Strengthening Schools Through Arts Partnerships Programs
2016 and 2017 School Years

Cross-Case Evaluation
November 2017

Prepared for the Arizona Commission on the Arts by

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PEDLS: Program Evaluation and Data Literacy Services
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Introduction

The Arizona Commission on the Arts (Arts Commission) is a state agency that strives to create opportunities for all Arizonans to experience and participate in the arts. To that end, the Arts Commission provides grants, programs, services and leadership in support of arts and arts education programs across the state. In 2014, the Arts Commission developed the Strengthening Schools Through Arts Partnership (SSTAP) grant program in response to statewide data which found that 20% of Arizona schools offer zero arts courses in any discipline, and that among Arizona’s lowest-performing schools, that percentage was even higher, at 34%. The SSTAP program supports school and community partnerships that strengthen teaching and learning in arts education and/or arts integration in Arizona “D” and “F” label schools, and encourages relationship building between schools, communities and local artists. The initiative is based on evidence that strong arts education programs and integrating arts in classroom instruction or complimenting the classroom curricula with art will positively impact student performance, extend the depth of content being taught and engage more students in the learning process.

There are numerous research studies that document the meaningful role arts education plays in preparing young people for success. J. Catterall found in his 2009 publication *Doing Well and Doing Good by Doing Art*:

- “Significant advantages for arts-engaged low-SES students in college going, college grades and types of employment.”
- “Low-income and ELL Students do better in art-rich vs. arts-poor schools; provides documentation of the qualities of arts-rich schools that may matter.”
- “A unique comparison of the arts and athletics explores the importance of students’ passionate engagement.”

Workman, E. (2017) in his publication *Beyond the Core: Advancing Student Success Through the Arts* described how arts education encouraged the development of deeper learning skills. M. Hardiman (2016) found correlations between arts learning with biological changes as well as cognitive and academic advantages. Workman also explored how arts education could foster the much-needed skills of creative thinking and problem solving.

The following is a cross-case evaluation of two SSTAP programs implemented during the 2016 and 2017 school years. Findings from a cross-case evaluation of SSTAP programs implemented during the 2014 and 2015 school years offered confirmation that integrating arts programs with school improvement plans or capacity building efforts can have a positive impact on academic achievement, student engagement, and student self-efficacy regardless of school type, grade level or arts discipline. The purpose of this report is to document findings across SSTAP programs implemented during the 2016 and 2017 school years.
Summary

Embody Learning and Drama Frames were successful ways of integrating the arts in the curriculum. The teachers felt more comfortable with the programs as the year progressed. From the observation data it is apparent that students were more active in the classroom. The letters students wrote at the beginning and end of the year aligned, in spirit, with the data from the teachers’ interviews and focus groups. The students, including the English Language Learners, were empowered through this process.

The benefits of these programs reached far beyond just the introduction of arts to these students. The programs were used to enhance learning even when a student was struggling with the language. Both programs proved to be an enriching experience for the teachers and students. The students’ depth of knowledge for the complex content area was increased. Evidence from multiple sources supported the testimonials from students and teachers.

2016 and 2017 Grantees

Gallego Intermediate School and Isaac School District implemented SSTAP programs during the 2016 and 2017 school years.

Gallego Intermediate School partnered with Arts Integration Solutions to learn active engagement strategies generated from the arts to teach academic content in the classroom. The program used is titled, Embody Learning¹. A core group of classroom teachers participated in a three-part process with the school’s Arts Integration Specialist and Embody Learning Facilitator. This process included classroom modeling by the Embody Learning Facilitator, co-teaching with the Arts Integration Specialist using modeled strategies and independent teaching using the new strategies and content supported by the Arts Integration Specialist. The cycle was repeated five times throughout the year. A detailed description of the Gallego Intermediate School and Embody Learning partnership program implemented during the 2016 and 2017 school years can be found in Appendix C.

Isaac School District partnered with Childsplay to provide professional development to teachers in Structured English Immersion (SEI) classrooms at Moya and Alta E. Butler Elementary Schools during the 2016 and 2017 school years. The program used in the SEI Classrooms of participating schools is titled, Drama Frames. This program promotes language and literacy development through creative drama. Five Childsplay teaching artists worked directly with 9 teachers and 270 students reaching students in kindergarten through 5th grade. Findings from a program evaluation showed statistically significant improvement in both teacher behavior and student performance. A detailed description of the Isaac School District and Childsplay Partnership program implemented during the 2016 and 2017 school years can be found in Appendix D.

¹ The Embody Learning program was later established as an individual organization prior to the publishing of this report.
The two SSTAP grantees used an array of data collection methods to provide evidence of progress. The following table designates the data collection tools used:

### Table 1. Data Collection Tools

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Pre/Post Teacher Surveys</td>
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<tr>
<td>Teacher Focus Groups</td>
<td>♦</td>
<td></td>
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<tr>
<td>Pre/Post Teacher Assessments</td>
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<tr>
<td>Classroom Observation</td>
<td>♦</td>
<td></td>
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<tr>
<td>Teacher Evaluations</td>
<td>♦</td>
<td></td>
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<tr>
<td>Student Personal Letters</td>
<td>♦</td>
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<tr>
<td>Assessments (District Assessments, AZELLA)</td>
<td>♦</td>
<td>♦</td>
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<tr>
<td>Field Notes</td>
<td>♦</td>
<td></td>
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<tr>
<td>Teacher Interviews</td>
<td>♦</td>
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<tr>
<td>Attendance Data</td>
<td>♦</td>
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</table>

### Evaluation of the Strengthening Schools through Arts Partnerships Program 2016-2017 Cohort

The purpose of this evaluation was to gather information needed by the Arizona Commission on the Arts to determine how SSTAP funding was utilized during the 2016 and 2017 school years. Each grant recipient was required to turn in an annual program evaluation report to the Arts Commission in August 2016 and August 2017. The program evaluation documents submitted in August 2017 by each grant recipient are designated as the cases in this cross-case evaluation. A copy of the 2017 annual program evaluation reports are included in Appendices A and B).

### Methodology

#### Cross-Case Evaluation

Cross-case evaluation methods were used to organize knowledge from individual evaluations (a.k.a. cases in this context). There are multiple procedural methods to refer to when deciding upon the right methodology for a cross-case analysis. The methods typically fall into two categories: variable-oriented (i.e., breaking down each case into its raw form to analyze on a larger scale) or case-oriented (i.e., reviewing common themes that were found in the original cases) (Khan & VanWynsbergh, 2008).
combination of both methods was used in this evaluation to, first, recognize individual nuisances within a case (see Analytic matrix, Table 2) and, secondly, identify similarities, differences and common themes across cases (see Thematic matrix, Table 3). These methods were used to value each school/artist partnership as a unique and comprehensive case study on its own yet, the commonalities found across cases will provide the Arts Commission a broad view of how the SSTAP funding was utilized. This study brings to light common strengths and identifies common obstacles encountered by the partnerships.

Research Questions

The following, four cross-case evaluation questions were used to guide this evaluation and are directly aligned with the criteria indicated on the Request for Proposal addressed by grantees in their 2016 and 2017 grant applications. Each applicant had to describe the possible impact of their program on school improvement or capacity-building efforts; how program objectives and outcomes would be aligned to school improvement plans; and, the capacity of their partnership to carry out the program to successful completion. A point system was used to determine whether the applicant best met these criteria.

1) *How did the methods used by the SSTAP grantees strengthen teaching and learning in arts education and/or arts integration?*

2) *How did the methods used by the SSTAP grantees contribute to ongoing school improvement or capacity-building efforts?*

3) *Did the SSTAP grantees design a school-based program with goals and strategies aligned with the school improvement plan?*

4) *What components were incorporated in the SSTAP program to build capacity and sustainability throughout the school year?*

Analysis

Nine analytic categories pertinent to the research questions were used in this evaluation to identify individual nuisances within each case. Table 2 lists the nine analytic categories and illustrates how the analysis was conducted. The cells in the matrix were completed for each case under evaluation. This information was then summarized across columns/cases in the summary column. The Analytical Matrix completed for this evaluation is included as Table 4 in Appendix A.

Table 2. Analytical Matrix

<table>
<thead>
<tr>
<th>Analytical Categories</th>
<th>Gallego Intermediate School/Arts Integration Solutions PROGRAM: Embody Learning</th>
<th>Isaac School District/Childsplay PROGRAM: Drama Frames</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Composition</td>
<td>Description of the student population served</td>
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<td></td>
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<tr>
<td>Stakeholders</td>
<td>All parties directly or indirectly involved with the program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facilitators</td>
<td>Those that implemented the programs</td>
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</tbody>
</table>
Findings in the summary column of the Analytic Matrix (Table 4, Appendix A) were used to conduct a thematic analysis to answer the four research questions. A thematic matrix (Table 5, Appendix B) was developed to review the analytic summaries against the four evaluation questions. Table 2 below lists the six analytic categories reviewed, the evaluation questions and illustrates how the analysis was conducted.

Table 3. Thematic Matrix

<table>
<thead>
<tr>
<th>Thematic Categories</th>
<th>Impact: Strengthen Teaching and Learning in Arts Education and/or Arts Integration</th>
<th>Impact: Contribution to Ongoing School Improvement or Capacity-Building Efforts</th>
<th>Quality: Goals and Strategies Aligned with School Improvement Plan</th>
<th>Viability: Build Capacity and Sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose</td>
<td>Summary across Cases for each Evaluation Question</td>
<td></td>
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<tr>
<td>Theory</td>
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<td>Process</td>
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<td>Evaluation Methods</td>
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<td>Impact/Results</td>
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<tr>
<td>Limitations</td>
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Results

Both schools were in lower socioeconomic areas and were low performing schools. One partnership focused on grades 4, 5, 6 and 8 while the other partnership targeted students in SEI classrooms.

Research Question, 1) How did the methods used by the SSTAP grantees strengthen teaching and learning in arts education and/or arts integration?

Both grant recipients were focused on student achievement, student engagement and teacher professional development. Progress at both levels (i.e., students and teachers) was anticipated with the idea that these programs could help teachers reach students who may have a harder time comprehending the content due to language barriers and the complexity of the concepts. The expectation was that students would retain the information and comprehend the content at a deeper level.

The theoretical framework described and supported by research was focused on teacher practice in the classroom, student engagement and student comprehension of complex materials. The first objective was to address the teachers’ comfort level for operationalizing the programs. There were multiple
methods used by teaching artists and facilitators to work with teachers and mentor them until they felt comfortable incorporating the programs into their classroom curriculum. For example, facilitators and teaching artists worked with teachers during professional development sessions, they co-taught with the teachers in the classroom, co-planned curriculum, observed classroom lessons to provide feedback and were available for consultations.

Data supported the fact that teachers were feeling more comfortable as time progressed and as the students started to respond. One teacher was reported saying, “Learning should be fun, but it’s also learning. [The program] is difficult and challenging. I enjoy that.” As time progressed during the school year students were displaying confidence in their willingness to participate and often requesting favorite strategies in which to express certain concepts.

Multiple items were assessed during the classroom observations. The findings, across cases, showed prior knowledge was accessed and incorporated in the current lessons for students and high order thinking was practiced. The teachers demonstrated scaffolding of concepts over time and facilitated the connections students were making between gestures and concepts (e.g., individual representation of fractions to group representations). One teacher shared, “As soon as you put a funny motion to a word, the vocabulary sticks [for English Learners]. Like they might not remember exactly how to use it, but they know the word and they can try and use it – which is half the battle.”

It was apparent in most instances that teachers were reconstructing modeling processes taught by teaching artists in the coaching sessions. Both programs at the participating schools included modeling by the teaching artist and classroom mentoring to help reinforce the new pedagogy. This helped the teachers understand the process and build the skills necessary to capture the essence of the strategies to incorporate them in the appropriate places within the curriculum. These strategies helped to reinforce student learning which was made apparent to teachers. Students were taking ownership of their learning. Moving teachers beyond just “teaching” to become facilitators of learning was a major objective.

“I’ve seen confidence growing which has been great. I’ve seen more students participating like we’ve all said, that have not generally participated. And yeah, I’ve seen their willingness to participate at a greater level than during other instructional time. So that’s great.” One teacher expressed in an interview.

Other teachers expressed the following statements in focus groups and interviews:

“As we used more [program] strategies students connected mathematical processes to vocabulary they had worked with months earlier.”

“I observed a student who, visibly, transformed his knowledge base from non-comprehension to understanding.”

“It [the program] has impacted how I plan my lessons by helping me to think how...to best meet the needs of kinesthetic learners, or students who need that movement.”

Research Question, 2) How did the methods used by the SSTAP grantees contribute to ongoing school improvement or capacity-building efforts?
The intention for both programs was to build capacity within the school. Many conversations took place between teaching artists and school administrators discussing what program would be the most appropriate for their students and how they might implement the strategies. One partnership decided the best approach would be to focus on English Language Learners (ELL) at the school. They incorporated strategies, based on previous documented research, that enhanced instruction focused on listening and speaking skills. The other partnership focused on incorporating a program, also based on previous research, within the mathematics curriculum that targeted certain standards for grades 4, 5, 6 and 8.

