of Professional Development**
As indicated in previous sections, implementing the BTSALP is expected to take place school-wide, therefore, necessitating a wide range of skills and practices related to arts integration, side-by-side-teaching, and other related implementation issues. Table 6 is a summary of the professional development offered to address this range in program implementation topics. A description and examples of each professional development topic are provided.

**Table 6. Professional Development Topics to Support BTSALP Implementation**

<table>
<thead>
<tr>
<th>PD Topics</th>
<th>Description</th>
<th>Examples</th>
</tr>
</thead>
</table>
| Art Form  | • Professional development to support art specialists and classroom teachers’ growth in the art form.  
• Typically these opportunities were one-time experiences | • We’ve had a tri-county ... art conference for the district. Those have been really beneficial in the way that the teachers are invited to that. Where when I’m just meeting with the specialists, the classroom teachers aren’t invited. But when the classroom teachers are invited, then they kind of start to grasp a better understanding of how the art can help support their classroom curriculum and reach a wider range of |
<table>
<thead>
<tr>
<th>PD Topics</th>
<th>Description</th>
<th>Examples</th>
</tr>
</thead>
</table>
| **Arts Integration** | • Professional development to support art specialists and classroom teachers’ ability to design lessons that integrate the arts to teach core subjects.  
• The majority of PD opportunities for arts integration were provided by PDPs, although some of the regional meetings addressed this topic | • [The art specialist] has done a much better job this year at integrating instead of strictly sticking to the dance core. I have tried to be a support to her in this by co-teaching concepts with her at the beginning and the end of each month. That has been our system for the month of October, November, and December. That aspect of her instruction is much stronger this year. (PDP, Activity Log) |
| **Co-Teaching** | • Professional development to support art specialists and classroom teachers’ ability to collaborate in arts integrated side-by- | • One of our professional development days, we did this whole segment on what [side-by-side teaching] is and what it’s not and giving them ideas of how – they don’t actually have to be doing everything. They can go around commenting on the shapes that they’re making or their form or – I mean there’s a whole |
|                       |            |          |
| designed to deepen art specialists knowledge of the art form or introduce teachers to the art form and give them practice engaging in the art form.  
• The increase in skill and comfort level with the art form was reported to improve the quality of the arts integrated lessons because the classroom teachers were more involved in the art itself. | • This year the only professional development opportunity that we’ve had through the arts was through the Ririe-Woodbury Dance Company. They came and did a professional development piece for all of our teachers. (Principal, Focus Group)  
• The visual arts specialist has asked the teachers what they would like to learn in visual arts, and she has offered to stay herself, several nights after school, and so they would come and do stuff. She did that the first couple months and then she started saying “I’m still here after school, come in.” Then she would show them what they were going to be doing in the class over the next couple of weeks. She would introduce clay. They could come and play with the clay. They could form and make the object, and then she found that if she did that with the teachers a couple weeks before they came in with the students, then the teachers were great. “This is how you can do it and I’ll help and model.” They would participate a lot more, but they didn’t like what Teresa mentioned. They didn’t like just coming in blind, and even knowing that you’re going to do pots, you’re going to do ceramics that day, they didn’t like coming in without a confidence or skill level. She said that made a big difference. (PDP, Focus Group) |

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side teaching sessions
- Art specialists were primarily responsible for modeling this relationship at the school level.
- Examples of side-by-side lessons were also provided by PDPs and in regional meetings or through videos of side-by-side model lessons

Technology
- Training for art specialist to document their side-by-side teaching activities and to create and upload the e-portfolios.
- An unintended outcome of the technology training was the sharing of e-portfolios.

Assessment
- Professional development to support art specialists and classroom teachers’ ability to assess student learning in the arts or through arts integrated lessons.
- This topic was not widespread.

bunch of ways to be involved side by side, and that was so helpful when we did that. As we’ve tried to help our teacher – our art specialist catch the vision and see what was happening, we tried to identify...who are some teachers who are doing a great job, and we provided her a sub and sent her out. And I don’t know if she got as much as we hoped, but certainly, the opportunity was there. And we just need to be identifying places where great things are happening because, I think, if you see a live model or videotaped model or, you know, something, people start to see what they should be doing. (Principal, Focus Group)

The portfolio review was helpful in seeing what other specialists are doing in our area. (Specialist, Activity Log)

Besides the technology workshop that was good – technology workshops that have been good, another thing that’s been good is when the groups share their portfolios and they show each other their best work because then that work inspires somebody to go try that. (PDP, Focus Group)

I feel the time I spent working on Assessment tools for her was time well spent. [The art specialist] and I have talked about how the assessment should be stepped up. Yet there is little time for the specialist to develop tools which will work with the unique format for BTS ALP teaching goals. (PDP, Activity Log)

The information presented in Table 6, while not exhaustive, illustrates the range of professional development offerings that schools identified to be successful in implementing the components of the BTSALP.

Notably, there was little evidence of professional development for school administrators. Likewise, there was no evidence that art specialists and teachers were engaged in professional development for how to collaboratively plan more strategically or conduct side-by-side teaching for arts integration. Given the importance of leadership for successful reform initiatives and collaborative planning is a major component of the model, attention to these gaps in PD opportunities will be helpful.
Professional Development Delivery
The PD to support implementation of the BTSALP includes a broad range of topics as described above, as well as a range in the types of delivery strategies. In this section we summarize the primary professional delivery mechanisms to support BTSALP implementation, including mentoring from the PDPs, conferences and workshops, and peer networking.

Mentoring from the PDP
As noted above, the PDPs are a central feature of the BTSALP professional development component. With a primary focus on supporting the art specialists (as opposed to classroom teachers or administrators), the PDPs are expected to visit the BTSALP schools monthly to observe classrooms, give feedback about the lessons they observe, attend meetings, and provide resources to the art specialists. In addition, PDPs take part in the regional professional development meetings to further support the art specialists they mentor.

Mentor/Mentee Fit
Year 2 findings highlighted the importance of having a good match with the PDP background and expertise to that of the art specialist they were mentoring. There were numerous reports from art specialists who described their appreciation for the PDP support and encouragement, but that the mentoring was not necessarily helping them to improve their practices due to the mismatch of experience and expertise.

I am going to be honest. I like [the PDP], and I think she really tries to come once a month. She tries to help me when I need it. But I haven’t found her very useful. And I know I don’t need her like she wants to be needed – does that make sense? And I think that makes her feel bad. But you know I’ve done teaching for so many years and that, it’s almost like when she comes I’m a little student teacher again. (Specialist, Interview)

This example raises questions about how the PDPs are matched with art specialists and the ways in which mentoring relationships are defined. For example, are there ways to take advantage of mentoring in different ways other than just one-on-one visits every month? For example, they might identify an area that a group of specialists needs assistance with, such as classroom management or art integration. If there were a comprehensive needs assessment, you could offer the services of a mentor (regardless of the art form) for that specific area. For example, you could sign up for monthly calls on a certain area for a year ...topic that you wanted to work on. Below, a PDP highlights such questions about the role PDPs play and how they are matched with specialists:

I think there’s an important role the PDP plays and there might be some situations where the PDP maybe isn’t confident in observing or commenting on another art form. I know a few have. Especially it seems like the ones that aren’t over visual art, they seem to be a little uncomfortable about having to supervise visual art. Generally I think it’s been just
I think we do have to look at some of those demographics and dynamics as far as do you send someone further away just because that's their art form, and so forth, or do you have someone that's closer attend or help that person [regardless of the art form]? (PDP, Focus Group)

The following example further highlights the importance of tailoring the mentoring relationship to ensure a good fit between the PDPs and art specialists:

I suggest, especially for next year, that the PDP and the specialists sit down and develop a plan together to say “What are your professional development needs?” We have several specialists that not only don’t need a lot of professional development, especially in their art form, but they could actually teach professional development to others. So we need to start identifying where they are on that spectrum and say “This specialist needs this kind of professional development. This one doesn’t.” Maybe individualize a little more. Maybe one of them needs more help in developing the school art teams, and others might need more help in integrating the core. Others might need more on just classroom management routines. I think we ought to look at that, that it might not be uniform across the board as far as the 54 hours, that some of them might need more or less. (PDP, Focus Group)

Currently, the BTSALP stipulates that a professional development plan should be in place. Further, the matching of PDPs to art specialists has been challenging for some due to the long distances that PDPs travel to visit the BTSALP schools. Such scheduling difficulties raise further questions about the potential for different types of mentoring arrangements. (e.g., designing a combination of on-site and remote mentoring through online or video conferencing).

Figure 27 below shows the mean number of hours that PDPs reported spending on the various monthly site visits and regional training activities. Year 2 findings indicated that PDPs reported spending an average of just under an hour per month with art specialists on art team meetings, an average of approximately an hour and a half on classroom observations, and another 2 and a half hours of additional professional development and technical assistance activities. In addition, Figure 28 shows that the PDPs spent an average of one half our per month attending school arts team meetings in Year 2 and an average of one and a half hours per month observing classrooms.

Figure 26. Mean Number of Hours Reported by PDP on Mentoring Activities, PDP Activity Logs (Year 1 & Year 2)
The mentoring that the art specialists receive from PDPs occurs in a variety of ways. For example, Figure 29 illustrates that the two primary delivery formats are in person at the school.
and by email.Figure 30 shows that the PDPs primarily focus on integration of the art form to
 teach the other core academic subjects, side-by-side teaching strategies, and technical support
for documentation and portfolios.
Figure 28. PDP Reports of the How Professional Development was Delivered, PDP Activity Logs (Year 1 & Year 2)

![Chart showing the percentage of professional development delivery methods for 2008-09 and 2009-10.]

Source: 2008-09 PDP Activity Log, N=353; 2009-10 PDP Activity Log, N=388

Figure 29. Primary Focus Areas of the Professional Development Provided by PDPs, PDP Activity Logs

![Bar chart showing the focus areas of professional development for 2009-10, with percentages for each area.]

Source: 2009-10 PDP Activity Log, N=388

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Figure 31 shows the ratings of usefulness regarding the support and feedback from the Professional Development Partners (PDP) in Year 2, as reported by specialists in their monthly activity logs. Notably, art specialists rated classroom observations and feedback as most useful. Least useful was the support or resources for implementing or expanding the school arts team.

Figure 30. Usefulness of the Support Provided by the PDPs, Year 2 Art Specialist Logs

Below we describe in further detail the various types of mentoring that PDPs provided to art specialists in Year 2.

**Classroom Observations and Feedback**

The art specialists provided a number of specific examples of how the PDPs were helpful as they observed the art specialists’ classrooms and gave ideas about how to improve. For example, PDPs provided ideas for classroom management, sample lesson plans, materials or...
references to additional resources, and suggestions about side-by-side teaching. Likewise, the PDPs described the ways in which they used the classroom observations to determine what additional support art specialists needed. The following example illustrates the kind of specific feedback that PDPs are able to provide after having observed an arts classroom:

We discussed what lessons she wanted to include in her portfolio and how to go deeper in the art form. Also, we discussed using different ways to control the classroom. For example, in the water cycle using a rain stick to get the student’s attention instead of saying freeze etc. (PDP, Activity Log)

The following description of the classroom observation process is an example of a particularly focused strategy for supporting art specialists through classroom observations and feedback:

Our organization and support has been much more focused and lends supports for helping the specialists do their job. We have created the Beverley Taylor Sorenson ALP Lesson Plan/Discussion Sheet which lays out the expectation that we have for our observations. The specialists fill these out before the visit and hand them to us when we observe. We can then make notes as the lesson is taught as well as be freed up to help take pictures and videos of the lesson being taught. The specialists can then use both the lesson plan and the videos to download into their portfolios for the year. This form also gives us a structure for our discussions following the lesson. We have follow up questions such as What went well, upcoming inforances/performances, your professional development, description of planning with classroom teachers, side by side teaching success, concerns, other items to discuss and the date/time for next month’s visit. (PDP, Activity Log)

Encouragement and Moral Support
One of the most commonly reported benefits of the relationship with the PDP was simply the encouragement and moral support that PDPs provided to art specialists. In many cases, PDPs reported spending additional time helping the art specialist prepare for big events, helping to calm nerves and organize for the performances. The art specialists reported how nice it was to have a friendly face to turn to and who was always encouraging them to move forward despite the often challenging environments. This encouragement occurred during visits, during preparations for big events, as well as through ongoing communication (e.g., email or phone calls).

I love her support and constant enthusiasm. She has great ideas for me each time she comes and is so helpful in this way. We email a lot during the month and questions are always answered in a quick manner. (Specialist, Activity Log)
Materials and Resources

As noted above, one of the roles of the PDP is to provide art specialists with resources to teach the arts integrated lessons. Such resources included the provision of specific materials or supplies (e.g., “I sent her a word wall list of 300 visual art terms and encouraged her to use some of them for vocabulary words for the classroom teachers”) or referring the art specialists to useful Web sites. In many cases, the PDPs were able to connect the art specialists to existing resources at the district or state level, as indicated by the following example:

I was able to finally connect with the art director in [the] district to buy a copy of their music curriculum guide for the music teachers. I had talked to her last year but just never received a copy. My music teachers had been asking about any sequential music curriculum that might be available and the only one that I know of that matches the Utah State Core is the one from [the district]. Unfortunately this curriculum was designed for the old music core but nevertheless contains good ideas for playing, singing, and integrating the music curriculum. This arrived and I was able to put it in binders. It also contains a CD. [the art specialist] said that she would like to review this over the break so I was able to deliver it to her. I will pass this around to all of the specialists and they can use what they want. It is quite extensive in terms of reproducing (takes up 2 large binders). (PDP, Activity Log)

Advocacy of the BTSALP

In many cases the PDPs served as an advocate for the program by explaining the grant goals and requirements to school faculties or meeting with principals to encourage their support and commitment. The monthly visits from an external party therefore helped to keep awareness of the grant and implementation issues. The following example illustrates this type of advocacy that PDPs can provide:

I think that kind of differs with each specialist, ’cause they each had slightly different needs, but like for [this art specialist], she had a pretty clear idea of the curriculum and how it could work, but I found that she wanted me there in the planning meetings just sort of as a support. She said it felt like it kind of gave her authority in a way to get the teachers to, you know, give her ideas and everything. Also, I felt like one of my strong points is my ability to kind of combine the two curriculums and give ideas to connect, and so that was - primarily with all three of them, that would be - to meet with them and just give integration ideas, ways to integrate the two different curriculums, the art core and the classroom curriculum, so that was primarily my role. I would say also the other thing I helped with was just to try to help the teachers to understand the importance of them being in there and preparing the kids before they came so that … the parents or the teachers would be able to work with the students and prepare them ahead, so it was really integrating in what they learned, and then they could take it back to the classroom
and have it relate to other things they were learning. And I think just kind of me helping the teachers understand how to do that, that was kind of my primary goal. (PDP, Interview)

Regional Meetings, Arts Conferences, and Workshops (One-Time Training Events)
The university partnerships are valuable for their role in supporting the PDP relationship as described above, as well as helping the schools to connect with a variety of university professional development opportunities. Universities provide a range of professional development opportunities, although many are not necessarily connected to the BTSALP. While some of these non-BTSALP activities were reported as beneficial for BTSALP schools in Year 2, they are not the focus of this section. Rather, we focus on the regional university professional development opportunities provided by each partnering institution as part of the BTSALP.