These programs were focused on the teachers’ practices so special attention was paid to participating teachers through professional development sessions, mentoring, coaching and co-teaching. A pre- and post-assessment was administered to teachers participating in one SSTAP program with an increased score in the post-assessment\(^2\). As the year progressed, the observations of teachers showed an increase in their knowledge and comfort level. Even the very last unit of learning (fourth unit) which wasn’t as high as the third unit, still had a higher observation score than the first two units of Flearning. The other SSTAP program reported that from the teachers’ perspective (i.e., via focus groups and interviews) the program helped to build students’ self-esteem, confidence and was a conduit to fostering positive teacher-to-student relationships.

**Research Question, 3) Did the SSTAP grantees design a school-based program with goals and strategies aligned with the school improvement plan?**

All participating schools were listed by the ADE as low performing schools. The STTAP program at Gallego Intermediate School focused on three primary objectives of arts integration/embodiment: teacher effectiveness, student engagement, and student achievement. These objectives directly align with Goals 1 and 5 from the Holladay school improvement plan: To improve student achievement as measured by reading and mathematics achievement, English language proficiency, attendance and graduation rate and to improve student achievement participating schools. The STAPP program implemented by Isaac School District was designed to increase the percent of students who become proficient in the English language by providing customized support for students who are classified as English language learners (ELLs). This objective aligns directly with the goals of the school where the program is being implemented. Both programs were expected to improve student achievement. One teacher was quoted as saying, “The data we had last year showed they tended to score better when they had this kind of lesson.” Another teacher added, “Test them a few weeks later and a lot of that stuff [content] stays with them.”

The programs were mainly focused on ‘teaching practice.’ Both programs focused on transforming teaching practices in the academic classroom. The programs incorporated movement and expression to complex concepts embedded in the curriculum to aid in students’ retention and understanding. One teacher was reported saying about the program:

> “Overall I noticed an incredible increase in vocabulary retention and test scores. And most important[ly], students took ownership of the words, and processes and the level of enjoyment

\(^2\) The post-assessment administered in the first year of the SSTAP program showed a greater increase than in the second year when the program continued; however, there may be a limit to the knowledge learned for the teaching practices beyond the first few years.
they had with vocabulary lessons. In our final lesson students showed truly how far they had come.”

By incorporating these strategies, it was reported that students were more engaged in their learning, that they felt empowered and it was a conduit to increasing their self-efficacy. Another teacher added, “So, once they get engaged in it [the program], I’ve seen them just flourish, because now they ask to do it...for them to just take it and make it their own has been really neat to see.”

Research Question, 4) What components were incorporated in the SSTAP program to build capacity and sustainability throughout the school year?

Sustainability was a focus of both SSTAP grantees through assisting the participating teachers in learning the strategies of these programs. Each partnership submitted a schedule in their proposal that outlined the professional development sessions that was provided to teachers. All professional development sessions were facilitated by experts in the program area and teaching artists worked with the teachers in their specific classrooms. The idea from the beginning of the year was to help the teachers reach a level of knowledge and comfort so they would naturally incorporate the expressions, gestures and movements in the curriculum where they felt it would have the most impact on the students.

In the case of the SEI classrooms, the teachers reported that their students would remember English words faster when there was a gesture tied to it. This was the first step in the students learning the language. As the school year progressed students themselves were using the strategies without the teacher prompting them. These programs were student centered and, as time progressed, were student driven.

Teachers were reported stating:

“I will continue to use it forever, probably, because I enjoy seeing them using it and take it and make it their own.”

“I observed a student who, visibly, transformed his knowledge base from non-comprehension to understanding. Through the use of Embody Learning protocols, he went from failing the class to ‘A’s and ‘B’s.”

“I can really see how evident it is to have learning and fine arts together. Our students are flourishing at our school because we celebrate that.”

“The impact I’ve had on every student in the class is that I’ve been able to create memories for the class as a whole that are not paper and pencil.”

Common Themes

Three common themes became apparent when reviewing the two SSTAP programs: an enhancement in teacher efficacy, a change in teaching practice and an increase in student engagement. One theme that resonated above the others was teacher efficacy.
**Enhanced Teacher Efficacy**
Shifting common teaching practices to incorporate physical movement was a strong component in each program. Once the teachers were comfortable with the program they reported that they thrived on the student engagement and critical thinking that resulted.

> “Some of my students that I didn’t think usually have creative ideas all of a sudden became creative. So I got to see some students that usually aren’t as outspoken, or never really hear them [are] using higher vocabulary and giving really good ideas too.”

> “They [students] feel like they can be part of the group, and they feel involved. And then also it’s kind of like a better chance to get to understand them. Cause sometimes those are the kids that are so just in themselves, and not really participating all the time. So when you get them in that setting, then it’s your time to see like, "Oh that’s, that’s how that kid ticks. Or that’s, that’s why they do that.”

> “Learning should be fun, but it’s also learning. [Embody Learning] is difficult and challenging. I enjoy that.”

> “It took the whole lesson to do the one problem, but when you see the success, that they were able to apply that the next three days, it was amazing.”

**Changes in Teaching Practices**
Both programs included targeted professional development for teachers. This was to help teachers understand the concepts and techniques. In addition, teaching artists co-taught with teachers, observed classes and provided constructive feedback. Teachers commented on the affect these changes had on their teaching practices and the resulting differences it made in their classrooms.

> “I would say maybe my third lesson . . . I was like, ‘Oh they can be engaged, and I can be having fun. And they can be having fun, and we’re not getting too crazy.” And it was like, "Oh this might actually be like a good thing to do all the time.”

> “I’ve definitely noticed a change in my kids. My kids are much more relaxed and much more willing to go up with me on the ride. You know I feel like it’s a more relaxed atmosphere, and they’re more willing to follow me.”

> “I will continue to use it forever, probably, because I enjoy seeing them using it and take it and make it their own.”

> “It helps classroom management because the students are engaged. It’s important to have my students engaged in what they are doing at all times, and when you walk into my class and we’re doing Embody Learning it’s evident; you can see that.”
Increased Student Engagement

Teachers reported that students were participating and contributing more to classroom lessons. Students made the techniques their own. They requested the program and certain techniques even during other class time.

Student initiates, “Why can’t we always do this?”

One teacher states, “There is 100% engagement.”

“I’ve seen confidence growing which has been great. I’ve seen more students participating like we’ve all said, that have not generally participated. And yeah, I’ve seen their willingness to participate at a greater level than during other instructional time. So that’s great.”

Conclusion

The programs reviewed from the SSTAP Cohort 2016-2017 focused on changing teaching practices. This resulted in enhancing the classroom experience both for the teacher and the student. It is evident that student engagement was increased and as a result, teachers were affected as well. Teaching practices were altered to incorporate physical movement into their curriculum. This addition to the classroom strategies helped all students remember words and concepts. It was particularly effective for kinesthetic learners and ESL students.

Success was reported from both programs through interviews, focus groups, student letters and district benchmark assessments. Students and teachers shared very strong emotions through quotes reported in the final evaluations. Both programs affected their participants in a positive manner.

Limitations

Working through school staff changes from one year to the next was an obstacle for both grant recipients to sustain the capacity-building efforts. One program plans to continue the program in the school indefinitely while the other is unsure of the continuation of the program due to school administration staff changes.

Recommendations

In the future, it is recommended to combine the cases from all the cohorts to draw more substantial conclusions about the programs used in the SSTAP grants.

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3 It was noted from the Childsplay report that the AZELLA used to measure progress of Drama Frames was re-scaled by the Arizona Department of Education in 2017. This created a different version of the AZELLA and was not comparable to use as a growth measure from the previous year.
References


Appendices
### Table 4. Analytical Matrix

<table>
<thead>
<tr>
<th></th>
<th>Gallego Intermediate School</th>
<th>Moya and Alta E Butler Elementary Schools</th>
<th>All three schools are considered low performing according to the Arizona Department of Education accountability system.</th>
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<tbody>
<tr>
<td><strong>Student Demographics/Student Composition</strong></td>
<td>Gallego Intermediate School is a Fine Arts Magnet school in the Sunnyside School District located in Tucson. This school serves grades 4-8. This student population has a large percent of English Language Learners.</td>
<td>The focus of this programs was used in the SEI programs at these elementary schools which, of course, is made up of 100% English Language Learners. Alta E. Butler Elementary has 777 students in grades K-5. Moya Elementary has 575 students in grades K-5.</td>
<td>One program was focused on all students in grades 4, 5,6 &amp; 8. The other program was targeted for SEI classrooms.</td>
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<tr>
<td><strong>Stakeholders</strong></td>
<td>Students in Grades 4-6 and 8 4 Teachers: 1 – Grade 4 Math teacher 1 – Grade 5 Math teacher 1 - Grade 6 ELA Teacher 1 – Grade 8 ELA Teacher</td>
<td>English Language Learners in two elementary schools in the Isaac School District 8 SEI Teachers</td>
<td></td>
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<tr>
<td><strong>Facilitators</strong></td>
<td>Arts Integration Solutions/Embody Learning</td>
<td>Childsplay Theater Company</td>
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<tr>
<td><strong>Purpose</strong></td>
<td>1. To show an effect on Math test scores for grades 4 and 5 2. To show an effect on ELA test scores for grades 6 and 8 3. Show an increase in student engagement during academic content instruction 4. To transform teaching practice in the academic classroom</td>
<td>1. To increase ELL students’ academic achievement in language acquisition as seen on by an increase of AZELLA test scores and through student letters written post-program 2. Meaningfully change teacher behaviors in SEI classrooms by teaching drama strategies to be used with their students, increasing the teachers’ proficiency in using the drama and incorporating the strategies into their school improvement culture.</td>
<td>Both grant recipients were focused on student achievement, student engagement and teacher professional development. Progress at both levels (i.e., students and teachers) was anticipated with the idea that these programs could help teachers reach students that may have a harder time comprehending the content (e.g., English Learner, complex concept). The expectation was that the students would retain the information and comprehend the content at a deeper level.</td>
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<tr>
<td><strong>Theory</strong></td>
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### EL is based on constructivist and social (observational) learning theories. This classroom practice pedagogy focuses on how the teaching practice. The pedagogy encapsulates teaching “skills in presentation, innovation, improvisation and collaboration” to teachers to improve their core practice. See Appendices entire Evaluation report including references.

### Drama Frames is an evidence-based program that is noted to improve teacher facilitation to help develop literacy skills in ELL students. “Drama frames promotes language and literacy development through creative drama, providing an authentic, story-based approach to the Total Physical Response (TPR) methodologies that have proven particularly successful with Language Learners.”

### Both programs have documented research supporting them. The Embody Learning focuses on teaching practice and can be used across content areas. Drama Frames, for this project was focused on the SEI classrooms. This was to encourage student participation even though the language was not yet mastered.

### Process

<table>
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<tr>
<th>Arts Integration Solutions worked with Gallego Intermediate the previous year providing intensive professional development to four teachers (Grades 4, 5, 6, and 8). In 2016-2017, the professional development was reinforced with the four teachers in four staff development sessions throughout the school year. The EL facilitators focused on Human Clay, Tableau and Content Imaging with the teachers. They modeled the strategies in the classroom for the teachers, as well. The teachers were instructed to identify two standards in their content area for the second and third quarters. The EL strategies were incorporated into the curriculum focused on the standards chosen by the teachers.</th>
</tr>
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<tbody>
<tr>
<td>Childsplay facilitated a professional development program, Drama Frames, to eight SEI classroom teachers. This professional development model teaches teachers how to integrate drama into their instruction on literacy and language standards.</td>
</tr>
<tr>
<td>Both artist partners (i.e., Arts Integration Solutions and Childsplay) followed the same process of working with the teachers in profession development sessions and then shadowing them in the classroom to make sure they were comfortable applying the new methods. The follow-up for the artist partners was to follow-up with the teachers, observe the classroom, collect data from students and teachers in various ways.</td>
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</tbody>
</table>

### Evaluation Methods

<table>
<thead>
<tr>
<th>The research questions were: 1. Does the use of Embody Learning strategies impact student mastery of targeted academic content standards? 2. Does the use of Embody Learning strategies increase student</th>
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<tbody>
<tr>
<td>Research Question: Can applying the Drama Frames program to SEI classrooms lead to meaningful change in teacher behavior and student performance around language acquisition?</td>
</tr>
<tr>
<td>Both SSTAP programs focused on teacher practices as well as student performance. The data collection methods varied from traditional instruments or tools to innovative types of data collection. The</td>
</tr>
</tbody>
</table>
### Data Collection Methods:

<table>
<thead>
<tr>
<th>Method</th>
<th>Details</th>
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<tbody>
<tr>
<td>District Mathematics Benchmark Assessment</td>
<td>To measure the progress of Grades 4 and 5 students in math achievement; specifically, the standards that were the focus of this program. (RQ#1)</td>
</tr>
<tr>
<td>District Reading Benchmark Assessment</td>
<td>To measure the progress of Grades 6 and 8 students in reading achievement; specifically, the standards that were the focus of this program. (RQ#1)</td>
</tr>
<tr>
<td>Classroom Observations by the District’s Arts Integration Specialist</td>
<td>The instrument was an observation tool of eleven criteria created and tested by Arts Integration Solutions. (RQ#1, #2 &amp; #3)</td>
</tr>
<tr>
<td>Field notes from the District’s Arts Integration Specialist</td>
<td>These were reflective notes taken all school year on the impact of EL in their school. (RQ#2)</td>
</tr>
<tr>
<td>Teacher Interviews at the end of the school year</td>
<td>The four teachers were interviewed on the impact of the EL strategies on the students in their classrooms in terms of achievement, engagement and their own practice. (RQ#2 &amp; #3)</td>
</tr>
<tr>
<td>Attendance data</td>
<td>As a gauge for students’ engagement. The theory was that if the students were more engaged they would be</td>
</tr>
<tr>
<td>Pre/post surveys for teachers</td>
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<tr>
<td>Focus groups with participating teachers</td>
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<tr>
<td>Pre/post assessment of knowledge for teachers</td>
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<tr>
<td>Observation tool, Childsplay Teacher Facilitation Rubric</td>
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<tr>
<td>Teachers evaluations from district leaders</td>
<td></td>
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<tr>
<td>Student written letters, post-program</td>
<td></td>
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<tr>
<td>AZELLA test score data compared to a control group</td>
<td></td>
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<tr>
<td>Program focusing on SEI classrooms</td>
<td>Program focusing on SEI classrooms incorporated a letter written by students at the beginning of the year and then at the end. Not only was it an innovative way to capture student voice it was also an opportunity to assess writing skills.</td>
</tr>
<tr>
<td>Whereas the other program, focused on specific standards within the curriculum. The program was tailored around those standards and tested with the district benchmark assessment. This was a targeted effort to assess the impact of the program.</td>
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<tr>
<td>Impact/Results</td>
<td>The Embody Learning used by Gallego Intermediate had a positive impact on student achievement, student engagement and teacher efficacy. The results from the multiple sources of data (i.e., district benchmark exams regarding the standards that were feature with EL instruction, the results from the observations of students and teachers, the teacher interviews and student testimonials, and record of student attendance) shows how strong the impact of EL was for both student and teacher. The student depth of knowledge for the content area was acknowledged by the teachers interviews and reinforced by the assessment results. The student population is made up of a high percentage of English Language Learners of whom seemed to flourish with this type of instruction and freedom to express their thoughts in a number of ways (i.e., Tableau, Hand Clay and Content Imaging), in addition to English. The evaluators reported that EL helped to build the students’ self-esteem, confidence and was a conduit to fostering a positive teacher to student relationship. (Details are included in the Gallego Intermediate school’s final report, Appendix C)</td>
</tr>
</tbody>
</table>
| Limitations | Gallego – the teachers that were not included in the study (and therefore not included in the support and guidance from the facilitators) were not incentivized to try EL in the classroom on a regular basis. The results from the evaluation, however, is a testament that the effects are apparent. The hope for Arts Integration Solutions (authors of EL) are to continue their relationship with Gallego Intermediate. This will help reinforce teachers’ learning of the method and possibly start a mentoring system with other teachers.

   Butler – Two of the eight SEI teachers had this training the previous year but the remainder were experiencing Drama Frames for the first time. This had some barring on the progress initially. Many of the teachers and school staff left the school after the 2016-2017 so sustainability of the program is tenuous. |
| Findings by Grant Recipients | Both programs proved to be an enriching experience for the teachers and students. The students’ depth of knowledge for the complex content area was increased. Evidence from multiple sources supported the testimonials from students and teachers. |
| | Embody Learning and Drama Frames were successful ways of integrating the arts in the curriculum. The benefits of these program reach far beyond just the introduction of fine arts to these students. The programs were used to enhance learning even when a student was struggling with the language. |
Table 5. Thematic Matrix

<table>
<thead>
<tr>
<th>Thematic Categories of all Grant Recipients</th>
<th>Impact: Strengthen Teaching and Learning in Arts Education and/or Arts Integration</th>
<th>Impact: Contribution to Ongoing School Improvement or Capacity-Building Efforts</th>
<th>Quality: Goals and Strategies Aligned with School Improvement Plan</th>
<th>Viability: Build Capacity and Sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Purpose</strong></td>
<td>Both SSTAP programs focused on the teachers’ comfort level for operationalizing the programs. Through professional development sessions, co-teaching, critiquing their progress and observing the classroom lessons.</td>
<td>One SSTAP program focused on SEI classrooms in a STEAM school listed as a low-performing (i.e., letter grade D) school by the Arizona Department of Education. The partnership focused on integrating a program in the SEI curriculum instruction to assist the school in their annual goal of increasing students’ proficiency in English. The second SSTAP program is in a school that embraces the fine and performing arts. This school is listed by the ADE as a low performing school. The program is focused on the ‘teaching practice.’ This method incorporates movement and expression to complex concepts to aid in students’ retention and understanding.</td>
<td>The purpose of both programs was to provide the teachers with research-based activities to help reinforce the student learning, build self-efficacy and increase academic achievement.</td>
<td>The artist partners with both grant recipients provided professional development to the teachers and co-taught with them in the classroom to help them apply the activities.</td>
</tr>
<tr>
<td><strong>Theory</strong></td>
<td>The theoretical framework described and supported by research for the SSTAP programs were focused on teacher practice in the classroom, student engagement and student comprehension of complex materials.</td>
<td>The programs are aligned to support the school improvement efforts for each school.</td>
<td>All objectives were discussion between artist partners and the schools to use a program that allowed them to set appropriate goals and objectives.</td>
<td>The theoretic framework of these programs supports building capacity in the schools for sustainability.</td>
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<tr>
<td>Process</td>
<td>There were multiple methods used by teaching artists and facilitators to work with teachers and mentor them until they felt comfortable incorporating the programs into their classroom curriculum. For example, facilitators and teaching artist work with teachers during professional development sessions, they co-taught with the teachers in the classroom, observed classroom lessons to provide feedback and were available for consultation.</td>
<td>The intention for both programs was to build capacity within the school.</td>
<td>The programs planned out their schedule at the beginning of the year to and followed through with meeting their goals.</td>
<td>Sustainability of these programs was important to the SSTAP grantees. There is evidence that there were positive changes in the classroom culture. Students were given the opportunity to take the initiative with their learning. Teachers reported out that students were engaged and supportive of each other.</td>
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<tr>
<td>Evaluation Tools</td>
<td>There were multiple instruments used to access the progress of the teachers and the students. Data, both qualitative and quantitative, were collected as evidence of the programs’ effects. Note: the AZELLA assessment used for one of the programs was re-scaled by the Arizona Department of Education and therefore was not able to be used to growth from the previous year.</td>
<td>As the year progressed teachers felt more comfortable with the programs which was reflective of the data. From the observation data it is apparent that students were more active in the classroom. The student written letters and comments align with the data from the teachers interviews and focus groups that the students, including the English language learners were empowered through this process.</td>
<td>It is difficult to maintain sustainability in the education system at this time due to the frequent changes to the teaching staff and administration. These programs, however, were made operational for two years (2016-2017) in the schools. The SSTAP grantees made adjustments to the operationalization from one year to the next but were able to maintain a good relationship with the participating teachers and staff.</td>
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Galileo Intermediate School Intervention Project  
School Year 2016-2017 - Project Report  
Compiled by Julia Barwell and Rick Wamer for Arts Integration Solutions

**EXECUTIVE SUMMARY:** Embody Learning is a teaching pedagogy in which teachers work with trained facilitators to learn to use active engagement strategies generated from the arts to teach academic content in the classroom. At Galileo Intermediate School in Tucson, AZ, a core group of classroom teachers, supported their Arts Integration (AI) Specialist and an Embody Learning (EL) Facilitator participated in a professional development model called Impact 3-5. After school wide professional development sessions, this core group of teachers engaged in a three part process: classroom modeling by the EL Facilitator with the teacher and students, teacher and facilitator co-teaching with the modeled strategy, and independent teaching with the new strategy and new content supported by the AI Specialist. This cycle was repeated five times over two semesters. The project explored the intervention’s impact on: student achievement, student engagement, and transformation of teaching practice.

**INTRODUCTION**

**Background information**

Embody Learning is a teaching and learning model in which teachers guide students to engage with existing standards of content through physical activity and visualization. Students have the opportunity to work with peers to explore and discover understanding and meaning of new learning content, and actively show their learning through the physical representations they build together. Students use their imaginations to connect prior knowledge to new learning and build their own constructs that make learning meaningful and relevant.

Embody Learning facilitators guide teachers in developing and teaching lessons that align with their curriculum, and connect with any part of a lesson plan. The model is easy to learn quickly, can be implemented in every classroom. Rooted in the arts, Embody Learning is a framework of teaching strategies that are easily aligned with core content learning content to provide opportunities for teachers to pre-assess, teach, and post-assess student learning. It is a kinesthetic approach to teaching pre-k - 12th grade students that results in deeper learning that transfers well to other content, because it engages the whole brain through multiple modalities.

The Embody Learning Model came out of the work of non-profit Arts Integration Solutions (AIS). AIS has worked for several years in classrooms throughout the United States and Mexico to guide teachers in their use of an integrated approach to teaching academic content that engages the whole child. Embody Learning is a teaching/learning model that evolved from that work. AIS contracts with the LLC. ThrivinGroup, which owns the intellectual property of the Embody Learning Model. Trained Embody Learning facilitators work in our partner schools. When the
contracted work is supported by grant funding, it is provided by the non-profit AiS. ThrivinGroup contracts with AiS to provide Embody Learning facilitators who work directly in schools.

The Setting
Gallego Intermediate School is a Fine Arts Magnet Intermediate school the Sunnyside School District in Tucson. Gallego has been a partner with Arts Integration Solutions for two years. The mission of the school is...

...to elevate our students to a higher level of academic achievement while using the academic excellence and expectations that have been foundational instilled in our Gallego students and staff. Utilizing a strong academic base, infused with the fine & performing arts, together we will build a safe, positive and engaging place for the leaders of tomorrow. Learning at Gallego Intermediate does not take place in isolation. We all learn together. Our academics and arts curriculums exist as one.

During the 2015-16 school year we provided professional development to the entire staff, and worked with four classroom teachers in grades, 4, 5, 6, and 8 in an intensive model we call Impact 3-5. The model is five cycles of three visits per teacher in his/her classroom with students, as described below:

- **Day one:** Classroom modeling and co-teaching with Embody Learning Facilitator learning to use Embody Learning Strategies in their classrooms – aligned to selected curriculum standards that are particularly challenging for students.
- **Day two:** Co-planning using the strategy modeled in day one: Debriefing from the previous cycle and applying new modeling to future lesson planning
- **Day three:** Observation and facilitator support while teacher implements the strategy with students.

As a continuation of the project in the 2016-17 school year, we continued to provide schoolwide professional development training, and work with the same group of core teachers to help them build and refine their practice. To build their skill-sets, and begin to grow the work within the school, each individual in that core group of teachers worked with a teacher on their grade level team and content area to begin to model the use of the strategies in the other teacher’s classroom. We believe that this modeling strengthens the core teacher’s practice, and builds accountability for using the strategies. That helped to expose other teachers to the practice, while focusing primarily on the development of the core teachers. The same Impact 3-5 Model was followed, with the added time of teaching a peer teacher’s students when scheduling made it possible.

Program Intent: The intent of this project is to provide professional development training and classroom modeling to the teachers at Gallego Intermediate School to support and build their mission of fully integrating academic content learning with the arts, through the Embody Learning
pedagogy. The training and practice are facilitated by Embody Learning Facilitators who work directly with teachers and students to model and practice teaching together with the intent of improving student achievement, student engagement, and teacher efficacy.

**Theoretical Framework:** The latest research shows that there are better ways for learners to acquire content knowledge than the transmission model commonly found in classrooms. Student-centered constructivist models engage learners more deeply by generating their own knowledge through experiences anchored in real-life situations (Duffy & Jonassen, 2002). While the teacher’s role in education matters more than any other aspect of schooling (Rand, 2016), neither pre service nor in service professional development provides adequate pedagogical support let alone a dynamic set of skills and technical support required to help teachers meet the needs of a challenged student population (MDR/EdNET, 2016). Embody Learning addresses the gap in the systemic deficit of support for teachers by providing teachers with a model they can practice on their own that will have as great an impact as any systemic intervention. Teacher initiative, in this case, at the grassroots level, has the potential to transform education outcomes.

The core of the Embody Learning model is a classroom practice pedagogy. Embody Learning is focused on how the teacher teaches... on the ‘how’ of teacher’s practice. The model has solid conceptual components we have developed in our ongoing work with teachers in partnership with schools, in classrooms and in professional development laboratories. Embody Learning pedagogy considers the classroom experience for each lesson to consist of teachers facilitating students to ENGAGE, EXPLORE and SHOW what they have learned. Embody Learning training addresses skills in presentation, innovation, improvisation and collaboration. The benefit to the teacher is improved student outcomes and an opportunity to become a better teacher with new teaching strategies.

When children are given the opportunity to learn in the multi-modal kinesthetic way that is natural to them, the learning transfers, and becomes a relevant body of knowledge that they take out into the world with them as they make new meaning. The theoretical basis for the development and success of Embody Learning techniques for teachers has been constructivist learning theory as created by John Dewey, Jean Piaget, Jerome Bruner, Lev Vygotsky, and others. and Bandura’s social learning theory which suggests that people can learn though observation, including direct instruction, modeling, and imitation. (Cooper, 1993). “The highest level of observational learning is achieved by first organizing and rehearsing the modeled behavior symbolically and then enacting it overtly.” (Bandura, 1977). On these bases, Jonassen (2002) describes a Constructivist learning environment as a classroom model. In such a space, learners interact with real objects and real problems, and with coaching and reference support, construct their own knowledge. This is different from what usually happens in our schools, which are by tradition objectivist, propositional and therefore teacher-centered, disconnected from real experience.
The Embody Learning model has grown out of arts integration and the emphasis toward making all learning active and an embodiment of content and knowledge and understanding. For younger students this emphasis overtly involved play and for older students it grew out of theater and movement.

Art and active learning are all factors directly related to developmental processes that we experience throughout our lives. The incorporation of arts-derived activities into the classroom can serve as a powerful tool for helping teachers translate findings from neuroscience and cognitive science into instructional practice. (Hardiman, 2010) The benefits for content learning have been identified across the curriculum (Rinne, et al. 2011; Salomon & Perkins, 1998).

We all learn by experience, so when teachers create learning experiences, students learn. Embody Learning is a tool for teachers to make every lesson a learning experience. And because every human being is physical, emotional, intellectual and social... not just one or two of those aspects of being make a full learning experience. Embody Learning engages learners fully. And the outcome is authentic learning from full engagement. Our Impact 3-5 Model allows teachers to learn alongside their students, acting on student needs, co-facilitating instruction with an experienced Embody Learning Facilitator who helps them to align the use of active learning strategies with curricular goals and student learning needs. This unique model creates an experience that both teachers and students can draw from in future lessons. Embody Learning becomes another tool in a teachers’ toolbox of learning strategies that help students succeed. To engage students, motivate them to explore and discover knowledge and enable them to demonstrate their learning — to realize the relevance of their investment in school — producing the ultimate outcome of education. Embody Learning provides multiple doorways for comprehension, assessment and presentation across the curriculum, allowing for a rich experience that provides daily performance assessment of learning in the classroom.

Overview of the Report Structure
This report begins with a description of the Embody Learning pedagogy and ties to our goals for the partnership with Gallego Elementary. We identify three research questions, describe our data collection instruments and data collection process. Following the description of data collection is the report of our data, and our analysis, conclusions, including successes and limitations of the intervention. We close with our conclusion and recommendations for future practice.

METHODOLOGY
Our focus was on the use of primarily two Embody Learning strategies- Human Clay, and Tableau, with some emphasis on the use of Content Imaging. These strategies are derived from movement, theater and visual arts. We taught the strategies to the staff in four staff development sessions during the course of the school year, and modeled them in the classrooms of four teachers, who we considered the ‘core’ group — one from 4th, 5th, 6th and 8th grade. The teachers were selected by the school leadership.
The Strategies
Brief descriptions of the strategies follow. A more detailed description of each is included in the appendix.

*Human Clay:* Using the body to model learning concepts, ideas or processes. Ex: Creating a physical representation that shows the meaning of a vocabulary word.

*Tableau:* Using the body and voice to create a physical representation of a concept, idea or process, adding movement and voice to demonstrate perspective or understanding of how that character’s actions impact the story outcome or sequence. Ex: Creating a scene from a text and giving voice to each character represented to show that character’s point of view at that point in the story. Tableau is by nature and ensemble endeavor.

*Content imaging:* Using imagery to represent an idea, concept or process, giving attributes and/or labels to the image that demonstrate students’ take away from the learning experience and consolidate the physical learning experience from human clay or tableau.

**Research Questions:** We asked the following questions in our endeavor to measure the impact of the program on students and teachers:
1. Does the use of Embody Learning strategies impact student mastery of targeted academic content standards?
2. Does the use of Embody Learning strategies increase student engagement during academic content instruction?
3. How does the Impact 3-5 Embody Learning teaching model transform teaching practice in the academic classroom?

To create a cohesive curriculum alignment, the core group of teachers each selected one standard from one content area during the second and third quarters in order to measure the impact of applying the use of Embody Learning strategies toward student achievement in each targeted standard. The standards selected are as follows:

<table>
<thead>
<tr>
<th>GRADE</th>
<th>MATH 2nd QTR</th>
<th>MATH 3rd QTR</th>
</tr>
</thead>
<tbody>
<tr>
<td>4th</td>
<td><strong>CACRS.MA.4.4.NF.A.2</strong>&lt;br&gt;Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fractions such as 1/4. Recognize that comparisons are valid only when the two fractions refer to the same whole.</td>
<td><strong>CACRS.MA.4.4.MD.B.4</strong>&lt;br&gt;Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Solve problems involving addition and subtraction of fractions by using information presented in line plots.</td>
</tr>
<tr>
<td>5th</td>
<td><strong>CACRS.MA.5.5.NF.B.5.a</strong>&lt;br&gt;Compare the size of a product to the size of one factor, without</td>
<td><strong>CACRS.MA.5.5.NBT.B.7</strong>&lt;br&gt;Add, subtract, multiply an divide decimals to hundredths using concrete</td>
</tr>
</tbody>
</table>
### PEDLS: Program Evaluation and Data Literacy Services

<table>
<thead>
<tr>
<th>Performing the indicated multiplication.</th>
<th>Models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction, related the strategy to a written method and explain the reasoning used.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ELA 2nd QTR</strong></td>
<td><strong>ELA 3rd QTR</strong></td>
</tr>
<tr>
<td>6th</td>
<td>6th</td>
</tr>
<tr>
<td>CACRS.LA.6.6.RL.4</td>
<td>CACRS.LA.6.6.RL.6</td>
</tr>
<tr>
<td>Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of a specific word choice on meaning and tone.</td>
<td>Determine an author’s point of view or purpose in a text and explain how it is conveyed in the text.</td>
</tr>
<tr>
<td>8th</td>
<td>8th</td>
</tr>
<tr>
<td>CACRS.LA.8.W.1b</td>
<td>CACRS.LA.8.CSL.5</td>
</tr>
<tr>
<td>Support claim(s) with logical reasoning and relevant evidence, using accurate, credible sources and demonstrating an understanding of the topic or text.</td>
<td>Compare and contrast the structure of two or more texts and analyze how the differing structure of each text contributes to its meaning and style.</td>
</tr>
</tbody>
</table>

### Data Sources:

To measure the effectiveness of our intervention we used multiple methods of data collection. The data collection instruments and processes used were varied in order to gather data from different perspectives. In the prior school year, we asked teachers to complete an Action Research Form after each cycle. This was a short planning form that asked them to indicate the standards used, strategy applied and rate the outcome of the lesson in the three areas of student engagement, student achievement, and teacher efficacy. Unfortunately, the school administration asked that we not require this of the teachers in the second year of the program. Although we found the data to be valuable, we strove to collect relevant data to measure progress using other methods.

Another significant difference from last year in our data collection was the use of quarterly benchmark testing to measure student success with the standards. This served to be a much more consistent and reliable measure of student achievement than the previous year because it was the same measure in each classroom. In the previous year, teachers used their own measures of success with different criteria. It was difficult to compare across the board. We were also able to use this data to compare Embody Learning (EL) classrooms to non-EL classrooms. The complete set of data is comprised of several pages, and is available upon request.

Finally, a significant measure of the impact of the program came from classroom observations completed by the school’s Arts Integration Specialist, who observed lessons that were co-taught with the facilitator and taught independently by the core teachers.
1) **Benchmark assessment data:** Using the Illuminate quarterly benchmark data assessment, Gallego administration collected data to determine if the intervention impacted student learning of the two selected standards in each classroom during quarters two and three, the time of the intervention. We used a comparison of students with and without the Embody Learning intervention to look at progress over time.

2) **Classroom observation data:** Our facilitator and Gallego’s Arts Integration Specialist used a classroom observation instrument to collect data on eleven indicators of teacher effectiveness while co-teaching lessons. The form for this is included in the appendix. The full content of these observations are available upon request.

3) **Observer/facilitator notes:** Our facilitator and the Arts Integration Specialist kept reflective notes after classroom visits and these notes are anecdotal in nature. These notes are consolidated in the report and available upon request.

4) **Anecdotal comments from teacher videos:** At the end of the intervention, the four core teachers were interviewed to gather their perspectives on the impact of the intervention on their teaching and the achievement of students in their classrooms. A link to the videos is included in the appendix.

5) **Attendance data:** In our proposal, we suggested that student attendance would be impacted by the use of Embody Learning in the classroom. A graph of the data is included, and the multiple pages of school attendance data are available upon request.

The data sources were compiled to support the three research questions as follows:

1. Does the use of Embody Learning strategies impact student mastery of targeted academic content standards?
   - Benchmark assessment data
   - Classroom observations
   - Anecdotal comments from teacher videos

2. Does the use of Embody Learning strategies increase student engagement during academic content instruction?
   - Classroom observations
   - Facilitator notes
   - Teacher reflections (video)
   - Attendance data
3. How does the Impact 3-5 Embody Learning teaching model transform teaching practice in the academic classroom?
   • Classroom observations
   • Anecdotal comments from teacher videos

Data Collection
Data was collected by our Facilitator, the Education Coordinator at Arts Integration Solutions, and Gallego’s Arts Integration Coordinator. Teachers gave input at every stage of the intervention, and gave input to the Arts Integration Specialist and Embody Learning facilitator about their experiences and the experiences of their students. Data and qualitative evidence from observations and teacher comments were compiled by the Arts Integration Facilitator, the Education Coordinator and Gallego’s Arts Integration Specialist.

Data Analysis
Our data was analyzed by our Education Coordinator, the Facilitator, and Gallego’s Arts Integration Specialist. We gathered the information, looked for trends, and tied it back to our three questions and three general areas of: student achievement, student engagement, and teacher transformation.

EVALUATION RESULTS

Data Collected
1) Benchmark Student Achievement Data:
Gallego Intermediate School and the Sunnyside School District use the Illuminate program for gathering formative assessment data on student progress on each of the standards. The following charts include the results of the benchmark assessments on each standard.
2) Classroom Observation Data:
Using a Likert-type scale of 1-5, the Arts Integration Specialist observed teachers using the Embody Learning pedagogy in their lessons with students. There were eleven criteria used to assess the impact of the lessons on student engagement, and student achievement, as well as teacher efficacy and transformation. The following charts report the data for students and then teachers. Observations were completed on six different occasions from January 24th through May 11th.
3) Observer Comments – Gallego Intermediate School - January 24th – May 11th, 2017: As the Arts Integration Specialist observed and rated the eleven criteria, she included descriptive comments about what was happening in the classroom with the teacher and students during the lessons. Her notes were compiled to extract significant observations that illustrated evidence of progress in the three focus areas – student achievement, student engagement, and teacher transformation. The following
bulleted observations highlight descriptive evidence of progress in the three areas. As the observations were of teachers teaching lessons, it is important to note that a larger portion of the observations were of teacher actions. This served to be a valuable tool for examining teaching practice, as well as its impact on students.

**Student Achievement/Mastery of Content**
- Great innovation to work with like fractions using human clay to help understanding.
- Teacher reported that the students in her class work with the strategy on Wednesday and did much better on the problem worksheet after the Embodiment.
- Students and teacher reflected on how they were able to understand more by seeing and exploring the book’s content in this way.
- Adding voice gave more content and lead to more accurate inferencing by observers.
- Nice transfer to relationship of bodies to the visual rectangle by being a representation of a fraction.
- Student models an idea showing how to show shaded parts of fractions with hands – idea represented was evident that student was really thinking outside of the box.
- Nice connection to standard!
- Students were discovering 2D and 3D volume, length width, height, and depth using embodiment strategies.
- Students are asked for prior knowledge, rising action, climax and directed that one of the best ways to understand rising action and climax is if we can feel what it feels like. They did an embody exercise that parallels the concept, and their teacher connected it to students’ own lives – moving on to the next grade level.

**Student Engagement**
- Good encouragement of the work- making it fun.
- Student response to the question – “What do you see that makes you say that?”
  “He inferred, looked at the evidence, made inference, just like when you are reading.”
- Students questioning students
- Students are encouraged to explore, take risks – “Can’t fail.”
- Student initiates, “Why can’t we always do this?”
- They applied traits – physical line up and voice – to create a character and most groups were well on task.