Figures 32 and 33 show the ratings by art specialists and PDPs regarding the usefulness of the regional professional development meetings for supporting BTSALP implementation.

Notably, for both the art specialists and PDPs, the regional meetings were rated as most useful for networking and sharing with other artists/educators. The regional meetings were least useful to art specialists and PDPs in supporting the implementation or expansion of the school arts teams.

Please note that regional meetings are not offered monthly, which is reflected in the relatively large portion of respondents who marked “not applicable” on these activity log items. It should also be noted that the logs did not start until October; as such, the ratings of the September 2009 events are not included in the above figures. Comments in the activity logs indicated that the September events were valuable.
Figure 31. Art Specialist Ratings of Usefulness of the Regional University Professional Development, Year 2 Art Specialist Activity Logs

Figure 32. PDP Ratings of Usefulness of the Regional University Professional Development in Supporting the BTS Art Specialist, Year 2 PDP Activity Log
Peer Networking and Collaboration

As indicated above, one of the most important professional development experiences reported in Year 2 was the opportunity for sharing and collaborating with other artists and educators. Art specialists and principals reported the value of sharing opportunities related to the art form, about teaching in a side-by-side manner, sharing lessons plans, sharing portfolio material, working with teachers. Likewise, PDPs shared how they were supporting and working with the art specialists. This sharing and networking was done in person at meetings or on-site at school campuses, as well as remotely through video/teleconferencing. While some of the sharing involved discussions of lesson plans or instructional strategies, some of the sharing involved watching lessons modeled or observing each other’s classrooms. Art specialists highly valued the opportunities to see other classes, as illustrated below.

And also one thing my principal had me do this year was go and observe other specialists teach. That was phenomenal. The meetings that we had, like you said, where we got to sit down and tell each other our lesson plans, share our planning sheets – those were the invaluable ones. And when I went to go and observe these art teachers, I thought we should’ve been doing this from the very beginning – and this was my principal asking me to do this. It wasn’t the grant or anything. It was amazing the things that I learned just from observing one teacher for a day. It was incredible. (Art Specialist, Focus Group)

This type of sharing/observation was also made possible through the development of the e-portfolio system. A PDP explains the potential of this resource for enhanced/ongoing collaboration:

The state has also provided support this year and a true “God send” is the eportfolio provided by UEN. This provides a uniform format for the portfolios and if the teachers are "on top of it" they can record the lessons they have written for us monthly as well as the pictures we have taken on a monthly basis and then they can communicate these in an ongoing fashion. This is a wonderful tool if used - I am really encouraging my specialists to use this and keep recording what they are doing on a regular basis. (PDP, Activity Log)

Even principals reported the value of such peer collaboration experiences. For example, a principal describes the value of networking and sharing:

The one thing that I really enjoyed, as an administrator, is getting together more frequently than we did the first year. It’s nice to hear what other people are doing and to glean form that because there are a lot of really cool things happening, and it’s certainly stirred my thinking. So that’s been very helpful. I mean it’s only been – what – three times a year and then the art segments that we’ve been able to go to. ... We all are really great as educators, you know, gleaning ideas from everybody else and then putting them into our own thing, but that’s what it’s about. You know? Improving upon
somebody's idea and making it better and integrating it into what works in our school. 
(Principal, Focus Group)

Organizations and Individuals Who Provide Professional Development
As indicated above, there are a number of professional development delivery mechanisms. Likewise, there are a number of individuals and organizations engaged in providing professional development to support BTSALP schools at the state, district, and local levels. For example, a number of specialists have provided professional development for classroom teachers related to arts integration and side-by-side teaching through mini-workshops in faculty meetings and modeling in the classroom.

Table 7 provides an overview of the different individuals and organizational levels of professional development.

Table 7. Individuals and Organizations that Provide Arts Related Professional Development

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- The school that has had the most progress with the teachers, the principal actually gave her 10 minutes every faculty meeting to go over techniques so the teachers could talk about it or she could pre show them something so when it happened they knew what was going on. The teachers sometimes have no clue about what to look at or what the method is behind what looks like madness. I think that has helped a lot. That school has had the most progress. (PDP, Focus Group)
- [Our art specialist] offers classes to teachers frequently. So right now she’s doing a class for adults on altered books. And, you know, they can just participate if they want. They don’t get anything for it, other than that they just want to do it [Laughter]. So she’ll – you know, about every other month she’ll tell teachers something that they can come and work on in her classroom after school. So it’s kind of an informal professional development, but we get good participation. (Principal, Focus Group)
- There are always opportunities outside of the school for it and every time I get notice of anything I send it out to the teachers. And I did do some Professional Development for the district this year. We did an Arts
### Examples

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- Academy, and so all the BTS Specialists here in the District were taught at the Arts Academy. And that was an opportunity for teachers to actually earn university credit in the Art. And so that extended over several months with different workshops each month, the things that we went in and taught for teachers in the district. (Specialist, Focus Group)

#### State/USOE

- UEN portal for BTSALP, including e-portfolio system
- Arts endorsement; Alternative routes to licensure

#### Universities

- I brought two actors from the Actor Training Program at the University to perform and lead an acting workshop with all three 6th grade classes. They performed a scene and two songs for the students. We discussed in depth how clean and clear the actors were; characterization, character building; and how to look for details and bring them to life on stage. The students loved it. We also had time to do a lot of improvisation with the students which pushed them to think. (PDP, Activity Log)
- Was excited to learn that one of the classroom teachers has taken advantage of the "Fabulous Fridays" [university] outreach program. Her class traveled to [the University] and took part in a half-day art program taught by faculty and staff. This opportunity was in part a result of our Sept. BTS workshop for all [school] faculty, held at the University. (PDP, Activity Log)
- I have a lot to do with seeing what teachers sign up for, different professional development that our education department does. The interest has really grown in those schools and I think it's because the classroom teacher, a lot of times will participate in whatever the art activity is and so they're feeling a little bit more confident in their ability and want to learn more about it. So I think there are more teachers participating in what we're offering at [the University] from the schools that have specialists than the ones that don't. (PDP, Focus Group)

#### Arts Organizations

- Professional art conferences and annual meetings
- Workshops
Impact of Professional Development
There were a number of reports from PDPs who reported progress and growth in the implementation of the BTSALP, some reportedly influenced by the collaboration with the PDPs. There were also reports by principals and teachers about the progress made, as reported in the sections above.

While there were a number of reports about the relative quality as well as the progress in implementation, there was little evidence that schools are evaluating the impact of their specific professional development plans or opportunities. Further exploration is needed to determine how schools are evaluating their implementation levels and whether the professional development efforts are making a difference.

Summary of Professional Development
Year 2 findings indicated a range of professional development offered to support BTSALP schools. Overall, the professional development was rated as useful and practical. Year 2 findings also indicated that planning for comprehensive professional development could be more systematic and evidence-based and that resources (including staff and staff time) to support professional development may be reviewed and possibly re-allocated to ensure effective and adequate access to professional development.

Given these findings we offer the following suggestions for further consideration;

- Support deliberate, purposeful professional development directly linked to greater implementation and student learning.
- Identify strategies to maximize economies of scale (e.g., pool resources, share costs, and organize/coordinate PD activities strategically) to offer professional development to both specialists and other core subject teachers.
- Ask specialist, administrators, and teachers for input on what they need; e.g., design professional development plans collaboratively to increase teacher investment, commitment, and application.
- Assess gaps in professional development (e.g., PD on how to plan collaboratively; PD for how school principals can support implementation).
- Continue to support multiple professional development strategies to ensure a comprehensive system of supports:
  - For example, continue to foster peer networking/collaboration opportunities for art specialist, classroom teachers, principals, and PDPs; opportunities to share; problem-solving and exchanging ideas (Online or in person).
  - Promote the multiple arts PD opportunities across the state and articulate how they align with the BTSALP goals and mission (e.g., university partnerships, professional arts associations).
• Continue to develop and enhance the online resources available to BTSALP schools related to arts integration and side-by-side teaching. The electronic portfolios were reportedly valuable and may serve as a useful training tool, modeling integrated lessons and side-by-side teaching. Additional clearinghouse of lesson plans and strategies would be useful.

What types of professional development opportunities will provide the most leverage for schools? We believe that thinking about the professional development system will lead to the greatest impact.
Overall Implementation and Impact

The BTSALP continues to be viewed as having a positive impact in the participating schools. Participants across the state report increases in the following during the second year BTSALP program implementation:

- Access to the arts, including the use of arts to teach the core curriculum;
- Student engagement, arts appreciation, and student learning as a result of their arts experiences;
- Parent and community engagement; and
- Collaboration between the art specialists and classroom teachers.

BTSALP schools also reported on the resources they have to implement the model and a number of ways in which the arts program aligns with other school and/or district initiatives. Schools also shared several challenges they have experienced in implementing the BTSALP model.

To begin, Figure 3 summarizes the changes in overall implementation and impact, as reported in the 2010 end-of-year survey. Notably, all areas were rated as having “moderate” to “a great deal of change.”

Figure 34 shows the Year 1 and Year 2 comparisons of reported changes that were perceived to be “moderate” and “a great deal” as a result BTSALP implementation.

Detailed discussions of Year 2 findings related to the overall implementation and impact of the BTSALP are discussed below.

*We have seen an increase in attendance, student engagement, independent student application in extension projects, and specifically science scores. For a number of students we have seen heightened levels of self-esteem because of the confidence that comes with their accomplishments in the arts. We also saw that students were more animated, more enthusiastic, and better performers during school programs when they were more a part of the creative process of scripting, arranging, staging, and choreographing. (Principal, Survey)*
Figure 33. Changes Reported for BTSALP Implementation Year 2, End-of-Year Survey

Source: 2009-10 End of Year Survey, N=391
Figure 34. Changes Reported as "Moderate" and "A Great Deal" for the BTSALP Implementation, End of Year Survey (Year 1 & Year 2)

Source: 2008-09 End of Year Survey, N=245; 2009-10 End of Year Survey, N=391
Benefits for Student

Year 2 findings include reports from across the BTSALP schools about the ways in which arts integration contributes to students’ interest and engagement in the lessons. The arts integrated lessons reportedly provide students with new and exciting opportunities to express themselves through the creation of artwork and performing for various audiences. This has resulted in reports of improved student behavior, school climate, and additional positive changes in the school. In particular, the BTSALP has resulted in a range of student benefits, including:

- Increased student achievement and engagement in learning
- Improved social and emotional outcomes
- Improved student behavior
- Increased exposure and access to the arts

These benefits for students are described below.

Student Achievement – Part I

An important component of the BTSALP was the use of statistical modeling to address two questions about the relationship between BTSALP and academic achievement:

1. How does achievement for students in schools which were selected for participation in the BTSALP program compare to demographically similar students in nonparticipating schools?
2. Among BTSALP schools, how does achievement vary with the extent of program implementation?

Below is an overview of the results from the statistical analysis. Appendix B provides a detailed description of the statistical methods and results tables and discussion.

First, we compared the 52 BTSALP schools which participated in both 2008-09 and 2009-10 to approximately 500 non-BTSALP Utah schools on academic outcomes across two years.

Table 8 shows the effect size of participation in BTSALP on student achievement, based on prior year performance and controlling for student demographics.

For all five outcomes, school participation in BTSALP had a small and positive effect on academic achievement. Four of the outcomes were statistically significant.

Please note that the comparison of mathematics results for 2007-08 to 2008-09 was not estimated at the request of the USOE because a fundamental change in the math CRT created a discontinuity in the time series of math test results between 2007-08 and 2008-09.
We then compared the subset of 42 BTSALP schools for which we had complete implementation data in 2009-10 on implementation across student academic outcomes. As indicated in Table 9, student achievement was slightly higher in schools that implemented the BTSALP model with greater fidelity.

Although the effect sizes presented in Tables 8 and 9 above are very small, the results from the statistical analysis of student achievement suggest that BTSALP schools slightly outperform non-BTSALP schools after controlling for students’ prior performance and demographic factors.

In addition, the evidence suggests that overall implementation of the BTSALP model is associated with somewhat higher levels of student achievement.

Again, these results should be interpreted with great caution, but do suggest that the program has a positive cumulative effect on the participating schools.

**Student Achievement – Part II**
As noted above in Figure 34, 63% of respondents to the end of year survey administered in May 2010 reported moderate or a great deal of change in student achievement as a result of the BTSALP implementation. This perception about the impact of the BTSALP on student achievement is consistent with the statistical analysis of student achievement and was echoed
by the specialists, teachers, principals, and PDPs in the open-ended survey responses, focus group interviews, and monthly activity logs.

For example, when asked about student learning, a specialist reported feedback from a classroom teacher about the increases in test scores that were attributed to the art lessons:

_I’ve also had success in tying the art core into other subjects for each grade level. This is becoming easier for me as I see the great results it brings. One 4th grade teacher said her test scores on the water cycle raised to 80% because of the reinforcement project we did in art that tied into the curriculum. Success in real numbers! (Art Specialist, Activity Log)_

While not as common, there were a few schools who reported that students with disabilities had improved achievement as a result of their involvement in the arts. For example, a principal relayed a story of one student’s progress in spelling:

_I just sat on a special ed meeting on a student that just qualified as learning disabled in 1st grade and he has a short term memory problem and just was not getting the sounds and the phonics and the decoding and everything. We had starting doing the music with him just as an intervention and he’s learning. He now can get 80 percent on a spelling test because they use the music. (Principal, Focus Group)_

While there were a considerable number of reports of increased student achievement, there were fewer reports of specific data analysis or concrete attempts to determine specifically which arts integrated lessons or focus areas may have contributed to changes in student achievement. The following discussion illustrates the general perception that the BTSALP is making a difference for student achievement, but the evidence is not necessarily compelling:

_In each grade level she had two or three concepts that we hadn’t done as well on, on end of levels to integrate, which she did. And, we don’t know the test scores for sure, but it definitely looks like our science scores came up this year. (Principal, Focus Group)_

The reports of increased student achievement scores suggests that schools may be experiencing positive impacts, but they have not yet developed specific methods for assessing or evaluating the direct impact of the students’ experiences in the arts integrated/side-by-side lessons on their assessment results. (Please note that this issue of assessment is discussed below in relation to some of the challenges reported by BTSALP schools in implementing the model.)