**Teacher Transformation**
- Good accessing prior knowledge – trying to determine myth cues as an introductory activity.
- Teacher used a really great connection of tap-in with text to self – awesome extension of it.
- Teacher used ‘I see, I think, I wonder’ to facilitate observation and discussion.
- Excellent questioning – what do you see? Reinforcing to describe the actual physicality of the tableau participants.
- Excellent reconstruction of the modeling process from our coaching session.
• Very organic method of moving from solo (individual) representation of fractions – to group- by “working with a friend or friends.”
• Very good process structure overall for the class.
• Very good collaboration with the teacher leading the academic inquiry and facilitator leading with the Embody Learning strategy.
• Teacher does a great job asking the student to explain her thinking.
• Students are encouraged to explore, take risks – “Can’t fail.”
• During facilitator demonstration, teacher jumps in - making observations – “What do you see, what do you notice?” “What’s the information their bodies are giving you? Shape? Relationship to one another? Make sure we get our evidence and data based information/text evidence to build our inference.”
• “What did you see that might have been evidence to suggest that?”
• Super well-scaffolded and challenging learning experience using Embodiment to explore distance, area and volume.
• Much better teacher facilitation than the other day. The teacher had a great plan for the class!
• Nice job of asking higher order thinking questions to get kids to reflect on whey they were doing what they were doing.
• Student movements embodied the text – rising action and climax. Questioning followed – “How did they resolve the problem? Who became the protagonist? Could this be the ending? What might the writer do next?” Teacher connected to understanding the standard that they struggled with in the third quarter.
• Great use of the example used in the co-teaching session to extend to using fractions and understanding the process of finding area. Placed them in the context of word problems.

4) Anecdotal Comments from Teacher Videos: The core teachers participated in video interviews at the end of the project. The following quotes are directly from the videos, which are available in their entirety on the Embody Learning website (appendix). Comments directly related to our three focus areas were transcribed and sorted under each of the three areas of focus.

Student Achievement/Mastery of Content
“Embody Learning has really brought looking at ‘what do you see’, ‘what do you think’, and then, ‘what do I wonder’. It’s really helped bring all that together to help (students) make these inferences and to make intelligent inferences, not just making guesses out of the blue.”

“It has really helped the students who are really struggling comprehending some of the information.”

“The students who are struggling comprehension wise, they are really getting a visual of what this chapter looks like, or what this character’s going through by the movements we are doing.”

“It took the whole lesson to do the one problem, but when you see the success, that they were able to apply that the next three days, it was amazing.”
“As soon as we began to act it out, and work together and they had to become the common denominators it made sense. We finished the lesson and they actually went out to lunch, then came back and I said, “I want everyone to go back to your paper and now write an equation of what we acted out.” Their equations were beautiful.”

“The data we had last year showed they tended to score better when they had this kind of lesson.”

“Test them a few weeks later and a lot of that stuff (content) stays with them.”

“I remember the time that (one of the students) was on top of the table and he was the 7 of the 7/9 and he moved underneath the table and all these characteristics of a memory – of physical memory of people moving – that you’re able to remember and have a lasting impact on your memory, verses using only paper and pencil where its more solitary when you are writing down things for your own understanding.”

“I noticed a huge bump in the vocab. And it affected their grade because for some of the students who weren’t quite able to put out that the numerator is the number of parts we have, they were able to gain the ability to identify the concept based on our work as human clay.”

“Overall I noticed an incredible increase in vocabulary retention and test scores. And most important, students took ownership of the words, and processes and the level of enjoyment they had with vocabulary lessons. In our final lesson students showed truly how far they had come.”

“As we used more EL strategies students connected mathematical processes to vocabulary they had worked with months earlier.”

“I observed a student who, visibly, transformed his knowledge base from non-comprehension to understanding. Through the use of Embody Learning protocols, he went from failing the class to As and Bs.”

**Student Engagement**

“So, once they get engaged in it (Embody Learning), I’ve seen them just flourish, because now they ask to do it…for them to just take it and make it their own has been really neat to see.”

“When we have a test, I see them doing some of the movements, and it looks kind of silly when people walk in, but it’s all a part of learning. As a group I see them talking about it, sketch it, and being very eager to perform their work.”

“We use it (Embody Learning) on Tuesdays and Thursdays and I noticed my attendance is much better than on a Monday.”

“The kids found a way to express themselves.”
“I can really see how evident it is to have learning and fine arts together. Our students are flourishing at our school because we celebrate that.”

“We are dancing around, we are moving really fast, creating the fractions and we have to represent even in the groups and there is no fighting. There actually is more collaboration.”

“There’s 100% engagement.”

“We’re also using Embody Learning to illustrate some deeper concepts. The students are excited by this and they’re engaged by this.”

“I definitely think the students own it because of the way they talk about it and the way that they communicate how excited they get when they know we are doing that today.”

“When the class as the group is exploring something as a whole, it is a more holistic look at what they are doing. They have to be more intentional with their time, with their group members, with their communication. They have to be clear. They have to practice. They have to rehearse – all great skills for them to be learning.”

“Once I began using Embody Learning, students began to take ownership for the words that they presented. They were more fully engaged. Their work became something they had to perform in front of the whole class.”

**Teacher Efficacy**

“I will continue to use it forever, probably, because I enjoy seeing them using it and take it and make it their own.”

“Learning should be fun, but it’s also learning. (Embody Learning) is difficult and challenging. I enjoy that.”

“I use it for assessment, just kind of for them (the students) to do a self-reflection. “What did you learn? Tell me. Show me. Can you show me with your drawing; can you sketch it?” I can hear what they know, where they need to be or where I need to take them.”

“It helps classroom management because the students are engaged. It’s important to have my students engaged in what they are doing at all times, and when you walk into my class and we’re doing Embody Learning it’s evident; you can see that.”

“It has worked beautifully this year...because we are doing math, we have to be more flexible and the kids are doing fractions. Fractions with arts and they are using their bodies and they are creating the whole numbers and they’re showing the parts and we’re attacking our word problems with fractions.”
“One of the things I used it (Embody Learning) for was vocabulary, to front load vocabulary, and give them new terms to work out and set out as tableaus and using human clay and also as a means of reviewing things they have already learned.”

“Embody Learning really allowed the kinesthetic learners that movement and that possibility to get up and move and to really express their understanding through their movement – all of it being intentional. It’s important to build intentionality in our work as human clay, just like we would in a sentence.”

“The impact I’ve had on every student in the class is that I’ve been able to create memories for the class as a whole that are not paper and pencil.”

“Embody Learning helps create a culture of accepting that mistakes are O.K. Mistakes let us know when we don’t know something and when we need to go forward.”

“It (Embody Learning) has impacted how I plan my lessons by helping me to think how, for example, this table is not a table, but a vinculum, or how to best meet the needs of kinesthetic learners, or students who need that movement.”

5) **Student Attendance- 2nd and 3rd Quarters**: While we have included student attendance data in this report as promised in our proposal, we recognize that there are many factors that impact student attendance, and this data is not conclusive and cannot be attributed solely to the implementation of Embody Learning. The attendance is reported as a percent of students present over two semesters, out of the total number of students registered in each classroom compared to non Embody Learning classrooms at the same grade level.
DISCUSSION AND LIMITATION
Discussion of Findings

Focus 1 - Student Achievement: Does the use of Embody Learning strategies impact student mastery of targeted academic content standards?

When students are physically engaged in the learning process, they are provided with an opportunity to reach academic success, and are more likely to commit new learning long-term memory. The data from the Illuminate benchmark testing shows that in three of four classrooms during quarters two and three, the students in the EL classrooms outperformed the identified standards over their peers in non-EL classrooms. The evidence of student achievement is even more compelling when examining the qualitative data through classroom observations and teacher interviews. Observations of lessons and teacher interviews note that on several occasions students were able to use the Embody Learning approach as a tool for problem solving and for gaining a deeper understanding of new learning content. Comments and observations often point to a natural use of higher order thinking skills. As a result of the physical engagement, students appeared better able to visualize new learning, and build constructs of ideas, concepts, and processes through physical movement. This, according to the data, transferred well to paper-pencil learning, and student assessment. Teacher comments indicate that the learning was more likely to be committed to long-term memory - “Test them a few weeks later and a lot of that stuff (content) stays with them.” Kinesthetic learning accesses multiple modalities, and the simple process of learning through movement, and allowing students to build their own constructs, creates an environment in the classroom where more students are able to succeed. Given the high population of students at Gallego who are second language learners, the opportunity to physically show what they understand might supersede the challenge of finding the language to explain one’s thinking. In this approach, the language comes out of the physical construct, and the collaborative sharing of ideas that follows allows second language learners to find the vocabulary to express their shared ideas. In the meantime, the multiple experiences of successful ideas that are constructed in the classroom with peers only serve to build their confidence as learners.

Focus 2 - Student Engagement: Does the use of Embody Learning strategies increase student engagement during academic content instruction?

We, at Arts Integration Solutions and Thrivent Group believe from our extensive body of work, that student engagement is the cornerstone of building successful learning experiences. Classroom observations and teacher reflections in this project reveal that student response to the Embody Learning strategies is highly positive because it sets up a classroom environment in which they are out of their seats, collaborating with peers, and actively solving problems. The classroom environment becomes a supportive place in which students initiate, share and critique ideas. Their willingness to collaborate grows as a result of multiple successful experiences. The data collected from classroom observations illustrates significant growth over time in which students initiated ideas, actively engaged with the learning goal, and used higher order thinking skills. This evidence is supported from the teacher-focused data in these observations that notes a strong environment of risk-taking, positive
teacher-student rapport, and effective student engagement. Comments from both the observer and teachers indicate multiple examples of student engagement. Students taking ownership for their work, eager to discuss and share what they’ve learned, finding new ways to express themselves, collaborating, feeling excited about the work, engaged in exploration, bringing intentionality to their collaboration and communication, are all examples cited that suggest a powerful connection between the Embody Learning pedagogy and student engagement. “So, once they get engaged in it (Embody Learning), I’ve seen them just flourish, because now they ask to do it...for them to just take it and make it their own has been really neat to see.” This type of engagement makes learning relevant to students, and that relevancy is what helps them to discover purpose in learning that transfers to their lives outside of school.

**Focus 3 – Teacher Efficacy and Transformation:** How does the Impact 3-5 Embody Learning teaching model transform teaching practice in the academic classroom?

Professional development that is followed by classroom practice and coaching is more likely to bring about change in classroom practice than simply attending a workshop with no accountability to follow up with implementation of new learning. “The content of the professional development is most useful when it focuses on concrete tasks of teaching: assessment, observation and reflection” rather than abstract discussions of teaching. Studies find strong effects of professional development on practice when it focuses on enhancing teachers’ knowledge of how to engage in specific pedagogical skills and how to teach specific kinds of content to learners.” (Darling-Hammond et al 2009) Our model directly focuses on putting the skills and strategies into the hands of teachers as they are working with students in their classrooms. Professional development, followed by modeling, and classroom mentoring with an Embody Learning Facilitator helps teachers to learn the why and how of new pedagogy by practicing with a skilled Embody Learning practitioner who can guide them through the process of building the practice of new skills, while field testing them directly with their own students and curriculum. The data collected from three different sources draws compelling evidence that this does transform practice, and ensures that it becomes part of a teacher’s toolkit of instructional strategies. Teachers were observed using active learning strategies, questioning for higher order thinking, building collaborative learning environments, encouraging and building upon student ideas, encouraging students to take risks in learning, and preparing well-planned lessons that carefully sequenced the learning toward student problem-solving, group demonstration and guided reflection that tied closely to learning standards. The work became increasingly complex and teachers were continuously surprised at the outcome of student learning. Classroom management was a key part of the success. From the new teacher who needed more structure in his classroom management skillset, to the experienced teacher who needed to give up control in order for students to thrive, both ends of the spectrum were met at teachers reflected on their roles as classroom managers and their need to get the most out of their students. One teacher summed up the experience by saying, “I will use it forever, probably because I enjoy seeing them using it and taking it and making it their own.”
Discussion of Limitations

At Gallego Intermediate, we were able to use our Impact 3-5 model to examine how working with classroom teachers in a co-planning and teaching model can facilitate building sustainable practice of the Embody Learning model. We were somewhat limited in our ability to collect reflective data from teachers regarding their planning and lessons. In addition, the data we collected gave us a limited amount of information about the every-day use of Embody Learning in these four classrooms. The outstanding work of the teachers, students, Arts Integration Specialist, and Embody Learning Facilitator speaks to the effectiveness of a classroom demonstration, mentoring, and practice model. The accountability ended with the core group. There was little incentive or encouragement for the other classroom teachers at the school to begin using what they had learned in their professional development sessions. However, these limitations speak to the effectiveness of the Impact 3-5 model. When teachers are able to practice with a facilitator and with instructional feedback, they gain confidence in their ability to apply the new pedagogy to their daily practice. With continued funding and support, the plan at Gallego is to have the facilitator work with the teachers who were mentored this year by the core teachers, and for the new core group of teachers to have the same experience in their classrooms, eventually mentoring other peers. If the project could create an incentive and some accountability for school-wide implementation, the sustainability of this model could be well in place within 3-4 years. However, any sustainable model would require full commitment and focus by staff and administration.