**Student Comprehension of Core Content**

According to specialists, teachers, principals, and PDPs, the reason that they expect increased results on the CRTs is that the arts integrated lessons provide students with enhanced experiences that promote better comprehension and master of core subject matter “at a
deeper level.” The following description of the learning process for students was generally reflected across the BTSALP schools:

Once you teach them something using the arts it's a lot easier to remember it. If they've created a picture using it as part of the lesson now, because they've put it there on paper and it's not just a worksheet or regurgitating something from what they've read. But if they've actually created something it's a lot more likely or it seems more likely that they will remember. That they sung about the water cycle because they - you know we suddenly say, "Evaporation," they start singing the song. And they can remember that's part of the different precipitation. I mean learning something by the art, you learn it more by heart, I think. (Teacher, Focus Group)

There were numerous reports of increased comprehension (e.g., teacher explaining, “I have found that my students understand core curriculum concepts so much better after we have been to dance”), as well as reports of students singing or dancing as a strategy for recalling important information on which they were or would be tested. This strategy for recall is illustrated in the following comment from the end-of-year survey:

Students love learning their grade level curriculum through music. Often students can be found singing related songs they learned in music when they are taking state mandated tests on science, math, and language arts concepts. Students learn an appreciation for music and musicians; they learn to work together; and they learn core curriculum concepts. (Teacher, End of Year Survey)

A number of teachers and specialists also reported the benefits of addressing the core subject matter in both the regular classroom and art lessons. The following example illustrates the perceived benefit of this type of redundancy and connections for students’ comprehension of core subject matter:

Core subjects have been brought in very nicely to our music time. It's a fabulous academic support. Students not only have things set to music, but they are able to hear the same concept taught by two different teachers. I think it is magical to 1st Graders to think one teacher knows the same "silent e" rule that another does. I think it makes it all the more powerful. (Teacher, End of Year Survey)

These examples are consistent with the findings discussed in the above sections related to arts integration and side-by-side teaching and further illustrate the potential benefits for student learning.

**Student Learning Activities**

A key finding from the Year 2 results was the perception of increased student engagement as a result of hands-on, arts integrated learning experiences provided to students. For example, a
principal reported the results from his monitoring of student engagement in classrooms throughout his building and found increases during arts lessons:

One of the things we really focused on here at school with observations is student engagement. I’ve done a lot of tracking this year of the student engagement in regular classrooms and in music classroom and it’s just amazing. You know, the level of engagement in music as compared to other places in the curriculum. When they’re in the music room and they may be learning about a concept through the arts, the engagement’s like a hundred percent, and you can take them back to the classroom and put them in their traditional setting, and that engagement will drop to, you know, 60 or 75 percent. So, giving them the opportunity to learn - learn things through arts based is having a great impact on students’ engagement. (Principal, Focus Group)

Notably, BTSALP schools reported on the importance of providing students with more varied, hands-on opportunities that reflect their learning styles and allow for creative expression, as illustrated by this comment from a classroom teacher:

My class loves dance, they get excited about it and the way in which educational concepts have been implemented have been fun and have offered a different way for students to learn concepts. (Teacher, End of Year Survey)

The benefits of these types of learning experiences were reportedly more pronounced for students who were perceived as not as successful in the traditional classrooms. For example, there were many reports of “struggling” students (or students with disabilities, as discussed further below) succeeding or excelling in the art class compared to their performance in the regular classrooms.

Students who struggle academically have been able to access core subjects in a way that meets their needs. Students frequently refer to what they learned in dance to help them assimilate new information. (Teacher, End of Year Survey)

In addition to the success stories, there were also numerous explanations about how intrinsic motivators are perceived to help increase student engagement levels, such as activities that hold high interest for students, that are designed by students, and /or that help students feel empowered. The following discussion highlights the perception of how student agency contributes to the learning process:

And I think when kids have the chance to participate we give them ownership. And by allowing them to have that ownership they’re more excited. They want to participate more. All of a sudden subjects they’re learning in school are not just boring lectures – rather they are involved, wanting to learn what’s next. Let’s do whatever. They’re excited. They go home and they tell their families. They tell their younger siblings who are so excited to come up to the upper grades where they can do those fun things. I think
giving kids that ownership, letting them participate by doing art in different ways. Rather than just painting the picture just because it's pretty, but painting their picture of the mountain or the pine tree because of the coniferous tree and the deciduous tree. Comparing the two and all those kinds of things - I think giving the kids that ownership makes a huge difference.

Another example illustrates additional benefits of learning environments that may motivate students to move beyond the class lesson:

[The Art Specialist] received a letter from a parent praising her for the work she does. His daughter came home and told him about the Sistine Chapel she had learned about in class. The father and daughter spent 30 minutes on the computer learning more about the Chapel. He was very impressed. [The Art Specialist] has rearranged her classroom after reading about creativity. She has it in a large circle with a lot of space between tables. She feels it is a great change and has helped the students become more creative. (PDP, Activity Log)

In addition to intrinsic motivators, there were also explanations of how external motivation has increased student engagement, such as public recognition in performances or awards for artistic work. The following example is reflective of numerous reports about the impact that public performance or recognition has on students’ engagement in the learning process:

The assemblies that the older students have put on, integrating the dance and curriculum subjects, have been great. The students' confidence in themselves and their enjoyment of dance has greatly increased! They have found a way to express what they learn. (Teacher, End of Year Survey)

Finally, there were numerous reports of how the arts lessons resulted in particularly successful experiences for students with disabilities. Although there was little evidence that the arts lessons with special education students involved a specific focus on academic core subjects, the arts experiences were reported to have considerably positive effects on these students. Special education students’ experiences in performances were highlighted, as illustrated below:

I have a student in sixth grade. We just had an informance and she is learning disabled and she has physical problems, too, and she really wanted to be part of the play, which we have everyone participate in. But she had a hard time learning the words for songs and I sent some words home with her. So the day of the performance came and she was so excited and her mom was very excited. And she did well. And after she performed, she went over to her mom and gave her the biggest hug and she just started crying, "Can you believe I did that?" So that was really a cool thing, I thought. (Art Specialist, Focus Group)
A teacher sums up her appreciation for the BTSALP, when asked to describe the greatest successes that have occurred as a result of implementing BTSALP:

> Student engagement and appreciation/love of art as well as better understanding of all subjects have been the greatest successes. I am excited to get better and better at implementing this as I see the potential and benefits our students have already enjoyed. I would be CRUSHED not to have this opportunity! (Teacher, End-of-Year Survey)

The examples above about how the BTSALP has resulted in increased student engagement suggest that the program is generally having an influence on student learning experiences. These examples further suggest the potential benefits for student learning if the hands-on, arts integrated approaches and strategies were incorporated into all classroom settings.

**Assessment of Student Learning**

There were numerous reports of how difficult it was to measure the impact of the arts program on student learning. For example, a number of schools have compared their school scores with what they consider comparable schools. However, this does not provide sufficient evidence to attribute student scores to implementation of the arts program, as illustrated in the following principal’s reflections:

> I think that’s probably the most difficult thing is to provide data. I think in our school district, for example, when we look at the data for the year the number of students we have on free and reduced lunch, or economically disadvantaged, when tested they have - we have the least amount of discrepancies between the economically disadvantaged students and the regular students in my school in terms of test scores. So, I don’t know if you could say, because the arts are in the school? Ultimately when you compare with like schools that’s got to suggest that - I mean that, to me, suggests that. But, in terms of really hard data, I just haven’t quite figured out how you collect that. (Principal, Focus Group)

In other cases, schools reported that they did not see changes in test scores (e.g., CRTs) but were not sure whether to attribute that to the arts program or not. The following example highlights the challenges of using CRTs to measure the impact of the arts integrated/side-by-side lessons when they may not be sufficiently tailored to the specific intervention:

> We haven’t done anything more than simply, for the grant purposes said we want to attach it to science, and so we use the annual CRT scores, and hopefully those will go up if we’re using art to reinforce science concepts. We did not see any change the first year, and may or may not see the second year. I don’t know. (Principal, Focus Group)

Another principal emphasizes the concern that one hour of art a week may not be sufficient to impact student achievement:
I look at it like this. We have a full hour out of the week for art, and we also have, through donations, the kids have music for a half hour each week. And, in the couple of years that we’ve had both the art and music our language art scores have either stayed the same or gone up. And, so I attribute that to it’s not us having the - the sequential arts program has not made our scores go down, and our scores in language arts have gone up two points, and in math have gone up two points. So [laughing] that’s when I agree it's hard to - to say that arts have helped the scores, but I look at it from that reverse way--we have it and our scores are going up, and we’re taking the time to do the art. (Principal, Focus Group)

While the majority of schools expressed a desire to collect data that would help them determine the impact of the arts on student achievement, there were a few schools that were altogether skeptical about the goal of impacting student achievement. This sentiment is reflected in the following example:

I think Beverly Taylor bit off a little bit more than we could all chew by saying that the program is going to raise test scores. That’s a tough one to figure out that way. I can see increased levels in abilities of kids to communicate in art terms within the realm of the art, but across on those other layers, that type of knowledge is not recorded, I don’t think, on tests, or at least the tests we give in Utah.

Not only did schools report challenges in measuring the impact on student achievement in the academic cores subjects, they also reported challenges with assessing mastery of the art core. One of the challenges was the lack of interest or attention to students’ mastery of the art core, as illustrated below:

I used one of those [round curriculum maps] last year too. I had one for each. My principal actually had me do it where each child had one, and I had a binder for each class and I would have to go through. And I did it because I felt like if I gave them to the kids who knows what they would color in? And who knows when it would get lost? So I stuck it in a binder and kept it in my room, and then when it came time for parent-teacher conferences I gave them to the teachers for them to share with their families. And the response from the teachers was, “We have so much that we have to present in our parent-teacher conference, we don’t have time to touch on that.” And so this year I just went, “I’ll give a general letter to you that you can set on the desk outside your classroom for the parents to read while they are there telling them what we’re doing in the classroom, and they’re more than welcome and invited to come.” But I didn’t do a map for everybody, because I figured I’m the only one looking at it, and I don’t need one for myself. (Specialist, Focus Group)

The use of portfolios was reported as one of the more authentic ways to measure students’ progress in the arts. Portfolios were reported particularly by visual arts specialists.
I keep a portfolio for each child, and all of their artwork goes in that portfolio. And we get it out twice a year and we look at what they’ve done, and they’re always amazed at what they did the first of the year. And then we do a little thing on a folder where we do a little diagnostic drawing of a tree, house, and them, and then at the end of the year they do the same thing on the other side, and we share those. But I just share those within the class – you know I don’t post them somewhere, so. But those are kind of for the kids to see. (Specialist, Focus Group)

While helpful for demonstrating progress, the BTSALP schools did not generally analyze the results in a systematic way or connect the results with other academic core outcomes.

Even when more formal attempts were made to assess students’ mastery of the art core, specialists were more likely to report that the assessment did not provide useful information, as illustrated by the following example:

You know I personally don’t have grades on my students or anything. My principal asked me to do a couple of rubrics and then gather data from my students on a project or two just to show that we’re making progress. And I did that, and I kind of felt like it was a big waste of time because you can see right away who gets it. I can tell I have about one student per class who doesn’t. (Specialist, Focus Group)

Further, a number of art specialists and teachers were simply reluctant to assess students art core mastery at all because they felt it was too subjective. This reluctance to “grade” students’ art is reflected in the following example regarding the inclusion of art performance or students’ art lessons in report cards:

I think we assess everything we do. But on the actual report card, it’s a “participates.” So it’s not – plus I wouldn’t give a letter grade to art anyway, because we’re trying to develop uniqueness, creativity – and if it’s my judgment, I would say that wasn’t really good, or that was really good, but someone else might not. So I think the arts are a hard thing. (Specialist, Focus Group)

As indicated by the above examples, the schools “believe” or “hope” that the arts impacts student achievement but it was not evident how they really know this. The overall findings indicate that schools are extremely positive about the program and the perceived impact on students. At the same time, when asked to demonstrate that impact, schools exhibited a reluctance to attribute arts integrated lessons to student achievement gains, as well as reluctance to measure mastery of art core (e.g., the arts are too subjective). Importantly, there was minimum attention given to formal (or informal) evaluations of BTSALP program impact on student learning among schools. As one principal lamented, “How do you evaluate the success of your program without having any kind of data to analyze?” Given these circumstances, schools and school districts have little documentation or evidence that the arts do indeed
support student learning. This hampers their ability to secure funding and sustain their efforts, as will be discussed in further detail below.

Social/Emotional Benefits
In addition to reports of improved student achievement and engagement, BTSALP schools also reported positive social and emotional outcomes. In particular, schools reported improved student behavior, self-confidence, and sense of community and collaboration.

Better Behavior
A number of school principals reported that student disciplinary actions had reduced (e.g., “I really noticed in the two years that we’ve had a music specialist here, the behavior referrals to my office have been cut in half”). For many, this improvement in student behavior was attributed to the students not wanting to miss the art class, as illustrated below:

Our behavior overall, student behavior has improved since this program started.
Because, they want to go so badly and not be left out, that they will do anything to get to go to drama each time. (Principal, Focus Group)

Student Self Confidence
In part, the improved behavior was reportedly connected to students’ gaining self-confidence through the various opportunities they had to express themselves creatively and be successful with the arts. Notably, there were a number of reports of students “blossoming” during art classes, leading greater self-confidence. For example, an art specialist provided several examples of this transformation:

As far as theater is concerned here at Ashley, one thing that I’m noticing in terms of competency with the kids is the kids that were some of the shyest at the beginning of the year, especially in fourth and fifth grade and third grade, are the kids that are actually wanting to get up first every single class period now. They’re not afraid to perform now. They’re not afraid to be in front of an audience, which is wonderful. One example is a fourth grader. At the beginning of the year, she wouldn’t even come up on stage with me and perform. Now she is directing her own class play. I mean, she’s really blossomed into something amazing. Another example is a fifth grader who pretty much did everything technically behind the scenes and is now directing her own play within the class. (Art Specialist, Focus Group)

Art specialists, teachers, and principals attributed these successful experiences to increased self-esteem. The following example illustrates the potential for such opportunities for supporting students’ social and emotional growth:

One group of boys was involved in a dance to help them learn to focus. It turned out to be such a success. They met their goal of learning to focus better and performed a great
dance which was so popular they were asked to do it over and over again! And what an esteem-builder for them also. (Teacher, End of Year Survey)

Teachers also reported how these experiences were particularly helpful for certain groups of students. For example, a few schools reported success with refugee students, as the following example shows:

Dance has been amazing for our refugee population. My new students come in with no English language skills, and many have not even been in school before. They are uncomfortable and scared. I take them to dance and their faces light up and I see smiles for the first time. It is a place where they can understand the language and feel completely included. It is amazing. (Teacher, End-of-Year Survey)

In addition, a number of schools reported growth in self confidence among students with disabilities, as demonstrated by the following example:

One of the 6th grade students, who receives special education services and struggles with reading, writing, and math, has blossomed this year, and I believe in part due, to the art program. He is talking about going to Art College, and talking about what he needs to do academically to go to an art school. The art that he has made goes along with the curriculum, and he is learning through his art. (Teacher, End-of-Year Survey)

Sense of Community

Although not reported as frequently as improvements in self-confidence, schools also reported that the arts lessons have contributed to a greater sense of community for their students. In part, this was attributed to having to collaborate to perform a play or design a mural, but was also attributed to the greater awareness of difference that was experienced in the art classes. The following example represents the types of comments expressed about community:

One of the Kindergarten teachers shared an observation with me that her students are making friends in drama class. She said that these friendships are extending outside of drama class and children who used to play by themselves are now being more socially interactive with other children. She credits drama for having given her students opportunities to interact and make friends. (Art Specialist, Activity Log)

The following example highlights the importance of student collaboration to their collective identity:

The mural project with 6th grade has been both a challenge and success: lots of problem-solving, but I am getting to know these students on a different level and their art experience is going much deeper than just showing up and completing a project. They have really taken ownership of their ideas/ art images and are finally working together to create something beautiful and amazing. (Art Specialist, Activity Log)
This sense of community and inclusiveness was reportedly a benefit for English language learners in a few schools as well:

*I noticed it a lot with our ELL students. We have a large population of refugees that come into our school, and it's really hard to come into a place where you don't speak the language and you have no idea what's going on. But art is the one time of day where they manage to do something, and even though they don't understand our language they kind of get what's going on. And so I really feel like it's impacted our ELL students the most and I really enjoy that because I feel like that even an hour where they really feel like they're a part of the class. And they're participating in what's going on and not feeling as lost as they do say during a reading lesson when they don't know what's going on. So I think it's been really great for our ELL students.* (Teacher, Focus Group)

The above examples of the social and emotional outcomes are encouraging. And while principals and teachers reported improved social and emotional outcomes, it was not evident which specific policies or practices might have contributed to the improved outcomes across all schools. Rather, it seems to be the combination of all the experiences in their totality that result in the broad range of benefits for students.

**Exposure to the Arts**

As noted above, a primary assumption of the BTSALP model is that through arts integration students will have enhanced learning opportunities and improvement student achievement. However, a common sentiment expressed across the BTSALP schools was the value they place on students experiences with the arts, not necessarily connected with a broader academic learning goal. In other words, simple access and exposure to the arts was perceived as a goal in itself. In particular, schools reported the benefits of students having artistic opportunities and experiences because many students (particularly low income students) they may not be afforded those opportunities otherwise. Schools reported these benefits in two ways, opportunities that students have to attend performances, events or other art venues and their opportunities to participate in performances or exhibits of their own artwork.

**Opportunities to Attend Performances, Events, or Museums**

Many of the arts opportunities that schools reported as influential for students were not necessarily arts experiences in the classrooms, but rather the field trips that they arranged for students. A number of teachers and specialists reported on the positive impact that these experiences had on students, as demonstrated by the following example:

*I have a student who has asked his mom to take more dance classes during the summer because of having Tanner dance and going to see CDT's "True North." So, his mom enrolled him in Tanner's CDT this summer. THANK YOU! THANK YOU! THANK YOU, for
providing these great opportunities! Not only are the students learning so much but it makes it fun for them and they enjoy coming to school. (Teacher, End of Year Survey)

Schools often reported these types of arts experiences as opportunities that these students would not otherwise have due to the limited family resources or access to the arts in the community:

The new types of arts experiences for the students which in turn has enhanced our school climate and arts appreciation. There is such a limit of art where we live that this has helped wonderfully. (Teacher, End of Year Survey)

While these circumstances are important, statements about what students’ art opportunities often included unspoken assumptions about what exposure to the arts students from lower income or rural backgrounds really have.

Opportunities to Create and Perform

In addition to the benefits to attend art performances or venues, schools also reported a wide range of examples about how students benefit from their experiences in performances or exhibiting their work. Similar to the reports of increased self-confidence, teachers, art specialists and principals described the ways in which these opportunities to “be artists” were viewed as highly beneficial. For example, a teacher explained how the students’ artistic experiences were not truly authentic prior to implementing the BTSALP and the changes that have occurred since then:

But really to me pretty much nonexistent before the grant - very, very little - a lot of run-off dittos or something - you know continuous snowmen going down the hallway. But nothing like this, so yeah, I was really quite pleased. I was just saying we've just got Picassos going all over the place, so I think it's really, really great. (Teacher, Focus Group)

Likewise, a principal explained how the added dance program has further enhance students arts opportunities:

My school right now is doing a dance festival outside and the kids today they’re all dressed up and they’re in costumes and ready to do this festival. It has dramatically changed their experience in school. Without the specialist especially in the area of dance – I feel pretty comfortable leading in the other areas of the arts but dance is just not my forte. So I look at it and think, “My students never would have had this experience without the Beverly Sorenson specialist.” So the kids absolutely love it. The community is behind it 100 percent. We’re nervous about how many we would have there today actually because we’ve – we know it will be packed. Where we’re going to put everybody. So it’s extremely popular with the public. (Principal, Focus Group)
Other reports included the successes of students during performances that have typically not excelled in other areas, such as the example below about the performances of “special needs” students:

Watching students with special needs memorize and perform where everyone thought they would fail, give up, or not show up on performance day, and yet they did and did well.
(Teacher, End-of-Year Survey)

**Intensity of Exposure to the Arts**

There were a number of schools that were cautious about the outcomes they would attribute to the BTSALP, primarily because of the level of exposure that students have in arts lessons. For example, some reported that they wished there could be more intensive exposure to the arts integrated/side-by-side lessons.

I wish every kindergarten classroom had a side-by-side constantly. This age needs extra support and one on one attention. This doubles the opportunity! The benefits and results are amazing. (Teacher, End of Year Survey)

Likewise, a number of specialists and teachers expressed their concern that the 30-40 minutes once a week was not sufficient, especially for projects that require more time to complete. For example, some specialists reported projects that were carried out over multiple weeks in 30-minute lessons once a week. These were not viewed as favorably, for instance, an art specialist reported, “by the end, the kids were bored, I was bored, the classroom teacher was bored” (Specialist).

On the other hand, some specialists reported how this simply was not enough time to cover the materials they wanted. For instance, a specialist indicated, “*Working with the students only once a week we tend to be able to cover only a fraction of what the teachers would like us to be working on together.*”

In contrast, specialists reported much more positive outcomes when they felt as though they had ample time to develop rich, intensive experiences for their students and offered scheduling arrangements that might accommodate those types of plans.

*I see a much greater growth in children in the art form when it is intensive instead of sporadic, and 30 minutes to 45 minutes once a week is far less effective than a 2 or 3 week blitz. And then I would suggest BTS-wise rotate out, do another group, so that one is not trying to simultaneously – in my case there are 31 classes – teach 31 separate 30-minute classes all year long. (Specialist, Focus Group)*
Teacher Collaboration

Although discussed at length in the section on side-by-side teaching, most schools reported overall changes in teacher collaboration, which seems to have extended beyond the side-by-side lessons.

For example, 64% of respondents to the 2010 end of year survey reported moderate or a great deal of change in teacher collaboration as a result of the BTSALP implementation. Teacher collaboration was also addressed in focus groups and interviews, in which there were a number of reports of how teachers were proactively reaching out the arts specialists for assistance or ideas for created arts lessons in their own classrooms. For example, a principal described the changes that occurred in Year 2 compared to Year 1 implementation:

*The first year went really well. But I think that the second year the teachers more understand their role and are probably more involved. They’re more involved in discussing and sharing ideas with [the art specialist] on how to incorporate the arts with the rest of the curriculum. I’ve seen them take something that [the art specialist] did last year and develop it into their own lessons this year.* (Principal, Focus Group)

Another example from an art specialists demonstrates how this increased collaboration yields improved lesson design:

*I noticed the difference in the collaboration with the teachers. The first year was just kind of - I was an island unto myself, just kind of this new entity into their lives, they didn’t know how to really take me. But this year it’s been very exciting. As far as collaborating and coming up with really great ideas and a more of a give and take with the teachers. So that’s been really nice.* (Art Specialist, Focus Group)

Again, as noted in the Side-by-Side Teaching section above, these improvements to collaboration were generally viewed as part of the ongoing improvements in implementing the BTSALP model, and also highlight the broader impacts of the model to more than just the arts classrooms.

Parent and Community Engagement

Finally, the infusion of arts in the classroom has been enhanced as schools have hosted community performances and/or showcases to celebrate students learning and artistic accomplishments. The BTSALP schools reported high levels of parent engagement and some described new partnerships with community based organizations to support continued arts opportunities for students. Findings related to parent involvement and community partnerships are described below.

Family Engagement

Importantly, Year 2 implementation resulted in increased parent and community engagement, which was facilitated by community events such as “informances,” performances, or exhibits.
Between October 2009 and May 2010 the arts specialist reported a total of 667 events for an average of 2 events per month during the data collection period. The specialists also reported a total of 64,951 attendees at these inforances, performances, or exhibits for an average of 196 parent attendees between October 2009 and May 2010.

BTSALP schools hosted a range of community performances and events and the themes of these events and performances were often designed to reinforce the integration of the art forms and core subject areas. The range in the types of events and parent involvement is discussed below.

**Large School-Wide Events**
A common practice for the BTSALP schools is to host grand community events where students exhibit their work, perform plays or musical productions, and in some cases engage in interactive learning activities. These large-scale events were commonly reported as highly successful, based on the number of attendees and the positive public relations they seemed to promote. The annual “arts night” was a common event reported by many BTSALP schools, as illustrated by the following example:

*We have a yearly arts night – and that’s our biggest parent involvement night of the year, which came through our Beverley Taylor Sorenson and [art specialist]. And each class did a little performing of some kind or showing their work to their parents and a huge success two years running, and that was created because of what we are doing with this. And so that – the value has gone up that way parent involvement-wise, and that was fun to see.*

Although the annual art night and parent involvement were not necessarily new aspects or traditions for many schools, it was the increase in quality of performances and exhibitions that many schools reported as the big change. The following example illustrates the qualitative change in the type of parent and community engagement that resulted from the collaboration of the art specialist with classroom teachers and parents. In this scenario, the arts program consisted of a few parents helping out in the classrooms, but the last two years with the BTSALP have been different, leading to even greater parent involvement:

*The last two years we’ve had a huge art show, and I have never seen so many parents in our building at one time. Last year I think if somebody would’ve called the state fire marshal we would’ve broken fire code just in the hallway. There were so many people who had come to see their children’s artwork. We had a little presentation before, and every teacher was doing something in their classrooms. The walls were lined with art. It was the most spectacular thing I’d ever seen in my life. Just kind of made you want to stand still and just soak it all in. It was so incredible. And this year we had the same experience - so many parents wanted to come and wanted to help support their children...*
who had done these wonderful things; simple but wonderful things. And the kids were so excited to bring their parents. And the teachers were excited - they wanted to have the parents come to them. And we worked out times so there was something going on every 15 minutes in a different classroom. So it was a really neat experience. I think if more parents knew about or sat down to think about how much money it would cost to do something like that, that might help a little bit too. But their support, their willingness to come and see was a huge thing for our school. (Teacher, Focus Group)

Events and “Informances”
While the big events were often quite spectacular, schools also reported great success with smaller, more regular events, often called “informances.” These events provided for a more intimate experience where the parents, students and teachers could interact more easily. For example, a PDP explained the benefit of the smaller, more regular events:

[The art specialist] has provided more opportunities for her students to share their work this year which is great. Last year the students had one big informance and it was a bit crazy. By spreading them out this year, more parents are able to see their child longer and it isn’t so long. This is a huge school. (PDP, Activity Log)

The following example also highlights the creative ways that schools can engage parents in the arts:

We have, on the average, of 32 moms who come every day to learn English. And our specialist has worked it out so that they can have art, as well as the kids. It’s not on a weekly basis like the kids have, but, you know, two or three times a year they’ve gone in to do projects, and that’s had a huge impact. They have really loved that. And then shared some of the things they’ve learned with their kids, which has been really great too. So we wish we had more time to do more of that with adults. (Principal, Focus Group)

While they may not have generated as much public awareness or enthusiasm, the smaller events were reportedly influential in engaging parents at a deeper level and establishing the message that the school values the arts and is committed to ensuring their place in the school.

Parent Volunteerism and Support
A common type of parent involvement is their support in fundraising efforts. A considerable number of schools reported hosting fundraising events, often connected to the annual “arts night.” Parents were also reported to help with art lessons in classrooms. Teachers, specialists and principals shared their appreciation for this type of support, as demonstrated by the following teacher’s comments:
It has pulled the community together through our gallery strolls. It has also provided an arena for parents to focus their talents and aide as they want to volunteer and raise funds for the students to get a richer art experience. (Teacher, End of Year Survey)

Community Engagement and Public Relations

The arts events were reportedly helpful for engaging parents, but were also reported to increase engagement with the broader community, including the support of community partnerships and engendering public will to support the arts. The following example illustrates the ways in which schools have used community events to promote the arts locally and more broadly:

[The art specialist] took the challenge to make the Friends of the Art event an emotional, educational and political success. The event was well attended and well organized as to how parents could support the arts by contacting legislators, etc. The school was completely "dressed" for the event with hallways and the auditorium decorated with all sorts of art work by children. The performances, and speakers were charming, and some were inspirational. [The art specialist] took the lead in this and did a wonderful job. (PDP, Activity Log)

There were also reports of community partnerships in which community based organizations became engaged in the schools for mutually beneficial outcomes, as illustrated below:

Fourth grade was wetlands and we tied it in with Utah studies by wrapping it into the Great Salt Lake. We did printmaking with the Great Salt Lake birds. I emailed the Friends of the Great Salt Lake Organization here in town and said, "Gee, I have all these wonderful Great Salt Lake bird prints that we did in printmaking. Do you have a place for them to be exhibited?" And she emailed back immediately and said, "Well, as a matter of fact, we do. We've got a forum - Great Salt Lake forum coming up to be held at the University of Utah campus at the Fort Douglas Club, and we'd love to have them exhibited to remind everyone the importance of the Great Salt Lake needs water just like all the other water users need the Great Salt Lake water before it hits Great Salt Lake." That was the focus of it was water and water users, etcetera. So it was people from all stratospheres of Salt Lake Valley who are concerned commercially, nonprofit, education. Everybody was there at the forum and got to see the birds, and they were a big hit. And the big climax is that the Friends of Great Salt Lake want to feature one of the children's bird prints on their newsletter for next month. So that will be fun. (Specialist, Focus Group)

Examples like the one above suggest considerable potential for schools to foster these types of partnerships, thereby contributing to the broader support for the arts in the school.
Additional community engagement was evident in reports of service projects that were also described as very rewarding:

*This year, something they did with the music – they took big group of kids and went to some of the care centers in the area and performed for them. It was awesome. It was spectacular. And the people that they performed for just were really grateful for that. I think that’s one of the nicest things we’ve done this year at [our school].* (Principal, Focus Group)

While there were numerous reports of BTSALP schools partnering with community based organizations or other local business, in many cases these activities were more realistically a matter of good public relations with the community, such as the above service project, as opposed to a true partnership where there are mutually beneficial contributions and outcomes. The following is another example of a successful event, which was more about good public relations than developing long-term, committed partnerships:

*The tile wall celebration and the Project Linus were amazing projects this year. The school art team was impressed, the kids loved being on the news, the community member (daughter or Charles Schultz) was highly involved as was the U’s community of caring. Also feel good about getting the teachers more involved.* (Specialist, Activity Log)

In addition to these efforts mentioned thus far, participants indicated that the AWFK Legacy Foundation efforts were helpful for promoting the BTSALP. This organization provided both advocacy and support at both the state and local levels.