Our recommendations, in order for the use of Embody Learning to become a sustainable practice at this site, would be to continue to work with teams of teachers in the full Impact 3-5 model, building five cycles of three part visits over five consecutive months. Throughout this process, multiple forms of data are collected to note student engagement, student achievement, and teacher efficacy. As a fine arts school, the implementation of the Embody Learning model in every academic classroom would support its very robust arts program. Students would make a stronger connection between the strategies they learn in their arts classrooms, and see their application to academic content learning. This supports the school’s high population of English Language Learners as teachers are more likely to deliver instruction through multiple modalities. We have often observed students who are new to the English Language at Gallego, who are strong participants in Embody Learning lessons because there is an opportunity for them to be successful, no matter what their current level of English proficiency is. We believe that with a carefully structured plan involving all classroom teachers, implemented over three to four years, most teachers would make the use of Embody Learning a daily practice, and students would move from one grade level to the next, knowing that their engagement with Embody Learning strategies is a tool for everyday learning. We are very encouraged by the data collected from this experience at Gallego, and our continued partnership will support the students and teachers at the school, as they continue to work toward increasing student achievement in all academic areas.
Conclusion

Students and teachers in the Embody Learning classroom experience a transformation that brings joy into the learning experience. At a time when high stakes assessment has hijacked the classroom teacher’s independence and instructional decision-making, students and teachers are often at the end of the line of mandates, that make school a place of drill and practice instruction, followed by tests.

We know that if new practice is to become sustainable, it has to become something that is valued and used regularly. Our model allows teachers and facilitators to work side by side to model, plan, experiment and apply active learning strategies to different learning content. When a teacher walks away feeling successful, we know that he or she is more likely to use the model without a facilitator present because the teacher is comfortable in that role, and feels the success along with his or her students. Working side-by-side with an Embody Learning facilitator provides the safety net for successful new practice. For students, having the opportunity to construct their ideas by moving and visualizing, collaborating and problem solving brings relevance to every day learning that is not achieved by paper-pencil tasks. If a student can physically represent the variables in an equation before solving a mathematical problem, or become a character to examine motivation and bring textual evidence to support the portrayal of that character, a spark of relevance catches and ignites the learning process. We see the joy on the faces of both students and teachers, as they find relevance in learning that commits it to long term memory. Who wouldn’t recall a moment in school when they had the opportunity to visualize and become the concept, idea, process or content about which they were learning? Our aim is to have Embody Learning strategies become part of the toolbox of strategies that teachers use daily to help students succeed in learning academic content in a way that is joyful, lasting, and transferrable to all other areas of learning.

Resources


APPENDIX

Classroom Observation Instrument

School: ___________________________ Date: ______________

Teacher: ___________________ Grade: ________ Subject: __________________

Lesson goal: ____________________________________________________________

General observation notes:

EL Criteria | None | Some | Strong
---|---|---|---

1) Teacher maintained a positive rapport with students throughout the lesson.  
2) The teacher established an environment in which healthy risk-taking, exploration, innovative thinking, and student leadership are encouraged.  
3) The teacher effectively engaged students at the start of the lesson to activate prior knowledge.  
4) The teacher effectively facilitated the use of an active learning strategy.  
5) Teacher linked the learning standard/content to an active learning experience for students.  
6) The learning strategy used was an effective match for the learning goal.  
7) The teacher effectively used student initiated ideas to facilitate the learning experience.  
8) Students were actively engaged with a clear learning goal throughout the lesson.  
9) Students actively demonstrated their understanding of the learning goal.  
10) Students had opportunities to engage with learning using higher order thinking skills.  
11) Students initiated (exploration, discovery, and/or innovation) throughout the learning experience.

Comments & General Observation Notes (teacher efficacy, student engagement, student learning):

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

PEDLS: Program Evaluation and Data Literacy Services 42
Learning Strategy: Human Clay

Description:
Human Clay is a deceptively simple strategy based in Missouri because Missouri is the “show me” state. We so often ask our children to fill in the test or to write it down, but in Human Clay you are asking students to “show you” what they know. "Yes!" They need to write it down. "Yes!" They need to tell you. But if the students are “in” the learning content, using their bodies to communicate understanding, they will remember so much more.

How to implement the strategy:
1. All you need to do is to challenge students to show their knowledge. Ask students to use their imagination to visualize what a learning concept would look like if they can show it with their bodies:
   - “Show me what that letter looks like.”
   - “Can you show me a word that begins with that letter?”
   - “Show me what it’s like to be the number 5.”
   - What does the numeral look like?
   - How much five? How can you show that?
   - “Show me what that equation looks like”
   - “How can you solve it with Human Clay?”
   - “Show me how that character must have felt when...”
   - “Show me what you predict the character might do next”
   - “Show me with your body the impact of a forest fire has on an environment when it rains.”
   - “Use your body to demonstrate a right angle, acute and obtuse angles, etc...”
   - “Work together in a group to demonstrate all of the elements and process of photosynthesis.”

2. Use the human clay strategy to assess student understanding of a new concept by asking them to adjust their movement to demonstrate a specific attribute, feature, or process more accurately
   a. Example: Students individually create human clay representations of water cycle terminology: condensation, evaporation, and precipitation. Step two of the process asks them to combine their interpretation of the terms to work together to create a water cycle that demonstrates the function of each element working together.

Reflective practice:
Provide students with the opportunity to reflect on the learning experience by facilitating a discussion about the use of the Human Clay strategy for their learning content. Possible questions to ask include:
   - How did the Human Clay strategy help you to show your understanding of... (learning content)?
   - How can you adjust your Human Clay example to show more detail about...(learning content)?
   - How did the Human Clay strategy help you to see...(the learning) from a different point of view?

Potential integration application:
Human Clay is tested and proven as a simple but highly effective method to elicit presentations of any curricula area. It can work as a teaching tool or a simple check for knowledge. It can scaffold from pre-school to seniors in High School. All students know how to pretend. Human Clay taps students to pretend their content knowledge using their primary human tools: their bodies and their voices. Use it to show vocabulary, verbs, adjectives, synonyms, antonyms, idioms, homonyms – all parts of speech! With minimal instruction and broad parameters, Human Clay will astound you. Your students will reveal core content knowledge in amazingly creative presentations.
Learning Strategy: Holding Energy-Tableau

Description:
When students create a tableau based on a specific scene from literature they are putting themselves in the shoes of the characters they are studying. By “tapping in” to a character’s inner feelings the students are developing empathy for the character whose role they have taken on. Voicing the character’s perspective in a brief and spontaneous monologue allows the teacher to assess the student’s comprehension of the character and plot. While hearing everyone voice their feeling of the scene provides an opportunity for students to understand the multiple perspectives of the given scene in the plot.

How to implement the strategy:
“Holding Energy”
1. Warm-up: Holding energy; don’t say freeze or stop, but, “Hold energy.”
   a. Participants hold their energy & practice
   b. What was experienced & what was the evidence?
      i. Focus silence
      ii. Relaxation laughter
   c. Why the term “hold”?
      i. Who is doing the action?
      ii. You are choosing it – it is in your domain (We want students to understand their own investment - holding energy highlights actions, thoughts and feelings)
2. Direct students to hold energy with the term “run”
   a. Think about the destination to which they are running
   b. Use eyes to show where they are going
3. Direct students to show joy
   a. Observe each other – to show the evidence of what each group knows about joy
   b. Think about what they saw and what did it tell them that others understood about joy
      (Thumbs up, happy, smiling, uplifting, doing activities that you enjoy)
   c. We know that everyone experiences joy differently, but when we freeze it in time we get a snapshot about how people experience joy if I had to feel it to express it – I had to have a thought that made me feel joy
      i. There is an internal process that had to go on: prior knowledge and prior space
      ii. Making inferences by connecting with what you know
      iii. Transferring the process to make meaning transfers to all of the content areas
4. What is the meta-learning that we reinforce through arts integration?
   a. “I had to stop to look at what joy looks like to others”
5. Think of a vocabulary word from your content area or vocabulary list & hold energy to express the meaning of that word
   a. Direct students: “When I say a word you hold the energy – “tree””
   b. Create a five person tree to show more of what you know about trees (You may have movement as well)
   c. Participants share their configurations, identifying what they are demonstrating about trees
6. Processing
   a. Examine how an outlying example can show important information about trees

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Learning Strategy: Content Imaging

Description:
When students are in the process of consolidating and transferring their learning, they need opportunities to ‘make it their own’. Students learn best when they can independently develop their own visual representation of the learning, and think about how it connects to their prior knowledge, other classroom context, and the world around them. After engaging in a physical Embody Learning Strategy, there are many ways to use Content Imaging to help them to create their own representation of the learning, and make the important connections that build understanding and relevance.

How to implement the strategy:
1. After students have engaged in an Embody Learning experience using Human Clay or Tableau, provide a time for independent reflective thinking.
2. Provide material for students to create a visual image that represents the learning. This can be done with any materials available; post-its, white boards, plain white paper, and drawing materials ranging from a pen or pencil, colored pencils, or markers.
3. Ask students to create an image that represents the learning they have just experienced with their bodies. Prompt them to say that the image can be a simple shape, a symbol, a diagram, or drawing.
   a. One adaptation of this is to use specific vocabulary, as if students are creating captions or labels for their image once they have created their image. Or to integrate vocabulary into the original image by creating a diagram that shows the relationship between the vocabulary words that connect to the content for the lesson.
4. Ask students to share their image and justify what it means with a partner, small group or the whole class. This is an important part of the process facilitated by asking what the student has created and what elements of the learning experience are represented, along with how and why they chose to represent the learning the way that they did.

Reflective practice:
Possible questions to ask include:
- How did you represent the learning? What did you draw, and what does it show about what you have learned? What connections did you make?
- Explain why you used the shape(s) you used?
- How did you build the learning vocabulary into your image?
- How do you see this connecting to what we have learned before?
- How do you see this connecting to the world outside the classroom? How did you show that in your image?
- Tell us about the direction of your image. Why did you choose to make it circular, vertical, horizontal, from the inside out, or outside in? How does that connect to our learning content?

Potential integration application:
This strategy can be applied to any new learning. Students need the opportunity to visualize and create their own constructs that show the meaning and understanding they take away from a learning experience. Content imaging is an excellent assessment tool that will tell the teacher how students are using new vocabulary, or how they are connecting with concepts and learning content. Their level of learning will be evident and the process draws upon higher order thinking skills to integrate ideas and make connections. The strategy can be used effectively in all content areas and at any point in a lesson where you want to provide time for reflection and formative or summative assessment.

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Video Links and Website Links

6th Grade ELA Teacher - [https://vimeo.com/211565773](https://vimeo.com/211565773)
4/5th Grade Math Teacher - [https://vimeo.com/211567837](https://vimeo.com/211567837)
8th Grade Social Studies Teacher - [https://vimeo.com/211563369](https://vimeo.com/211563369)
Science and Math Teacher - [https://vimeo.com/211570832](https://vimeo.com/211570832)

What Embody Learning Looks Like in the Classroom - [https://vimeo.com/193966337](https://vimeo.com/193966337)

[www.embodylearning.com](http://www.embodylearning.com)
Childsplay and Isaac School District Final Program Evaluation Report

Executive Summary

Throughout the 2016-2017 school year, the Isaac School District partnered with Childsplay, a theatre company with a proven history of arts education, to provide professional development for teachers in Structured English Immersion (SEI) classrooms at two schools in the district. Throughout the 2016-2017 academic year, 5 Childsplay teaching artists worked directly with 9 teachers and 270 students at Moya and Alta E. Butler School, reaching students in kindergarten through 5th grade. As a result of this programming, the district found statistically significant improvement in both teacher behavior and student performance, based on quantitative data (including rubrics and AZELLA test scores) and qualitative data (including focus groups and student writing).

Introduction

Working with nine teachers and at Moya Elementary School (K-5) and Butler Elementary School (K-5) in the Isaac School District, Childsplay delivered job embedded professional development that used four creative drama units (pantomime/tableau, narration, structured improvisation and teacher in role, and group storybuilding) to achieve Arizona Department of Education and site-specific objectives for arts content linked to language and literacy. Butler and Moya Elementary School are two of three STEAM schools in the Isaac School District. Butler serves 777 students in grades Kindergarten through Fifth Grade, of which nearly 95% qualify for free or reduced lunch. Moya Elementary School serves 575 students in grades kindergarten through fifth grade, and 97% of Moya students qualify for free or reduced lunch. Thirty-five percent of Butler students and forty-one percent of Moya students are English language learners (ELL) and identify Spanish as their primary home language. Both schools were identified by the Arizona Department of Education as low-performing schools (“D” label).

As STEAM schools, the focus is on the integration of science, technology, engineering, arts and mathematics to engage students in dynamic curriculum that accelerates learning. STEAM education is an opportunity for students to engage, explore, and make sense of the natural world through inquiry and project-based learning, rather than merely learning isolated bits and pieces of phenomena or experiencing all new learning through the passive practice of teachers giving information and students receiving it. Students participate by integrating content concepts to solve real world problems that have application to their everyday experiences. Collaboration within and across STEAM schools ensures that as students move from the elementary to middle school level, their educational experiences are continuous and challenging.

With this in mind, Childsplay, a theatre company with a strong commitment to arts education and a research-based success history in teacher professional development made for an ideal partner in improving literacy learning for these two schools. At both Alta E. Butler and Moya, increasing the percent of students who become proficient in the English language, as measured by performance on the
state-adopted language assessment (AZELLA), is an annual school goal. Focused and customized support for students who are classified as English Language Learners (ELL) is a priority. In partnership with Childsplay, these schools received funding from the Arizona Commission on the Arts to implement an initiative aimed at accelerating the achievement of ELL students by incorporating Childsplay’s Drama Frames professional development model as a way to enhance instruction focused on listening and speaking skills. Teachers of ELL students, in partnership with artists from Childsplay, participated in job-embedded professional development with a focus on integrating drama into classroom literacy instruction. Incorporating drama strategies into instruction enabled the district to maintain compliance with state law, which requires a specific delivery model for English Language instruction, while at the same time, being creative in how students are engaged in language learning.

The theoretical framework for this program came from Childsplay’s years of research in implementing the Drama Frames program. Drama Frames is an evidence-based professional development model that has demonstrated success in improving teacher facilitation, changing deficit views of children’s capabilities and developing literacy skills in students, including children learning a second language. Drama Frames promotes language and literacy development through creative drama, providing an authentic, story-based approach to the Total Physical Response (TPR) methodologies that have proven particularly successful with Language Learners.

Best practices that support language acquisition throughout the lesson include wait time to allow for lexical retrieval, semantic mapping of student action with language, and a mix of questioning strategies that are scaffolded for different learners. Because children physically engage in the content, they are able to demonstrate cognition of key concepts and vocabulary kinesthetically. This allows the teacher a new way of measuring understanding, building confidence for children, and encouraging active participation. Teachers are then able to identify and celebrate achievement as verbal skills develop.

The drama integrated strategies used in Drama Frames builds upon best practices for language acquisition identified through recent research, including storytelling and retelling, interactive approaches embodying both content and language, and opportunities to engage with language in motivating and meaningful contexts. Childsplay’s extensive training in child development and educational theory allows for a kaleidoscopic approach to instructional pedagogy, with a foundation that blends Piaget’s theory on developmental stages, and focus on play and curiosity with Vygotsky’s Zone of Proximal Development and approach to language acquisition. It is important to note that because Drama Frames is a Professional Development program and the primary students are classroom teachers, Childsplay also utilizes a blend of PD instructional pedagogy, including Communities-of-Practice and Guided-Participation, supported by a sociocultural framework.

During our previous partnership throughout the 2015-2016 academic year, 4 Childsplay teaching artists worked directly with 12 teachers and 390 students at Moya and Morris K. Udall. Every ELL student at Moya and all “not-proficient” students at Morris K. Udall were able to participate in drama-based learning over the course of the academic year. Results from the program demonstrated a statistically significant improvement in both teacher behavior and student performance, resulting in a continued partnership between the Isaac School District, Childsplay, and the Arizona Commission on the Arts for the 2016-2017 academic year.

**Methodology**

The research surrounding this program was built around an overarching research question:
“Can applying the Drama Frames program to SEI classrooms lead to meaningful change in teacher behavior and student performance around language acquisition?”

In support of this research question, the Isaac School District and Childsplay identified the following outcomes in the original proposal, which were measured in a variety of ways:

- Teachers who work directly with English Language Learners will expand the toolbox of strategies through which they approach teaching language acquisition in their classrooms and after school.
  - This outcome was measured through pre-and post-surveys and focus groups with participating teachers, as well as a written test of knowledge administered before and after the program.
- Teachers will demonstrate increased proficiency in using drama to teach language acquisition.
  - This outcome was measured using Childsplay’s Teacher Facilitation Rubric over the course of the academic year.
- Drama teaching strategies will be integrated into the culture of two STEAM magnet schools and will be seen as a viable tool for school improvement by teachers and administrators.
  - This outcome was measured through pre- and post-surveys and focus groups with participating teachers and program evaluations with district leaders.
- Students who participate in this program will demonstrate increased confidence with regards to listening and speaking in English.
  - This outcome was measured by pre- and post-program student letters, assessed by Childsplay education staff.
- Students who participate in this program will demonstrate increases in AZELLA test scores.
  - This outcome was measured by school test score data compared to a control group.

In collecting data and evaluating success, Isaac and Childsplay conducted several research protocols over the course of the school year. Dr. Teresa Minarsich, worked with support from the education team at Childsplay to evaluate success in meeting these outcomes.

**Evaluation Results**

The Drama Frames Professional Development (PD) program has proven to be a powerful model for enhancing the professional experiences for the participating teachers of preschool and elementary-aged children. This model pairs professional teaching artists with practitioners at predominantly low-income education sites to integrate drama as a tool for achieving literacy and language standards. The approach combined foundational skills training with role-modeling and one-on-one structured feedback, and it provided participants with the tools and confidence to design and implement drama-based lessons to enhance children’s language and literacy skills. An internal plan of data collection and analysis was conducted by Childsplay to determine the effects of the PD program on several teacher outcomes. A number of key findings resulted from this effort and they are summarized below.

Program evaluation results are layed out into two sections. The first is focused around the results of the teacher focused outcomes, and the second of which centers around student focused outcomes. The teacher focused outcomes are listed below:

- Teachers who work directly with English Language Learners will expand the toolbox of strategies through which they approach teaching language acquisition in their classrooms and after school.
- Teachers will demonstrate increased proficiency in using drama to teach language acquisition.
• Drama teaching strategies will be integrated into the culture of two STEAM magnet schools and will be seen as a viable tool for school improvement by teachers and administrators

**Teacher Focused Evaluation Outcomes**

*Teacher knowledge of drama content*

• Teachers completed a 40 item test of arts content knowledge, both vocabulary and situational usage of strategies. Of the eight teachers that completed both a pre- and post-test of knowledge, the average growth in knowledge was an increase of 1.5 points. The pre-test mean score was 22.37 and the post-test mean was 23.87. A paired sample t test was conducted and the analysis showed that the teachers had some improvement, but it was not statistically significant (t = 0.8059; df = 7; p < 0.446).

*Teacher Facilitation Improvement measured by the Teacher Facilitation Rubric*

• Childsplay created a Teacher Facilitation Rubric in 2012 for measuring change in teacher facilitation of drama over time. There are 14 elements of drama facilitation on the rubric, and teachers can receive scores of 1-5 on each element. There were eight teachers that completed full data sets (4 rubrics), and those are the teachers in the calculations below. Teachers involved in the Drama Frames project demonstrated steady increases in their performance skills in delivering four drama infused solo lessons with students over the course of the program when assessed on the Teacher Facilitation Rubric. Initially the teachers demonstrated a “Developing” level of performance. This elevated level of performance at the beginning of the program this year can probably be connected to the fact that three of the teachers in the program participated last year, thereby raising their starting skill level. (2016-17 Unit 1 mean score = 3.29; 2015-16 Unit 1 mean score = 2.56) During units 2 and 3 teachers moved from “Developing” to “Achieving”. (Unit 2 mean = 3.78; Unit 3 mean = 4.01) Finally, during unit 4, teachers experienced a slight drop in level of performance. (Unit 4 = 3.88) This drop may be a result of several factors including but not limited to, difficulty of topic in unit 4 and end of the year testing schedule conflicts. Overall participating teachers demonstrated a consistent and steady growth over the year, with all teachers attaining and then maintaining a high “Developing” level of performance suggesting they understand most of the drama concepts and lesson delivery with evidence of some student success. See graph below.
Teacher Focus Group Results

- At the end of the program, the researcher conducted a focus group with eight of the participating teachers to address their experiences participating in the year-long program. Teachers were asked to discuss their learnings as drama facilitators; student participation; overall program design; and the impact of drama integration on their students, themselves, and their classroom environment. A transcript of the teacher focus group yielded the following themes:

Note: The teacher focus group was recorded and then transcribed. Teacher quotes appear in quotes and italics, and are verbatim, except for minor editing for clarity and grammar. Changes are noted in brackets.

- **Increased Literacy and Language Acquisition for Students:** Teachers reported student growth in literacy skills and language acquisition, especially vocabulary, comprehension, and inferential deduction.

  **Vocabulary**
  “As soon as you put a funny motion to a word, the vocabulary sticks. Like they might not remember exactly how to use it, but they know the word and they can try and use it, which is half the battle. So just from one aspect, the engagement is amazing.”
“My students hear one word for more than 20 times, so they stick to that word. And they really like that repetition, and I see them using the words in different context, and different areas.”

**Comprehension**

“I mean for example, using the pictures . . . talking about the pictures, and then acting out the pictures I think helped them to realize, ‘Oh wait, I can use pictures even if I don't know the words. And then make it up in my head as I'm reading.’ So I think that's one way that it helped them to transfer what we're doing in Childsplay to independent reading. Because in second grade, reading is such a huge thing before they get to third grade, where they're testing. So I think that, that's something that's really helped some of my lower readers.”

“Their answers are more thought out. It's stronger comprehension and I think that's because it's so immersive.”

**Inferential Deduction**

“That's such an important thing for them to think outside of the box, and think inferentially with the kids and letting them pick things up. Cause they pick up on things that you, you know that they have to defend their answers with. So I feel like it's more meaningful.”

“Inferential comprehension has definitely strengthened . . . Now that they feel like they have the tools [referring to Childsplay's thought bubble strategy] to like, 'I can immerse myself in this character. I can feel this character.' They'll do it, and they put that thought bubble on their head . . . and they'll defend their answer.”

- Increased Student Engagement and Participation: Teachers shared multiple stories of students’ increased participation in class, especially monolingual and special needs students. This increase in student participation, particularly for students with language deficiencies and ELL students, seems connected to the kinesthetic nature of drama integration which allows students to participate without having to use oral language. This theme is particularly significant, and appears prominently in the analysis of student letters in the next section.

  “Some of my students that I didn’t think usually have creative ideas all of a sudden became creative. So I got to see some students that usually aren't as outspoken, or never really hear them [are] using higher vocabulary and giving really good ideas too.”

  “I had a student who was a selective mute at the beginning of the year, and all of last year - he would just sit out and he wouldn't participate at all. He looked at everyone like we were really just crazy. And this past lesson, he had volunteered to come up to the panel, before students in front of the whole class. And I was absolutely shocked, because he's never done anything like that. But I just think he felt so comfortable with the students, since they've done so many activities together. I think he found his moment to shine.”
“Especially one [student] I have, he’s got a lot of hurdles in his way. Social, emotionally too, and he doesn’t really get along with kids in class. And he’s got trouble socializing and he doesn’t ever want to participate or do work. So the only thing he ever likes to do, and likes to do with the group is Childsplay. That’s all he does, and he volunteers, he guesses, he contributes and it’s like two different children.”

- **Positive Change in Classroom Learning Environment:** Teachers expressed positive changes in their classes due to drama lessons, including more student-initiated/student-driven activities. One of the goals shared by several of the teachers was to build relationships with their students. Said one teacher, “My goal was to . . . build a relationship more with my kids, and put down my teacher cape and just be fun with them.” Teachers shared that the training with Childsplay allowed them to do just that.

  “I would say maybe my third lesson . . . I was like, ‘Oh they can be engaged, and I can be having fun. And they can be having fun, and we’re not getting too crazy.’ And it was like, ‘Oh this might actually be like a good thing to do all the time.”

  “They [students] feel like they can be part of the group, and they feel involved. And then also it’s kind of like a better chance to get to understand them. Cause sometimes those are the kids that are so just in themselves, and not really participating all the time. So when you get them in that setting, then it’s your time to see like, “Oh that’s, that’s how that kid ticks. Or that’s, that’s why they do that.”

  “It’s nice to see them relax and have fun, because like my SPED kids are always so stressed and aware of others perceptions of them. And so they get ... They clam up. So letting them you know, ‘It’s okay, like you’re gonna be fine. Like go ahead throw it out there. Why not? Be something weird in the tableau. Be a rock. You know, you do you.’ And then when someone taps them they’re like, ‘I’m a rock.’ And everyone’s like, ‘That’s a good rock.’ And then they feel like that little empowerment that they really can’t get anywhere else.”