Taken together, the reports of improved parent and community engagement and support of the BTSALP schools suggest that the arts are a highly valued in these communities. This level of support will be helpful as the BTSALP schools continue to further develop as arts integrated schools.

**School Climate**

The impact of the arts integration program on student achievement may not be direct or linear, but the reports of how much the students and families love their arts experiences suggests that the impact on the school climate is tangible. There were numerous reports about how the school has changed and how it now “feels” to walk down the halls with students’ art displayed prominently or with the sounds emanating from the music classes.

*In addition to the increased knowledge and appreciation for the "arts" our school has become its own "museum" of student work. Our hallways are filled with art creations. And the students are able to express what they are learning in reading, writing, science, social studies, science, math, etc. through the use of different art mediums. The greatest success is the integration of the curriculum.* (Principal, End of Year Survey)
Some changes in the school appearance and “feel” were subtle, and some were reportedly more drastic, as demonstrated by the following survey response regarding the greatest successes that have occurred as a result of the BTSALP implementation:

_The amazing change in the physical appearance of the school. There are posters and projects of all varieties and types throughout the entire building. IT’S AMAZING! The staff and students love it._ (Teacher, End of Year Survey)

Other schools shared their perceptions of how the BTSALP implementation has affected not only the appearance of the school, but also the students’ experiences. In particular, there were a number of reports of how the entire student body has benefitted from an improved school atmosphere:

_The students have shown a greater appreciation for the arts. They have also been able to move out of their comfort zone of feeling "silly" and have learned how to freely express themselves in class. This has also allowed a greater tolerance for how students behave amongst one another. The atmosphere of the school has improved with the addition of dance._ (Teacher, End of Year Survey)

To avoid overstating the impact of the BTSALP grant on school climate, we noted above in the Arts Integration section that a number of schools shared that they have been an arts school prior to the BTSALP grant and that their schools have historically been arts-rich, “happy places” for students. The following example illustrates the considerable commitment that some schools have to incorporating the arts to improve students’ experiences, and not limited to one art

_I think we really consider ourselves an art school as well as a technology school, and we really try to show our kids the importance of not just visual arts but I know I do dance with the kids. We're trying to expose them to a lot of different kinds of art, and we tell them it's an art school and we constantly have their artwork on display around the school all year long. So I think they know that we're a school that focuses on the arts because I think they get that that's part of our mission. I don't consider it just one of those add-on programs, because it's true - we have a lot of things going on at this school. But art's pretty steady here._ (Teacher, Focus Group)

Nevertheless, even among the historically art-rich schools, there were reports of how the BTSALP grant has further enhanced their art program and overall school climate.

**Summary of Overall Implementation and Impact**

Year 2 findings highlight the overwhelmingly positive feedback from schools about the importance of having arts in schools, but more pointedly the importance of the arts integrated/side-by-side classroom experience for students. This section highlighted the benefits that were reported for students in terms of increased academic achievement and student engagement, as well as the social and emotional benefits of the arts exposure.
In Year 2 the BTSALP schools continued to report increases in teacher collaboration as well as higher levels of parent and community engagement. Attendance at school arts events were highlighted as incredible successes for the school communities.

Year 2 findings suggest that schools also continued to experience improvements to the overall school climate, which appear to be a result of the cumulative effects of all aspects of the program. This highlights the more global benefits of having arts in schools.

Given these findings about the overall implementation and impact of the BTSALP, we offer the following considerations for ongoing improvement:

- Again, take advantage of opportunities to document the impact of the specific components of this program on student learning. This information will not only inform teaching practices and ongoing planning for professional development, but will also provide valuable information that can be used to garner needed resources to sustain the program.
- Respectively, support schools in their efforts to evaluate the impact of the arts integration and side-by-side teaching on student learning. For example, these evaluations could be conducted through internal action research projects, or with the support of third-party evaluators (e.g., the school district, university partners).
- Identify creative ways to further harness the positive feedback and support from parents and communities by developing deeper connections with parents and the community. For example, schools provided a few example of how parents share their arts expertise in schools, but this could be broadened to include additional mutually beneficial partnerships.
- If possible within the given resources, provide grantees with more regular updates and feedback about classroom portfolios and other data collections, including the state-wide evaluation results.
Conclusions
Reforms, such as the BTSALP, require adequate time to become embedded fully in schools in ways that produce the most desirable results for students, schools and across the program statewide. Importantly, measuring results regularly is a means of determining whether the program has yielded the intended outcomes. Thus far, the results indicate that BTSALP implementation is reliant on the implementation of the model—arts integration, collaborative planning, side-by-side teaching, and professional development.

Year 1 evaluation recommendations included attention to the following seven aspects of program implementation:

1. Define/Refine Expectations
2. Develop Infrastructure
3. Align Subject Core and Arts Core
4. Generate Coherence
5. Develop Leadership for Arts Integration
6. Ensure/Share Resources
7. Cultivate Support

In reviewing the findings from Year 2 BTSALP implementation, we note that progress across these areas has occurred. The considerations provided within this report regarding arts integration, collaborative planning, side-by-side teaching and professional development will offer additional strategies for addressing these overarching areas of program implementation support that will support both sustainability and scalability.

Sustainability and scalability of BTSALP is an important factor for discussion. In part, sustainability and scalability will occur by producing intended results, demonstrating the feasibility of the model for other schools and districts, and acquiring and maintaining sufficient resources to support implementation. From the Year 1 and Year 2 evaluation, BTSALP schools report changes in student and school-level indicators such as student achievement, student engagement, teacher collaboration, school climate, and parent and community engagement, as evidence in the qualitative, quantitative and survey data.

Again, Year 2 findings indicate that the feasibility of implementation of the BTSALP relies on the ability of schools to adapt the model to their unique circumstances (e.g., readiness for arts and arts integration and side-by-side teaching, time available for planning, selected scope of implementation, school size, interest, development of buy-in, teacher and specialist experience and expertise). To date, many of the adaptations have occurred because of the conditions noted previously.

As the BTSALP continues to evolve and make progress towards desired or intended outcomes, BTSALP schools are encouraged to consider deliberate adaptations that are informed by needs assessments and analysis of school and student indicators. Moreover, purposeful delineations
and consensus among grantees of where adaptations are permissible and to what degree will also assist BTSALP sites in refining the program implementation, generating consistency in experiences, and potentially offering opportunities for economies-of-scale in areas such as professional development.

Efforts on behalf of schools, districts, the state, and parents, community, and advocacy organizations continue to both acquire and maintain sufficient resources for BTSALP implementation. Participants expressed concerns that the BTSALP will disappear after this year of implementation. Although several sites noted they would “make this work” and continue the program if state-level funding were not available, none, however, offered concrete means of doing so at this time. Informances and other efforts to increase parent and community engagement have generated considerable support for the BTSALP program across BTS schools.

In addition, schools and districts have made efforts in the past two years to align BTSALP with other initiatives as well as incorporate BTSALP into their school and district planning, which assists with providing supporting resources for BTSALP implementation. In part, many schools and districts have worked with parents and community and advocacy organizations on fundraising efforts. While the efforts make an important contribution, the funds raised to date do not match the resources necessary to sustain the BTSALP implementation.
Appendix A: Evaluation Methods

The evaluation of the BTSALP uses a longitudinal, multi-method design that includes quantitative, qualitative, and survey data collection and analysis to study the implementation and benefits of the BTSALP state-wide. The multi-year evaluation of the BTSALP is focused on (1) the implementation of the program (e.g., schools implementing the program as intended), (2) the quality of the professional development and mentoring, (3) key school outcomes, and (4) the policy and practice implications generated from the findings.

Evaluation Questions

The following table shows the evaluation questions that are being used to guide the evaluation activities over the course of the four-year study. Due to the focus of these questions, the evaluation will shift from a formative evaluation emphasis in the first three years of implementation to a summative evaluation in the final and fourth year of implementation.

<table>
<thead>
<tr>
<th>Evaluation Questions</th>
<th>2008-09</th>
<th>2009-10</th>
<th>2010-11</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To what extent do schools implement the BTS Elementary Arts Learning Program as intended?</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>2. To what degree do the statewide professional development workshops and individualized training for specialists prepare teachers to integrate arts into their instructional strategies?</td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>3. In what ways is student learning affected as a result of arts integration?</td>
<td></td>
<td></td>
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<tr>
<td>a. How does achievement for students in schools which were selected for participation in the BTSALP program compare to demographically similar students in nonparticipating schools?</td>
<td></td>
<td></td>
<td>x</td>
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<tr>
<td>b. Among BTSALP schools, how does achievement vary with the extent of program implementation?</td>
<td></td>
<td></td>
<td>x</td>
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<tr>
<td>4. What implications do evaluation findings have for refining the BTS specialist training, program implementation in participating schools, and ongoing monitoring and support?</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>5. What implications do evaluation findings have for refining and improving arts education policy at the school, district, and state levels?</td>
<td>X</td>
<td>X</td>
<td>X</td>
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To address the above evaluation questions, data collection during the second year of implementation (2009-10) included monthly activity logs, interviews, focus groups, online
school survey, and analysis of student achievement. Each of these data collection activities is described below.

**Monthly Activity Logs**
The BTS Specialists and PDPs were asked to record their activities each month in an online form that addressed the key components of the BTALP model. The logs were initiated in October 2009 and ended in May 2010. Below are the responses from specialists and PDPs on the monthly activity logs:

- Art Specialists (8 months; n=358)
- PDPs (8 months; n=388)

The art specialist activity log included seven parts, including:

A. **Side by side planning** (e.g., frequency of planning, classroom teachers involved, and meetings attended)
B. **Side by side teaching** (e.g., frequency of side by side sessions, types of collaborations with classroom teachers, number of arts integrated lessons by subject area, number and types of other arts lessons that were not integrated, examples of arts integrated lesson, and art core concepts taught)
C. **Collaboration with the university Professional Development Partner (PDP)** (e.g., ratings of usefulness of the support and feedback from the PDPs and most/least beneficial about work with PDPs)
D. **Celebration of students arts learning** (e.g., number of performances, parents involved, and descriptions of activities)
E. **Regional university professional development** (e.g., hours and usefulness of the regional meetings)
F. **Other activities** (e.g., additional BTS specialist activities not included in the other four components)
G. **Overall successes and challenges**

The PDP activity log included seven parts, including:

A. **School art team meetings** (e.g., number of meetings, individuals involved)
B. **Classroom observations** (e.g., number of observations, grades observed, feedback to specialist)
C. **Professional development and technical assistance** (e.g., hours, type of delivery, and focus of professional development and technical assistance provided)
D. **Regional university professional development** (e.g., hours and usefulness of the regional meetings for supporting the art specialist)
E. **Other university partner activities** (e.g., other activities not outlined in the required activities)
F. **Overall success and challenges**
The open-ended items from both the specialist and PDP monthly logs resulted in approximately 135 pages of text.

Please note that the response rates for monthly activity logs increased in Year 2, although not all specialists submitted activity logs each month.

**Interviews and Focus Groups**

An important element of the research and evaluation design is to collect data from BTSALP schools through interviews and focus groups. Thirty schools were randomly selected by district and art form for site visits conducted during March through June 2009. These visits provided the research and evaluation team with a richer understanding of how the schools implemented the BTS arts integration model in this first year, perceptions regarding the progress toward outcomes, and the factors that contribute to, or detract from, implementation.

Interviews and focus groups were conducted with the following:

- District Arts Coordinators (n=15)
- School Administrators (n=41)
- BTS Specialist (n=39)
- Professional Development Partners (n=12)
- Teachers (n=7)

All interviews and focus groups were digitally recorded and transcribed for analysis. Consistent with IRB standards, participants signed consent forms prior to participation in the interviews and focus groups. To preserve confidentiality, audio files were saved and stored on the UEPC’s password-protected secure server. The transcriptions resulted in approximately 800 pages of interview and focus group data.

**End of Year School Survey**

An online survey was administered to faculty and administrators of all BTSALP schools in April through June 2010. The survey included closed- and open-ended items addressing the key components of the BTSALP model including respondents perceptions of activities and school practices related to teacher planning, arts integration, side-by-side teaching, professional development, resources for implementing the model, and changes that have occurred as a result of the BTSALP implementation so far. End of year school survey respondents included the following:

- Total (n=391)
  - Respondents represented 18 districts, 43 schools, and 1 charter school.
  - Administrators (n=30)
  - Teachers (n=343)
  - (18 respondents did not indicate their position)
The online survey link was emailed to all participating school administrators who were asked to forward the link to their faculties. Response rates to the end of year survey were higher than in Year 1 (n=245).

Analysis
Descriptive statistics were calculated for all the quantitative items on the activity logs and end of year survey. Graphs and tables were prepared to illustrate the combined results for all items. The research team used a qualitative analysis software package, HyperResearch, to analyze the qualitative data from activity logs, survey, interviews, and focus groups. This analysis involved a multi-step process carried out in stages. Initially, research team members read through transcripts from across all data sources to get a general sense of the nature of responses. Using a constant-comparative method of analysis, the research team was able to determine themes within each category of implementation (i.e., arts integration, planning, side-by-side teaching, and professional development). To establish trustworthiness of the data, the research team used peer debriefing and triangulation of data across sites and roles (e.g., specialists, teachers, administrators). Peer debriefings permitted the research team to review preliminary codes for consistency of meaning and interpretation. This process included two additional reviews of transcripts with the preliminary set of codes and the second refined set of codes. Emergent themes were also documented and coded. The coding also reflected the research questions related to model implementation, influence on student learning, and implications for improvement and policy development.

Data for this study are reported at the aggregate level (i.e., parents, charter administrators, charter board members, district administrators, and district board members). The Director of Charter Schools at the USOE and the State Charter Board Members were reported as charter administrators and charter board members to maintain their anonymity.

Summary of Evaluation Methods
Based on the data collected from the above methods, the evaluation is designed to provide both formative information that can be used for program improvement and policy development and summative information to determine the degree to which overall BTSALP goals are met. Collectively, we expect this information will be valuable in refining the program to meet the needs of Utah students, expanding the coalition of teachers, schools, and districts integrating arts into education, developing the sustainability of the BTS Elementary Arts Learning Program, and scaling-up this program district- and state-wide.
Appendix B: Statistical Analysis of the Relationship between BTSALP and Academic Achievement

As part of the Year 2 evaluation of the Beverley Taylor Sorensen Arts Learning Program (BTSALP), we performed a statistical analysis of the relationship between BTSALP and academic achievement. This section of the appendix describes the methodology we followed and subsequent results.

Research Questions
We addressed two questions about achievement:

Q1. How does achievement for students in schools which were selected for participation in the BTSALP program compare to demographically similar students in nonparticipating schools?

Q2. Among BTSALP schools, how does achievement vary with the extent of program implementation?³

For the purposes of this analysis, we measured whether participation in BTSALP was associated with a (1) positive or negative, (2) small or large, and (3) statistically significant or non-significant effect on student achievement. We caution that finding a statistical association between BTSALP and academic achievement does not necessarily mean that the two variables are causally related.

Methods

Data
We used data on students as of October 2010 from the USOE Data Warehouse under a data sharing agreement established between the USOE and the UEPC in February 2010.⁴ The USOE deidentified (removed personally identifying information from) the data prior to making it available for analysis. We then extracted enrollment, demographic and test score data from the student master, student enrollment, and student test tables for school years 2007-08 to 2009-10. We focused on these years because BTSALP began operation in 2008-09. Achievement data from 2007-08 thus served as the baseline for measuring change in achievement during 2009. We also limited test score data to grades 2-6, because (a) state sponsored assessments were not administered below grade 2 in the period under analysis and (b) grades 7 and above were not targeted by the program. Next, we obtained school level data either by (a) aggregating it from the student level (for variables related to the demographic composition of the school) or (b) extracting it from the institution, school, and school year tables in the USOE Cactus database
or BTSALP program documents and data files housed at the UEPC (for variables that pertain to the school as whole, such as the type of school — elementary, middle, etc.).

**Sample**
To create a group of non-BTSALP schools which could be meaningfully compared with schools that had participated in the BTSALP program, we used a two-stage design, in which we first selected schools and then selected students within those schools to be included in the study. We chose this approach because BTSALP — the intervention we are evaluating — operates at the school level, but the achievement outcomes in which we are interested occur at the student level.

**Sample Selection, Stage 1.** In the first stage, the school was the primary sampling unit. We began by listing all Utah public schools which enrolled students in 2010. We then selected non-BTSALP schools which were similar to BTSALP schools on two criteria. First we selected regular (district and charter) schools, because special purpose schools (such as special education or alternative schools) did not participate in BTSALP. From the regular schools, we then selected elementary schools (providing instructional services primarily to students in some combination of grades K-6), because secondary schools did not participate in BTSALP. The one exception was the inclusion of a small number of schools identified as middle schools due to their unusual grade spans but which were nevertheless similar to one BTSALP school, which serves K-9. The result was a sample consisting of 555 schools.

**The BTSALP Intervention Group.** Of the 555 schools, between 38 and 60 comprised the group of BTSALP schools and the rest served as a comparison group, depending on the particular analysis. In the history of the program to date, 60 schools have participated, 59 in 2008-09 and 53 in 2009-10 — seven schools left after 2008-09 and one joined in 2009-10. All 60 were used in the descriptive comparison presented below in Figures 35-47. The 52 that participated in both years were used in the analysis to address the first research question as we felt the program continuity and commitment manifest by these schools provided the fairest test of the impact of the program. Finally, the 38 to 42 for which complete implementation and sufficient science test data were available remained in the analysis to address the second research question.

**Sample Selection, Stage 2.** In the second stage, we selected all students within the 555 schools who had test scores in successive years and grades or, in other words, who had both pretest and posttest scores. The two groups of schools are compared for the 2009-10 school year in Table 10. Three points are notable:

- The demographic composition of the student population in both types of schools was very similar.
• BTSALP schools were more likely to be located in cities and towns than in suburbs and rural areas.
• Average academic achievement in BTSALP schools was higher. (In fact, this is true for the entire period from 2003-04 to 2009-10, as can be seen in Figures 35-47.)

Table 10. School Descriptives, School Year 2009-10

<table>
<thead>
<tr>
<th>DEMOGRAPHY</th>
<th>BTSALP (N = 52)</th>
<th>Non-BTSALP (N = 503)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Min</td>
<td>Max</td>
</tr>
<tr>
<td>Enrollment</td>
<td>.54</td>
<td>1,050</td>
</tr>
<tr>
<td>Sex Ratio</td>
<td>.74</td>
<td>1.30</td>
</tr>
<tr>
<td>% Low Income</td>
<td>7.0</td>
<td>99.7</td>
</tr>
<tr>
<td>% LEP</td>
<td>.0</td>
<td>58.1</td>
</tr>
<tr>
<td>% Mobile</td>
<td>1.8</td>
<td>20.8</td>
</tr>
<tr>
<td>% Disability</td>
<td>6.0</td>
<td>23.6</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% American Indian</td>
<td>.0</td>
<td>67.4</td>
</tr>
<tr>
<td>% Asian</td>
<td>.0</td>
<td>13.5</td>
</tr>
<tr>
<td>% Black</td>
<td>.1</td>
<td>7.9</td>
</tr>
<tr>
<td>% Hispanic</td>
<td>1.0</td>
<td>74.3</td>
</tr>
<tr>
<td>% Pacific Islander</td>
<td>.0</td>
<td>6.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Locale</th>
<th>BTSALP</th>
<th>Non-BTSALP</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
<td>21.2</td>
<td>16.9</td>
</tr>
<tr>
<td>Suburb</td>
<td>42.3</td>
<td>50.7</td>
</tr>
<tr>
<td>Town</td>
<td>23.1</td>
<td>13.3</td>
</tr>
<tr>
<td>Rural</td>
<td>13.5</td>
<td>19.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AVERAGE ACHIEVEMENT BY PANEL</th>
<th>BTSALP</th>
<th>Non-BTSALP</th>
</tr>
</thead>
<tbody>
<tr>
<td>L 2007-08, 2008-09</td>
<td>-1.10</td>
<td>-.60</td>
</tr>
<tr>
<td>S 2007-08, 2008-09</td>
<td>-1.34</td>
<td>.75</td>
</tr>
<tr>
<td>L 2008-09, 2009-10</td>
<td>-.98</td>
<td>.67</td>
</tr>
<tr>
<td>M 2008-09, 2009-10</td>
<td>-1.03</td>
<td>.55</td>
</tr>
<tr>
<td>S 2008-09, 2009-10</td>
<td>-1.13</td>
<td>.71</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OTHER</th>
<th>BTSALP</th>
<th>Non-BTSALP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance Rate</td>
<td>91.6</td>
<td>99.1</td>
</tr>
<tr>
<td>% Title I</td>
<td>48.1</td>
<td>44.7</td>
</tr>
<tr>
<td>% Charter Schools</td>
<td>3.8</td>
<td>8.2</td>
</tr>
</tbody>
</table>

Note. The sex ratio is the count of males divided by the count of females: the naturally occurring ratio is 1.05. A panel includes only students with test scores in both of the years and the subject indicated: L = Language Arts, M = Mathematics, S = Science. Test scores are expressed as z scores (standard deviations) to facilitate comparison across subjects and years.
**Statistical Model**

We were unable to conduct a randomized experiment, which would have identified cause and effect relationships between the intervention (e.g., BTSALP participation) and the intended outcome (e.g., student achievement). Instead, we used a statistical model that allowed us to estimate the relationship (correlation) between BTSALP and achievement while controlling for the differences between students that we could measure.

**Basic Strategy.** From the descriptive data in Figures 35-47, we see that BTSALP schools have higher academic achievement; *in other words, school participation in BTSALP is positively correlated with academic achievement.* The goal of modeling the relationship was to see what would happen to this correlation when other factors known or believed to influence achievement were taken into account. If the correlation were to remain, it would provide evidence of the strength of the BTSALP effect. To this end, we developed two versions of a two-level students-within-schools hierarchical linear model (HLM), which differed only in the sample used (as described above) and how BTSALP was defined (as described below).

**About HLM.** Schooling is hierarchically organized. Students are in classes or under teachers, who in turn are in schools, which are under districts, and so on. HLM is an approach to statistical analysis that allows the researcher to model relationships simultaneously at multiple levels. It takes into account the fact that when analyzing an outcome like achievement that pertains to students, the outcome is influenced by factors at different levels of the hierarchy. In the data set for this analysis, most of the differences among (variance in) test scores were due to differences between students rather than to differences between schools (84% to 91%, based on the intraclass correlation coefficient). Consequently, we controlled for (statistically removed) variance in posttest scores at the student level due to extraneous factors that could obscure the correlation between BTSALP and achievement. But the much smaller variance between schools was statistically significant (*p* < .00 in every instance), indicating that there were differences among schools per se, so we also allowed the mean posttest score to vary randomly across schools; in other words, every school was allowed to have its own unique effect on achievement. HLM enabled us to model this complex situation to get a more precise measure of the specific impact of BTSALP than would be possible with a simpler or more traditional analysis. In the end, the model accounted for 74% to 92% of the variance between schools and 54% to 57% of the variance between students. In comparison to values for similar measures of goodness of fit generally reported in the social science literature, these indicate that the model fit the data well, giving confidence in the accuracy of the specific results reported below.
Level 1: Students. For both versions, at the student level, achievement was operationalized as a posttest score (measured after the student had the opportunity to be influenced by BTSALP for one school year) and specified as a function of the student’s pretest score (measured prior to the start of each year of program operation) plus the student’s demographic characteristics. The relationship can be described as:

\[ y_{ijt} = \beta_{0jt} + \beta_{1j}(PRETEST)_{ijt-1} + \sum \beta_{qj}(DEMOGRAPHY)_{ijt} + r_{ijt} \]

In equation (1), \( y \) is the posttest score for student \( i \) in school \( j \) at time \( t \); \( \beta_{0j} \) is the expected average posttest score for school \( j \); \( \beta_{1j} \) is the cumulative effect of all prior influences, represented by the pretest score at the end of the prior school year, on the student’s posttest score; \( \sum \beta_{qj} \) is the combined current effect of the student’s location in the social structure, represented by the student’s status with respect to cohort, disability, gender, limited English proficiency, low income, racial or ethnic identity, and residential mobility; and \( r \) captures error in measurement.

Level 2: Schools. At the school level, the school’s average score was specified as a function of whether it was a BTSALP school (1 = yes, 0 = no) or the extent to which it implemented BTSALP; that is:

\[ (2.1) \beta_{0j} = \gamma_{00} + \gamma_{10}(BTSALP | IMPLEMENTATION)_{j} + u_{0j} \]
\[ (2.2) \beta_{qj} = \gamma_{q0} \]

In equation (2.1), \( \gamma_{00} \) is the average (grand mean) posttest score for all schools; \( \gamma_{10} \), the result of primary interest, is the BTSALP effect on the average posttest score; the bar | indicates the two different operational definitions of BTSALP used in the two versions of the model, respectively; \( u_{0j} \) is the unique effect of school \( j \) on the average posttest score of its students (apart from any BTSALP effect). Equation 2.2 indicates that the pretest and demographic coefficients at the student level are all treated as fixed effects, which means that, for example, the effect of coming from a low income family is considered to be the same in all schools.

Variables
Achievement. We used the scale score on the Utah year end criterion referenced test (CRT) as a measure of academic achievement. Prior to analysis, we standardized the score (transformed it to a normalized standard deviation, also known as z score, which has a mean of 0 and a standard deviation of 1) for each student relative to the scores of other students participating in the same test as defined by each unique combination of subject, grade and year (e.g., Language Arts Grade 2 in 2008). This made it possible to combine and compare scores across
different tests and present results in normalized standard deviations, which is the most common unit of measurement for effect sizes.

**Demography.** All demographic characteristics were represented by a set of dummy variables (1 = yes, 0 = no), indicating the status of the student with respect to:

- disability (student received special education services),
- gender (student was female),
- limited English proficiency (student was classified as limited English proficient in any category other than “fluent”),
- low income (student was eligible for free or reduced price school lunch),
- racial or ethnic identity (student self-identified as American Indian, Asian, Black, Hispanic, or Pacific Islander); and
- residential mobility (student was enrolled for less than 160 days in the school where the test was taken).

After discussion with USOE staff and exploratory analysis, we determined that mobility would be a more reliable indicator of exposure to instruction than attendance. Mobility is based on membership data (the number of days the student was enrolled), and the definition, recording and reporting of membership are much more standardized than those of attendance. In fact, our operational definition of mobility (see the last bullet above) is the same one used by the USOE to determine whether a student has been enrolled for a full academic year in its implementation of the school accountability system mandated under ESEA. In the accountability system, students who were enrolled for less than 160 days are excluded; in our study, the same students are included but the fact that they moved between schools during the school year was explicitly taken into account. We also incorporated a measure of the cohort to which the student belongs based on the unique combination of school year and grade level in which the student was enrolled. This combination indicates when the student entered the school system. The five cohorts in the data set were represented by a consecutive set of whole numbers (0-4) with zero indicating the oldest cohort in the study. Because the subjects tested were analyzed separately, including the student’s cohort in the analysis effectively controlled for differences in achievement due to the specific test taken.

**Implementation.** We measured the extent to which each school implemented BTSALP with a single score based on a composite scale. Our basic method was to construct four subscales representing the four major components of the BTSALP model — arts integration, planning, side by side teaching, and professional development — as factor scores and then to construct a composite scale for overall level of implementation as a higher order factor from the subscale
scores. We began with items from a year end survey of administrators and teachers (n = 391) and monthly activity logs by arts specialists (n = 357) and professional development partners (n = 407), all administered by UEPC during the 2009-10 school year. The survey provided multiple views of each school at the end of the school year, with all questions asking for responses along a four-point scale (e.g., from strongly disagree to strongly agree). By contrast, the logs provided monthly perspectives, with questions asking for responses in various formats (e.g., scales like those above, plus counts, checklists, and so on). The logs and the survey only partially overlapped and where they did overlap they often assessed implementation at different levels of abstraction. By constructing a composite scale we intended to represent the full range of program activities and program staff perspectives to ensure content validity. We used factor analysis to combine the numerous indicators into a single score.