  “I’ve noticed my students become a lot more supportive of one another. And I guess the monolingual students are now understanding, and then they ... You know they throw out their idea, and it doesn’t make sense, they still support them in that. And encourage them.”

  “I’ve seen confidence growing which has been great. I’ve seen more students participating like we’ve all said, that have not generally participated. And yeah, I’ve seen their willingness to participate at a greater level than during other instructional time. So that’s great.”

  “I’ve definitely noticed a change in my kids. My kids are much more relaxed and much more willing to go up with me on the ride. You know I feel like it’s a more relaxed atmosphere, and they’re more willing to follow me.”
Student Focused Evaluation Outcomes

Pre and Post Program Student letters

- At the end of the first year of the program (2015-16 school year), Childsplay asked participating classroom teachers to have students write letters to their teaching artists. The letters produced valuable qualitative data, and the research team wished to continue this valuable collection of student focused data in year two. This year teachers asked students to write letters to important people in their lives both before and after the program. The hope was to measure changes in students’ attitudes around school, specifically around language acquisition and class participation. The Childsplay team worked with the teachers to create a prompt for the letter. Students were given a four-part prompt:

1. My favorite part of school is . . .
2. In class I like to . . .
3. I participate in class by . . .
4. When the teacher asks me to talk in class I feel . . .

Student letters were coded using two methods. The first, In Vivo coding, used student’s own words to try to identify important themes connecting students’ experiences and their feelings about school and class participation. The second, Magnitude coding, measured students’ attitudes about speaking in class. Letters were labeled as positive, negative, or neutral. Pre and post letters were compared, and changes in feelings were noted.

Students’ attitudes regarding speaking in class were quantified in pre and post letters. A total of 149 students’ letters were read, coded, and assessed. 28 students’ letters were found unusable due to incomplete answers or illegibility. Of the remaining 121 students, 66% expressed overall positive feelings in their post letters about speaking in class. 30% of students showed an improvement in attitude about public speaking, showing increased positive language when answering prompt four.

The majority of the students in these classrooms were designated as ELL. Given the importance of language in evaluating student success/progress, and knowing the language limitations of this group of students, we were particularly interested in hearing directly from the students what impact, if any, their participation with drama integration may have had. The students’ letters demonstrate that they know that they are judged on their language skills, and that they want very much to succeed in class. Their improvement in attitude about speaking seems particularly significant when combined with student and teacher direct quotes. This year’s letters illuminated the following key themes:

Note: Student writing is presented verbatim, italicized, and in quotations. Student grammatical mistakes are not corrected, unless needed for clarity which is done using brackets.

- “Or Else I will Flunk Like My Brother Did” aka The stakes of learning are incredibly high for these students: Students expressed an understanding of how important succeeding in school could be for their futures. School is seen as gateway to a bright future, and therefore the idea of failing in school is detrimental to their future happiness. When asked how they felt when called on to speak in front of the class, students repeatedly expressed negative emotions such as “bad,” “shy,” “nervous,” “so so shy,” “don’t like it,” “scared,” and “embarrassed.” While it is completely normal to feel nervous when public speaking, the severity of emotion seems connected to the fear of being wrong or of failing. Students reported feeling nervous because “I do not know what you are telling
me,” or “because I never talk before,” or “shy because everyone looks at me,” or “embarrassed because I think I get the answer wrong,” or “what if I get the answer wrong,” or “sad cause I mixed up the words.”

While these worries were prevalent, students never expressed complaints about school activities or school itself. In post letters students expressed an understanding that participating and speaking in class might make them nervous or scared, but that it was an important part of learning they must master. One student explained, “my job is to talk or else I will flunk like my brother did.” Another asserted that they must speak in class so “we can learn more.”

In the pre letters a high number of students expressed negative feelings, but for the majority these negative feelings decreased in post letters. One student explained in her post letter that “when my teacher asked me question I use to feel shy [but] now I feel confident.” Another student had a complete reversal from feeling “nervous and shy because I am not use to talk in front of people” in her pre letter, to “happy to share my answers on front [in front of class].”

While the change in student attitude might be attributed to several factors such as excellent teaching, positive school culture, and student growth, the next theme gleaned from the student letters connects this shift to the kinesthetic nature of drama integration. This assertion is supported by the student letters and teacher interviews.

- “But They Could Participate With Their Bodies” aka Students thrive when given a learning environment that prioritizes kinesthetic learning, hands-on learning, and social interaction/group learning: Students overwhelmingly expressed a preference for kinesthetic/hands-on learning. The answers to the first two prompts showed that students preferred activities that allowed physical activity. Recess, PE, brain breaks, games, specials (art, music, PE, computers), math, centers, and Childsplay were listed repeatedly as favorite parts of school. The commonality between these subjects/activities is none of them rely heavily on oral language for success.

After a year with Childsplay, students and teachers both reported a positive change in engagement and attitude. Students’ stated preference for kinesthetic learning may be linked to this change. As the teachers made clear in their focus group discussion, when given the chance to use their bodies to show their understanding, students’ engagement and participation increased – especially ELL, monolingual, and special needs students. Three teachers shared powerful evidence of the improvements students showed in their classrooms over the year:

“I have a high number of monolingual students in my classroom this year. And so it was great seeing them copy their friends with their bodies. Even though they weren’t able to fully understand the words, and the things that are happening. But they were more able to understand what's happening because we're demonstrating the things that we're talking about - using our bodies to describe the vocabulary. I also felt like they got to participate in ways that they never have been able to. Especially during reading, because normally they don’t know what’s being read. They cannot participate by answering any questions. They cannot write about it. But they could participate with their bodies.”
[Discussing a different selective mute student than was mentioned earlier] “My selective mute [student] has never spoken. He has come to the school the entire time. She had him last year [referring to another teacher in the group]. But he participates with everything [during Childsplay] except the speaking. He’s very social without talking. It’s really interesting to watch. But he shows, and he has kids guess. Especially when we do a tableau. He decided to be the wolf that was burning in the story. Which is crazy for him to put himself as the main character. So that was really interesting to see him being a selective mute, and also isolating himself at times just putting himself as the main character was really nice to see.”

“I have a student with a severe speech impediment. He is nearly impossible to understand. So tableaux are really great for him, because he could get up there and not have to repeat himself a hundred times over. So he was always one of the first people up to do tableaux. And then on our last session, we played a theater game called, "Boom Chicka Boom" and I was really excited. My teaching artist and I, we got really teary because he raised his hand, and he led the whole class in Boom Chicka Boom. Which was great cause the kids knew what he was gonna say anyway cause it's a repeat after me kind of a thing. And so the kids all knew what the responses were. You had no idea what he was saying, but the kids repeated after him anyway. Cause they knew what he was supposed to be saying, and he had the biggest smile on his face. He was so excited. I was really surprised that he even raised his hand to do it but he was all in.”

• **The Need to View Students as Experts:** The data collected from student letters during the first and second years of the program was illuminating and revealed information that motivated significant discussion about how to measure program impact. While the quantitative data gathered from teacher and student test results and rubrics demonstrate positive growth for both teachers and students, the student letters when combined with teacher interviews revealed information that cannot be captured through quantitative measurement tools.

First year letters were only collected after the program was complete and the prompt skewed answers towards an evaluation of teaching artists. While valuable, this year the prompt was broadened to attempt to understand students’ overall attitudes on school, not just their Childsplay experience. A pre letter was also added to try to determine change in attitudes over the course of the year. This year’s prompts also had some limitations, but still resulted in interesting results. Students’ responses to prompt one, in particular, showed a preference for certain subjects and learning style. These answers combined with their responses to prompt four reveal a significant hesitancy for participating in language based activities and public speaking. This make sense as the majority of students are ELL and working towards mastering the English language. Beyond that, the letters reveal a lot about student emotions, personalities, and values. Students, despite their struggles or fears were positive about school and rather than complaining about school, wrote repeatedly about its importance in their lives. Evaluating these letters at the beginning of the program, rather than just at the end, could help Childsplay teaching artists and classroom teachers better understand how to approach and engage students. In addition, perfecting the pre and post letter prompt, and adding additional student data collection (such as video interviews of students)
might result in a richer, deeper understanding of the impact of the program on students and their classrooms.

Positioning students as experts of their own learning is something we must do more in data collection in order to better evaluate the program and its results. As demonstrated by the students in this year’s program, when students find a way to “shine” or successfully participate as the expert their confidence as well as their progress increases. Drama integration already values the student as expert and is often student centered/driven. The teachers discussed the empowerment students felt when they could lead the chant or become the main character. Drama allowed them to participate and fail without fear of humiliation. They also repeatedly shared stories of students initiating drama outside of Childsplay lesson time.

“My kids will request it. Some kind of tableau, or like, ‘Can we do a tableau on what we just did?’ And I’m like, ‘Well okay.’ And they feel involved. And when they feel involved, especially with fifth graders, they are more willing to participate.”

“Some kids tell me, ‘Can we add movement to words,’ So because when you do it in Childsplay, like this past week we were learning about the three types of rocks. And they told me, ‘Can we do this for igneous. Like they come out of the magma, and like become solids.’ And I’m like, ‘Sure.’”

“I have a kid who’s obsessed with the thought bubble. We were reading a story the other day and he’s laughing quite like this, with his hands above his head. And I was like, ‘What are you doing?’ And he goes, ‘I’m using my thought bubble. Trying to think like the character.’ He’s using this thought bubble to create the character, and figure it out. They were answering comprehension questions about why the character would do whatever it was.”

Moving forward in the planning and implementation of future Childsplay job-embedded programs the theme of student as expert will remain a priority in both data collection and program development.

AZELLA test scores
Since a vast majority of the students that participated in the Drama Frames program were in SEI classrooms, the AZELLA was chosen by the partners as a tool to track student achievement in language acquisition.

Results were based off of a comparison between the AZELLA scores of Moya students during the 2015-2016 and 2016-2017 school years, in which both school years were implementation years of the Drama Frames program. Concerning Alta E. Butler, results were also based off a comparison of AZELLA scores during the 2015-2016 and 2016-2017 school years; however, the Drama Frames program was only implemented at the school during the 2016-2017 school year. (There are limitations to this data set. One such limitation includes a change made to the way the AZELLA test is scored which will be covered later in the report. ) The AZELLA scores for Moya Elementary and Alta E. Butler Elementary are below.

At Moya Elementary, 31 percent of students scored Proficient on their AZELLA tests during the 2015-2016 school year compared with 25 percent of students scoring at the Proficient Level during the 2016-
2017 school year. At Butler Elementary, 26 percent of students scored Proficient on their AZELLA tests during the 2015-2016 school year compared with 23 percent of students scoring at the Proficient Level in the 2016-2017 school year. Although these numbers demonstrate a decrease in the percentage of students who scored at the Proficient Level on the AZELLA test, it should be noted that the State of Arizona Department of Education made adjustments to the cut lines for the AZELLA which increased rigor and reduced the percentage of students moving to the Proficient category both in the Isaac School District and in school districts across the valley.

Moya Elementary, with a 25% reclassification rate, demonstrated the greatest percentage of students scoring at the Proficient Level on the AZELLA in the entire Isaac School District. While this demonstrates that Moya students did outperform a group of like-students at Butler Elementary, it should also be noted that by the end of the program, there were just 2 participating teachers in the Drama Frames Program at Butler Elementary compared with 7 at Moya. Some Moya students and teachers were also experiencing the Drama Frames program for the second consecutive year, while Butler staff and students were experiencing these specific arts integration strategies for the first time. Ultimately, there is not enough information to definitively say that the Drama Frames Program was not a success at Butler and only a success at Moya because of the AZELLA test score outcomes.

**Discussion and Limitation**

The quantitative and qualitative results detailed above reflect the fact the Drama Frames program at Moya Elementary and Alta E. Butler had an overall positive impact on teachers and students at both schools, and that meaningful progress was made towards each outcome over the course of the year.

This being said, there are limitations to the interpretations of program results. The Drama Frames Professional Development program was not the sole reason that Moya Elementary had the largest reclassification rate in the Isaac School District; there are of course other contributing variables to this outcome.

Furthermore, while both schools did see a decrease in the number of students scoring at the Proficient Level on the AZELLA test from one school year to the next, it must also be recognized that the Arizona Department of Education changed the cut lines for this test, which means that students would have to score even higher than in years past to prove proficiency in English. This was also a limitation to the project because it changed the variables from one year of programming to the next, which interfered with the accuracy of the comparison.

Yet another limitation to the project this year was turnover at the teacher and administrative level on both campuses. By the end of the school year, all but one of the participating teachers in the PD program were moving on to further their careers elsewhere, and the on-site administrators who had partnered and supported the work with Childsplay were also moving on to different career paths. While turnover is of course a natural part of every school year, it made sustainability and continuity of the program more difficult to achieve.
Overall, the partnership between Isaac School District and Childsplay saw success in both teacher facilitation and student achievement over the past two years. It is the hope of both parties that there will be future instances where their partnership in arts in education can be continued.