Properties of the Implementation Composite Scale. The specific items that constituted each subscale and their respective properties are presented in Table 11. Here we highlight the essential psychometric properties of the composite scale as a whole:

- Reliability (Cronbach’s alpha) = .84
- Percentage of variance accounted for = .76
- Factor loadings ≥ .82

This set of statistics demonstrates that the composite scale met conventional standards of acceptability for reliability (≥ .70) and was strongly unidimensional. Unidimensionality means that the indicators which were combined to compute the implementation scores for each BTSALP school were all measuring the same thing; it is a necessary condition for construct validity. Other items not shown in the table but present in the survey and logs were examined and tested for inclusion in initial analyses but not retained because their factor loadings were too low (< .30). The factor loading is the correlation between the indicator and the construct which it measures. Most notably, the professional development subscale had to be excluded from computation of the composite score for its low factor loading (-.11). In other words, the professional development subscale, while adequate in itself for measuring extent from the perspective of the professional develop partners who were its providers and usefulness from the perspective of the arts specialists who were its recipients (Cronbach’s alpha = .74, % variance accounted for = .37), was weakly and negatively correlated with the other three subscales — including it would have substantially reduced the reliability and validity of the composite scale.
Table 11. Implementation Composite Scale, 2009-10: Psychometric Properties

<table>
<thead>
<tr>
<th>Component</th>
<th>Source</th>
<th>Reliability</th>
<th>Variance Explained</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COMPOSITE</strong></td>
<td></td>
<td>.84</td>
<td>.76</td>
<td></td>
</tr>
<tr>
<td><strong>Arts Integration Subscale</strong></td>
<td></td>
<td>.78</td>
<td>.49</td>
<td>.92</td>
</tr>
<tr>
<td>Have opportunities to learn lang. arts core concepts through arts</td>
<td>S8d</td>
<td></td>
<td></td>
<td>.83</td>
</tr>
<tr>
<td>Have opportunities to learn mathematics core concepts through arts</td>
<td>S8e</td>
<td></td>
<td></td>
<td>.85</td>
</tr>
<tr>
<td>Have opportunities to learn science core concepts through arts</td>
<td>S8f</td>
<td></td>
<td></td>
<td>.85</td>
</tr>
<tr>
<td>Have opportunities to learn social studies core concepts through arts</td>
<td>S8g</td>
<td></td>
<td></td>
<td>.88</td>
</tr>
<tr>
<td>Class sessions integrating arts with language arts</td>
<td>L18a-g</td>
<td></td>
<td></td>
<td>.35</td>
</tr>
<tr>
<td>Class sessions integrating arts with mathematics</td>
<td>L19a-g</td>
<td></td>
<td></td>
<td>.52</td>
</tr>
<tr>
<td>Class sessions integrating arts with science</td>
<td>L20a-g</td>
<td></td>
<td></td>
<td>.60</td>
</tr>
<tr>
<td>Class sessions integrating arts with social studies</td>
<td>L21a-g</td>
<td></td>
<td></td>
<td>.51</td>
</tr>
<tr>
<td><strong>Planning Subscale</strong></td>
<td></td>
<td>.85</td>
<td>.66</td>
<td>.88</td>
</tr>
<tr>
<td>Arts specialist and teachers plan lessons collaboratively</td>
<td>S6a</td>
<td></td>
<td></td>
<td>.96</td>
</tr>
<tr>
<td>Arts specialist has adequate time to plan for side-by-side lessons</td>
<td>S6b</td>
<td></td>
<td></td>
<td>.64</td>
</tr>
<tr>
<td>Teachers have adequate time to plan for side-by-side lessons</td>
<td>S6c</td>
<td></td>
<td></td>
<td>.89</td>
</tr>
<tr>
<td>Lesson plans integrate lang. arts, math, science core curriculum</td>
<td>S6d</td>
<td></td>
<td></td>
<td>.90</td>
</tr>
<tr>
<td>Lesson plans integrate the arts core curriculum</td>
<td>S6e</td>
<td></td>
<td></td>
<td>.91</td>
</tr>
<tr>
<td>Our school supports planning for arts integration</td>
<td>S6f</td>
<td></td>
<td></td>
<td>.87</td>
</tr>
<tr>
<td>Frequency of planning</td>
<td>L3</td>
<td></td>
<td></td>
<td>.30</td>
</tr>
<tr>
<td><strong>Side by Side Teaching Subscale</strong></td>
<td></td>
<td>.70</td>
<td>.47</td>
<td>.82</td>
</tr>
<tr>
<td>Teachers remain with arts specialist during art classes</td>
<td>S8a</td>
<td></td>
<td></td>
<td>.69</td>
</tr>
<tr>
<td>Classroom teachers are actively involved in arts lessons</td>
<td>S8b</td>
<td></td>
<td></td>
<td>.85</td>
</tr>
<tr>
<td>Our school sets clear expectations about side-by-side teaching</td>
<td>S8h</td>
<td></td>
<td></td>
<td>.70</td>
</tr>
<tr>
<td>Hours in side by side teaching</td>
<td>L12</td>
<td></td>
<td></td>
<td>.68</td>
</tr>
<tr>
<td>Frequency of side by side teaching</td>
<td>L13</td>
<td></td>
<td></td>
<td>.54</td>
</tr>
<tr>
<td>Degree of collaboration in arts integrated teaching</td>
<td>L14a-e</td>
<td></td>
<td></td>
<td>.62</td>
</tr>
</tbody>
</table>

**Note.** Source: L = BTSALP Arts Specialist monthly activity log (N = 357); S = Year end survey of BTSALP school administrators and teachers (N = 391); the number following indicates the specific item on the instrument.
**Estimation**

The version of the model which addressed the first question about BTSALP participation was estimated five times — once for each combination of subject tested (language arts, math, science) and pair of successive pretest-posttest years (2007-08 to 2008-09 and 2008-09 to 2009-10), except one: math 2007-08 to 2008-09 was not estimated at the request of the USOE because a fundamental change in the math CRT created a discontinuity in the time series of math test results between 2007-08 and 2008-09. The version of the model which addressed the second question about BTSALP implementation was estimated three times — once for each subject tested in 2009-10. All variables other than the BTSALP indicator were grand-mean centered to facilitate interpretation of the BTSALP participation effect as the difference between the average BTSALP school and the average non-BTSALP school. HLM software (version 6.08) was used to carry out the procedures.

**Results**

**Effect Size and Statistical Significance**

First, we compared the 52 BTSALP schools which participated in both 2008-09 and 2009-10 to approximately 500 non-BTSALP schools on five academic outcomes across two years:

- For all five outcomes, school participation in BTSALP had a small and positive effect on academic achievement.
- For four of the outcomes, the effect was statistically significant, meaning that the effect was unlikely to have occurred by chance or, in other words, that the effect was real.

These findings are based on the following numerical summary, in which \( z \) is the effect size measured in normalized standard deviations; \( p \) is the probability of not observing an effect the size of \( z \), if the effect really is zero (.000); and \( ns \) indicates “not significant,” which means that the effect, while nominally different from zero, is not in fact statistically distinguishable from zero or, in other words, is due to chance:

- Language Arts 2008-09: \( z = .030, p < .05 \)
- Science 2008-09: \( z = .043, p < .10 \)
- Language Arts 2009-10: \( z = .024, p < .10 \)
- Mathematics 2009-10: \( z = .041, p < .05 \)
- Science 2009-10: \( z = .006, ns \)
We then compared the subset of 42 BTSALP schools for which we had complete implementation data in 2009-10 on implementation across three outcomes:

- For all three outcomes, achievement increased with increases in fidelity to the implemented the BTSALP model with greater fidelity tended to have a little higher achievement.
- For two of the outcomes, this small and positive effect was statistically significant.

For the third outcome the effect was on the cusp of significance; here is the numerical summary:

- Language Arts 2009-10: \( z = .038, p < .05 \)
- Mathematics 2009-10: \( z = .018, \text{ns (} p = .101 \) \)
- Science 2009-10: \( z = .065, p < .05 \)

This set of results gives the basic answers to the two questions:

Q1. How does achievement for students in schools which were selected for participation in the BTSALP program compare to demographically similar students in nonparticipating schools? Favorably — there is something about BTSALP schools that works in producing student achievement. The differences evident in a simple comparison of the BTSALP and non-BTSALP schools largely remain after other important factors are taken into account.

Q2. Among BTSALP schools, how does achievement vary with the extent of program implementation? Positively — in combination with the answer to Q1, this suggests that what works has something to do with BTSALP itself.

Complete results of both versions of the model are presented in Tables 12 and 13, respectively, including all variables in the model plus measures of goodness of fit and sample size.
### Table 12. BTSALP v. Non-BTSALP Schools, 2008-09 & 2009-10: HLM Results

<table>
<thead>
<tr>
<th>OUTCOME</th>
<th>L 2008-09</th>
<th>S 2008-09</th>
<th>L 2009-10</th>
<th>M 2009-10</th>
<th>S 2009-10</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SCHOOL INTERVENTION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BTSALP Participant</td>
<td>.030</td>
<td>.041</td>
<td>.024</td>
<td>.041</td>
<td>.006</td>
</tr>
<tr>
<td><strong>STUDENT CONTROLS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prior Year End Test Score</td>
<td>.678</td>
<td>.663</td>
<td>.694</td>
<td>.706</td>
<td>.673</td>
</tr>
<tr>
<td>Female</td>
<td>.045</td>
<td>-.096</td>
<td>.045</td>
<td>-.047</td>
<td>-.087</td>
</tr>
<tr>
<td>Low Income</td>
<td>-.091</td>
<td>-.075</td>
<td>-.104</td>
<td>-.090</td>
<td>-.073</td>
</tr>
<tr>
<td>Limited English Proficient</td>
<td>-.123</td>
<td>-.149</td>
<td>-.098</td>
<td>-.075</td>
<td>-.173</td>
</tr>
<tr>
<td>Special Education</td>
<td>-.227</td>
<td>-.250</td>
<td>-.198</td>
<td>-.197</td>
<td>-.238</td>
</tr>
<tr>
<td>Mobile</td>
<td>-.056</td>
<td>-.067</td>
<td>-.038</td>
<td>-.044</td>
<td>-.026</td>
</tr>
<tr>
<td>Cohort</td>
<td>.000</td>
<td>.022</td>
<td>-.001</td>
<td>-.014</td>
<td>.023</td>
</tr>
<tr>
<td>American Indian</td>
<td>-.106</td>
<td>-.128</td>
<td>-.149</td>
<td>-.127</td>
<td>-.151</td>
</tr>
<tr>
<td>Asian</td>
<td>.047</td>
<td>.066</td>
<td>.058</td>
<td>.073</td>
<td>.009</td>
</tr>
<tr>
<td>Black</td>
<td>-.114</td>
<td>-.143</td>
<td>-.111</td>
<td>-.155</td>
<td>-.160</td>
</tr>
<tr>
<td>Hispanic</td>
<td>-.068</td>
<td>-.077</td>
<td>-.059</td>
<td>-.079</td>
<td>-.092</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>-.066</td>
<td>-.083</td>
<td>-.079</td>
<td>-.075</td>
<td>-.155</td>
</tr>
<tr>
<td><strong>MODEL FIT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Between Schools</strong> ((u_{ij}))</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Base Model Variance</td>
<td>.109</td>
<td>.154</td>
<td>.086</td>
<td>.110</td>
<td>.139</td>
</tr>
<tr>
<td>ICC at Base</td>
<td>11.2%</td>
<td>15.8%</td>
<td>8.8%</td>
<td>11.1%</td>
<td>14.3%</td>
</tr>
<tr>
<td>% Variance Explained by Model</td>
<td>74.3%</td>
<td>74.7%</td>
<td>84.9%</td>
<td>80.9%</td>
<td>77.0%</td>
</tr>
<tr>
<td>Remaining Unexplained Variance</td>
<td>.028</td>
<td>.039</td>
<td>.013</td>
<td>.021</td>
<td>.032</td>
</tr>
<tr>
<td>ICC after Model</td>
<td>6.9%</td>
<td>9.5%</td>
<td>3.2%</td>
<td>5.2%</td>
<td>7.9%</td>
</tr>
<tr>
<td><strong>Between Students</strong> (r_{ij})</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Base Model</td>
<td>.866</td>
<td>.818</td>
<td>.894</td>
<td>.880</td>
<td>.833</td>
</tr>
<tr>
<td>% Variance Explained by Model</td>
<td>56.6%</td>
<td>54.6%</td>
<td>55.7%</td>
<td>56.8%</td>
<td>55.2%</td>
</tr>
<tr>
<td>Remaining Unexplained Variance</td>
<td>.376</td>
<td>.371</td>
<td>.396</td>
<td>.380</td>
<td>.373</td>
</tr>
<tr>
<td><strong>SAMPLE SIZE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schools</td>
<td>530</td>
<td>521</td>
<td>553</td>
<td>553</td>
<td>537</td>
</tr>
<tr>
<td>Students</td>
<td>148,918</td>
<td>68,854</td>
<td>153,619</td>
<td>153,382</td>
<td>71,377</td>
</tr>
</tbody>
</table>

**Note.** *p < .05, †p < .10 one-tailed and based on robust standard error. L = Language Arts, M = Mathematics, S = Science. HLM stands for hierarchical linear modeling, an extension of multiple regression to account for the nested structure of schooling (students being clustered nonrandomly together within schools). Cell entries for variables are z-scores (standard deviations). ICC is the intraclass correlation coefficient, a measure of the percentage of variation in the outcome that can be attributed to differences between schools as organizations rather than to individual differences among students within schools.
Table 13. BTSALP Implementation, 2009-10: HLM Results

<table>
<thead>
<tr>
<th>OUTCOME</th>
<th>L 2009-10</th>
<th>M 2009-10</th>
<th>S 2009-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grand Mean</td>
<td>.087 *</td>
<td>.119 *</td>
<td>.091 *</td>
</tr>
<tr>
<td>SCHOOL BTSALP IMPLEMENTATION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Composite</td>
<td>.038 *</td>
<td>.018 #</td>
<td>.065 *</td>
</tr>
<tr>
<td>STUDENT CONTROLS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prior Year End Test Score</td>
<td>.684 *</td>
<td>.695 *</td>
<td>.646 *</td>
</tr>
<tr>
<td>Female</td>
<td>.039 *</td>
<td>-.068 *</td>
<td>-.089 *</td>
</tr>
<tr>
<td>Low Income</td>
<td>-.117 *</td>
<td>-.083 *</td>
<td>-.105 *</td>
</tr>
<tr>
<td>Limited English Proficient</td>
<td>-.051 *</td>
<td>-.030 †</td>
<td>-.170 *</td>
</tr>
<tr>
<td>Special Education</td>
<td>-.226 *</td>
<td>-.235 *</td>
<td>-.241 *</td>
</tr>
<tr>
<td>Mobile</td>
<td>.022</td>
<td>-.020</td>
<td>.049 *</td>
</tr>
<tr>
<td>Cohort</td>
<td>.007</td>
<td>-.011</td>
<td>.053</td>
</tr>
<tr>
<td>American Indian</td>
<td>-.277 *</td>
<td>-.280 *</td>
<td>-.334 *</td>
</tr>
<tr>
<td>Asian</td>
<td>.031</td>
<td>.000</td>
<td>-.125</td>
</tr>
<tr>
<td>Black</td>
<td>-.175 *</td>
<td>-.229 *</td>
<td>-.206 *</td>
</tr>
<tr>
<td>Hispanic</td>
<td>-.056 *</td>
<td>-.104 *</td>
<td>-.067 *</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>-.101 *</td>
<td>-.058 †</td>
<td>-.127 *</td>
</tr>
<tr>
<td>MODEL FIT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Schools (u_0j)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Base Model Variance</td>
<td>.123</td>
<td>.107</td>
<td>.147</td>
</tr>
<tr>
<td>ICC at Base</td>
<td>12.6%</td>
<td>11.5%</td>
<td>16.0%</td>
</tr>
<tr>
<td>% Variance Explained by Model</td>
<td>89.4%</td>
<td>91.6%</td>
<td>85.7%</td>
</tr>
<tr>
<td>Remaining Unexplained Variance</td>
<td>.013</td>
<td>.009</td>
<td>.021</td>
</tr>
<tr>
<td>ICC after Model</td>
<td>3.2%</td>
<td>2.4%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Between Students (r_ij)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Base Model</td>
<td>.850</td>
<td>.826</td>
<td>.770</td>
</tr>
<tr>
<td>% Variance Explained by Model</td>
<td>53.8%</td>
<td>56.1%</td>
<td>54.4%</td>
</tr>
<tr>
<td>Remaining Unexplained Variance</td>
<td>.393</td>
<td>.363</td>
<td>.351</td>
</tr>
<tr>
<td>SAMPLE SIZE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schools</td>
<td>42</td>
<td>42</td>
<td>38</td>
</tr>
<tr>
<td>Students</td>
<td>11,763</td>
<td>11,801</td>
<td>5,198</td>
</tr>
</tbody>
</table>

Note. *p < .05, †p < .10, #p = .101 one-tailed and based on robust standard error. L = Language Arts, M = Mathematics, S = Science. HLM stands for hierarchical linear modeling, an extension of multiple regression to account for the nested structure of schooling (students being clustered nonrandomly together within schools). Cell entries for variables are z-scores (standard deviations). ICC is the intraclass correlation coefficient, a measure of the percentage of variation in the outcome that can be attributed to differences between schools as organizations rather than to individual differences among students within schools.
We also looked at whether the effect could be attributed to particular BTSALP activities or practices. Specifically, we examined achievement in relation to subscale scores for each of the major components of the BTSALP model and in relation to each of the indicators of which these scores were comprised, but the results did not exhibit the consistency that was obvious in using a composite measure of BTSALP and could not therefore be meaningfully interpreted. However, this absence of a clear result in this instance taken together with the clarity of the results summarized above lead us to a further conclusion:

- Academic effectiveness in BTSALP schools is at least partially attributable to the BTSALP model as a whole — planning, side-by-side teaching, arts integration, and professional development. It is something more than the sum of its parts.

Following conventions for the interpretation of effect sizes (Cohen, 1988), we have described the BTSALP effect as small. This is consistent with the history of empirical research on the relationship between arts education and academic achievement as summarized in the meta analysis (quantitative research synthesis) by Winner and Cooper (2000).¹ They used a measure of effect size, the standardized mean difference \((d)\), that is comparable to the measure of effect size \((z)\) used in this study (both are in fact normalized standard deviations, although they were derived in different ways). The average effect size among the quasiexperimental studies they located was larger than what we observed for BTSALP (verbal test score as outcome: \(d = .14\) based on 24 estimates; math test score as outcome: \(d = .12\) based on 15 estimates) but still well under Cohen’s criterion for a small effect \((d \approx .20)\). Moreover, the average effect was not statistically significant, even at the level used in this study \((p < .10)\). For the two experiments located by Winner and Cooper, in which students were randomly assigned to the arts and control programs, the effect size was smaller and very similar to what we observed for BTSALP \((d = .04 and .06, respectively)\).

From Correlation to Causation

To go beyond recognition of a correlation to establish a causal relationship requires three types of empirical evidence — that the hypothesized cause and effect are associated, that the cause precedes the effect, and that plausible alternative explanations (other causes) have been ruled out. It also requires a theory, that is, a compelling description (and preferably a test) of the process or mechanism whereby the cause brings about the effect. Here we evaluate the evidence of this study in light of these criteria:

- **Cause and effect are associated**: The correlational evidence presented above satisfies this criterion.
• **Cause precedes effect:** The research design satisfies this criterion by measuring the outcome after a year of program operation.

• **Other plausible causes are ruled out:** The research design goes some way toward addressing this criterion, in particular, by including a comparison group statistically equated to the BTSALP group on a pretest score, but this is not one of the stronger quasiexperimental designs, and it shares the weaknesses of all studies that do not use a randomized design (in which schools and/or students are assigned purely by chance to the intervention or control group) — it can control only for what can be explicitly measured.

• **Causal mechanism:** The literature offers at least two mechanisms, based on “cognitive structure” and “motivation” theories, respectively (Winner & Cooper, 2000, pp. 12-14). Briefly, in a cognitive structure theory, the mechanism is the transfer of cognitive skill learned through engagement with the arts to other academic areas in which such skills are conducive to success. In a motivation theory, the mechanism can be one or more of several kinds. With an “entry point” mechanism, for example, the student’s interest is piqued in an academic subject via an aesthetic encounter. This study did not set out to test any explicit theory of how BTSALP is related achievement and data were not available to incorporate either of these theories into a statistical model for testing.

We conclude that the evidence is not yet adequate to support the claim that BTSALP per se causes achievement, but the partial quantitative evidence available so far is not inconsistent with such a claim.²

**Notes**

1. A search of the citation database Scopus revealed only 11 references to the Winner & Cooper article in peer reviewed journals (as of November 24, 2010), none of which suggests that their meta-analysis has been updated, superseded or controverted. Their findings, based on 31 published and unpublished studies that appeared in English between 1950 and 1998, thus provide a reasonable benchmark for assessing the results of this study. Winner and Cooper divided studies by their design into “correlational” and “experimental,” and the latter group into “matched” and “unmatched,” the latter having an intact comparison group but no evidence of any control for preexisting differences between groups. Random assignment was used in only two of the matched studies. It would therefore be more accurate to characterize the experimental subset as a collection of (at best) quasiexperimental studies. For all studies, the average effect was positive, but the effect sizes and statistical significance were quite
different in the two types of studies. Here we focus on findings from prior studies which utilized the stronger designs.

2. Quantitative evidence must be considered simultaneously with qualitative evidence to really understand how BTSALP works — or, more precisely, how schools in which BTSALP is operational work — to accomplish higher levels of academic achievement among their students. Winner and Cooper (2000) are worth quoting at length on this point: “So often schools that make the arts central report that students learn better. We must not discount these claims. Rather, we suggest that researchers look closely and ethnographically at what happens to schools that grant the arts a central role in the curriculum. As mentioned at the outset of this article [their meta-analysis], schools that choose to integrate the arts with academic subjects may make other educational reforms at the same time. They may make learning more project-based, they may encourage more open-ended inquiry, or they may attract more enthusiastic, motivated teachers and/or students. If such changes occurred in association with bringing in the arts, we could account for the fact that so many schools that have infused the arts have enthusiastically reported that they have become more exciting places of learning” (p. 66).

3. We had also intended to compare BTSALP schools to non-BTSALP schools which employed arts teachers. However, we found evidence that official accounting for the assignment of fine arts teachers to elementary schools is incomplete. Specifically, known arts specialists in several BTSALP schools are not recorded as fine arts teachers in Cactus in either 2009 or 2010. While the USOE defines the data structure and physically maintains the Cactus database in which these data are found, local education agencies are responsible for providing its content, that is, for recording the assignments of their educators. This “error in measurement” has potential but unpredictable consequences for understanding the relationship between arts education (either as a specific model like BTSALP or more generically) and academic achievement. We had no means of obtaining evidence to determine whether the data were missing at random, so we decided not to attempt to address that question at this time.

4. The UEPC, a University of Utah College of Education research and evaluation center, is the official research arm of the Utah Data Alliance (UDA), of which it is a founding member (together with the USOE, Utah Education Network, Utah System of Higher Education, and the Utah Department of Workforce Services), and the UEPC Director of the Center, Dr. Andrea Rorrer is a UDA co-principal investigator. In May, the U.S. Department of Education awarded the UDA a three-year $9.6 million grant to construct a data system to support longitudinal research on the population of Utah from preschool through college and into the workforce. As the research arm of the UDA partnership, the UEPC has full access to data collected by each of
the partner entities, including microdata on Utah K-12 students and teachers, subject to explicit and rigorous security and confidentiality conditions overseen by both the USOE and the university’s institutional review board for the protection of human research subjects.

5. The intraclass correlation coefficient (ICC or ρ) gives the percentage of total variance in test scores that is due to differences between schools. It measures the extent to which students are more like other students in their same school than they are like students in other schools. It is obtained by dividing the variance between schools (τ₀₀) by the sum of the variance between schools and the variance between students (σ²); symbolically: ρ = τ₀₀ / (σ² + τ₀₀). The percentage of total variance between students is then obtained by subtracting the ICC from one (1 − ρ) (Raudenbush & Bryk, 2002, p. 36).

6. According to Raudenbush and Bryk (2002), “one of the most common applications of HLM in organizational research is simply to estimate the association between a level-2 predictor and the mean of Y [the dependent variable] adjusting for one or more level-1 covariates.” That is precisely the application we are making here. They go on to recommend grand mean centering as a way to “adjust the effect of BTSALP+ … for differences between *schools+ in the mean of [the posttest score+ …” (p. 142), thus providing a clearer picture of the impact. For example, gender is coded as 1 = female, 0 = male. Without centering, the BTSALP effect is compared to the average for boys. By centering, the comparison is to the average without regard to gender.

References


Appendix C: BTSALP Student Achievement Graphs

The figures below were included in a recent update on implementation evaluation presented to the Utah State Board of Education on November 5, 2010. They present information about student achievement across the state and thus provide context for the statistical analysis described in this appendix. The data come from the same source described above in the Data subsection of the Methods section and Note 4 above. The difference is that the BTSALP sample in these figures includes all schools that participated in BTSALP in either 2008-09 or 2009-10 (n = 60).

Method. Percent proficient was obtained by counting the students who scored at proficiency level 3 or above on the state administered criterion referenced test (CRT) and then dividing that count by the number of students who took the test. The results may be different from what the USOE publishes in its accountability reports, because we included all students whether or not they had completed a full academic year. But note in Table 10 above that the mobility rate was slightly higher among BTSALP schools, and our purpose was simply to compare BTSALP to non-BTSALP schools.

Interpretation. These data must be interpreted with caution, and conclusions about program effectiveness cannot be drawn from these data. In particular, because the state began administration of a new math test in 2009, math test scores before 2009 cannot be directly compared to math test scores in 2009 and after. But again, our purpose in presenting these descriptive data is to illustrate the comparison between BTSALP schools and all other public schools in the Utah not assess year to year growth. The percent proficient across subjects and grade levels is generally higher in BTSALP schools compared to all other Utah public schools and has been since 2004. The analysis presented above shows that when individual differences between the students in these schools are taken into account, academic achievement still tends to be higher in BTSALP schools.
Figure 35. Language Arts Grade 2 Percent Proficient or Above

Source: USOE Data Warehouse. The dotted vertical line marks the beginning of BTSALP.

Figure 36. Language Arts Grade 3 Percent Proficient or Above

Source: USOE Data Warehouse. The dotted vertical line marks the beginning of BTSALP.
Figure 37. Language Arts Grade 4 Percent Proficient or Above

Source: USOE Data Warehouse. The dotted vertical line marks the beginning of BTSALP.

Figure 38. Language Arts Grade 5 Percent Proficient or Above

Source: USOE Data Warehouse. The dotted vertical line marks the beginning of BTSALP.
Figure 39. Language Arts Grade 6 Percent Proficient or Above

Source: USOE Data Warehouse. The dotted vertical line marks the beginning of BTSALP.

Figure 40. Mathematics Grade 2 Percent Proficient or Above

Source: USOE Data Warehouse. The dotted vertical line marks the beginning of BTSALP. It also marks the beginning of a new state math test. This means that math test scores before 2009 cannot be directly compared to math test scores in 2009 and after.
Figure 41. Mathematics Grade 3 Percent Proficient or Above

Source: USOE Data Warehouse. The dotted vertical line marks the beginning of BTSALP. It also marks the beginning of a new state math test. This means that math test scores before 2009 cannot be directly compared to math test scores in 2009 and after.

Figure 42. Mathematics Grade 4 Percent Proficient or Above

Source: USOE Data Warehouse. The dotted vertical line marks the beginning of BTSALP. It also marks the beginning of a new state math test. This means that math test scores before 2009 cannot be directly compared to math test scores in 2009 and after.
Figure 43. Mathematics Grade 5 Percent Proficient or Above

Source: USOE Data Warehouse. The dotted vertical line marks the beginning of BTSALP. It also marks the beginning of a new state math test. This means that math test scores before 2009 cannot be directly compared to math test scores in 2009 and after.

Figure 44. Mathematics Grade 6 Percent Proficient or Above

Source: USOE Data Warehouse. The dotted vertical line marks the beginning of BTSALP. It also marks the beginning of a new state math test. This means that math test scores before 2009 cannot be directly compared to math test scores in 2009 and after.
Figure 45. Science Grade 4 Percent Proficient or Above

Source: USOE Data Warehouse. The dotted vertical line marks the beginning of BTSALP.

Figure 46. Science Grade 5 Percent Proficient or Above

Source: USOE Data Warehouse. The dotted vertical line marks the beginning of BTSALP.
Figure 47. Science Grade 6 Percent Proficient or Above

Source: USOE Data Warehouse. The dotted vertical line marks the beginning of BTSALP.
The Utah Education Policy Center identifies relevant issues related to educational access and equity both in public and higher education and engages in timely and rigorous research, evaluations, and analysis to inform educational policy and practice in Utah and the Region. For more information on UEPC research, evaluation, policy analysis and policy development services contact the UEPC at 801-581-4207 or 801-581-5177 or visit us at http://uepc.ed.utah.edu.

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