

Using Arts Integration to Improve Student Literacy

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Abstract

Through professional learning sessions and job-embedded support including lesson modeling, collaborative planning and digital coaching, ArtsNOW supports six schools across three southeastern districts in Georgia and South Carolina. In addition, a subset of teachers receives additional, more intensive training preparing them to serve their colleagues as teacher leaders in the area of arts integration. Through community events, the project provides families with access to books and other content about how to support their child's reading development. This project seeks to (1) increase the percentage of students reading on grade level; (2) increase the percentage of students scoring proficient (or higher) on state Reading assessments; (3) provide books to students to enhance their home library, while also increasing the book to student ratios in school libraries; (4) build teacher capacity to deliver arts integrated instruction. Preliminary results indicate positive effects on teachers' confidence in, and use of arts integrated lessons, as well as positive effects on the literacy achievement of students participating in arts-integrated instruction for two full school years. Directions for future research and program development and improvement are discussed.

1. Introduction and Background

ArtsNOW is a national non-profit organization dedicated to improving education by equipping teachers with professional learning and resources to bring creativity and the arts into daily instruction, so all students succeed academically, socially and artistically. ArtsNOW, and our collaborating partners, work with schools and school systems to support and advance arts in education in direct alignment with district and local school priorities. In 2021, ArtsNOW was awarded a \$2.8 million Innovative Approaches to Literacy (IAL) grant from the U.S. Department of Education for a project titled "REimagining and Accelerating Literacy through Arts Integration (REALAI)". This five-year grant provides support through professional learning for teachers, books for students and families, and classroom supplies to facilitate arts-integrated literacy lessons. The IAL program supports high-quality programs designed to develop and improve literacy skills for children

and students from birth through secondary school in districts and schools located in low-income communities and exhibit lower literacy achievement relative to other districts and states.

REALAI builds on a previous federal grant implemented by ArtsNOW from 2018 to 2023 that also provided professional learning to teachers that resulted in improved literacy achievement of elementary students. Like that previous project, REALAI fosters students' literacy achievement through professional learning designed to build the capacity of teachers and media specialists to plan and deliver integrated instruction, while also contributing significantly to school library collections through the purchase of developmentally appropriate and culturally relevant books. In addition, this project includes community events to provide families with access to books and other content about how to support their child's reading skills and literacy development.

Researchers suggest that many teachers greatly value the idea of arts integration but feel they lack the preparation and resources to do it on their own [1]. Many web-based resources exist for teachers, but it is not as simple as downloading an integrated unit from an instructional resource. Teachers need to be equipped with the skills and knowledge to make sense of the unit and utilize it in their classrooms as designed. Typical approaches to early literacy include small group and individual tutoring, reading aloud, repetition and other passive strategies. Strategies in creative dance and drama enable readers to enter into the life of a story—to experience it, understand its meaning, and relate it to their own lives [1]. The ArtsNOW consultants supporting this project help build schools' capacity to design meaningful, relevant lessons integrating the arts where students feel empowered to express their culture and identity through various art forms such as music, drama or visual arts.

Schools with a majority of students from low-income households face a particular challenge in terms of equality of opportunity to learn as these schools often have less funding for books and media/literacy resources, or extracurricular arts programs. In his work "*The Art and Science of Reading*", Rasinski [2] suggests "the great challenge

is for teachers of reading to find ways to make the science of reading come to life in artful, authentic, engaging and effective ways. The goal is [for teachers] to translate the science of reading into instruction that is not only effective...but also artistic” to increase students’ reading motivation and performance. For example, rehearsing lines for a skit can build students’ reading fluency, and “choral reading...provides a sense of rhythm and feel” that could be combined with dance/movement or music. Rasinski [3] also pointed out that truly effective, engaging reading instruction should be “authentic, aesthetic and creative”.

Arts integration is a learned skill, even for teachers who are naturally talented in the arts. The pedagogical practice of integrating the arts and literacy content simultaneously requires educators to be skilled in identifying content area connections, while developing confidence in their ability to instruct through the arts. Integrated instruction is a complex practice, and many teachers do not have expertise or experience to maximize integrated pedagogy. “Many teachers express the desire to learn fresh ways to teach that excite the creativity in their students and revitalize the creativity of teaching for themselves...teachers find that arts integration does both” [4]. As well, it is critical to ensure there is direct alignment to the content and arts standards so that natural connections are made. A cluster-RCT conducted by Roth et al. [5] showed an “analysis-of-practice” PD program “significantly impacted teachers’ knowledge and practice”. Teachers cannot simply download any lesson and use it; they need support and guided practice. A meta-analysis points out that “opportunity for dialogue and the exposure of students to authentic or situated problems” improves students’ critical thinking skills and these opportunities are often lacking in traditional classroom settings [6]. Further, Hill [7] pointed out that, while rare, “structured coaching” similar to what is delivered by ArtsNOW consultants boosts teachers’ practice and increases students’ performance.

A significant body of research demonstrates a positive relationship between the arts, literacy and language development. In early childhood, theater and other arts standards prepare students for achievement in reading and writing by increasing and refining oral language skills. The positive impact of arts-integrated instruction on literacy development is especially strong for students from low socioeconomic backgrounds at the elementary school level — who show the greatest relative improvement in academic achievement when participating in the arts [8]. A recent study of an arts-infused school model in Houston was a cluster-randomized control trial involving 36 elementary and six middle schools. This rigorous study was cited by the U.S. Department of Education’s *What Works Clearinghouse* (WWC) in 2021 as meeting standards without reservations and

providing Tier 1 “strong evidence” (per ESSA guidelines) of the significant benefits of arts integration on students’ academic and social-emotional outcomes.

The *Arts Access Initiative* (AAI) provided support and experiences for schools so their students could benefit both academically, as well as creatively [9]. Results showed significant positive effects on student behavior, engagement, and literacy. Another review found a link between arts integration and improvements in students’ long-term memory [10]. Specifically, this review “suggests arts integration may offer a highly effective way to enhance retention of content.” (p.94) In fact, when integrated with ELA content, drama and music are art forms found to provide substantial benefits like improved reading and oral language skills in the elementary grades [11].

2. Sample and Methodology

REALAI provides the opportunity to impact literacy instruction through authentic arts integration. Each year, REALAI serves approximately 2,200 students and over 100 teachers, media specialists, and literacy coaches across six high-need schools. Five schools are located in Florence and Colleton County, two rural school districts in the coastal region of South Carolina. In Florence, JC Lynch Elementary serves students up through sixth grade, and Lake City Early Childhood Center serves students up through second grade. In Colleton, three elementary schools (Cottageville, Forest Hills, and Northside) all serve students up through fifth grade. The sixth school, East Clayton Elementary, is located in Clayton County, just outside Atlanta, Georgia.

The leaders of each school and district agreed to support these schools’ participation in professional learning sessions (i.e. Focus Institutes) at least four times per year, coaching and reflection sessions with arts consultants at least six times per year, and the development of a bank of arts-integrated literacy lessons that can be shared with teachers in other elementary schools. During Focus Institutes, teachers are given the opportunity to experience an arts-integrated lesson as if they were students, led by an ArtsNOW consultant. These are followed by demonstrations, usually the following day, where the lesson is delivered to elementary students so teachers can observe how they respond. This has been a very well-received approach to professional learning support. Further, one teacher per grade level serves as a teacher leader and receives additional coaching on arts integration as well as resources that can be used to support their colleagues’ adoption of these instructional strategies. In addition, each school sends a team of five people to a 3-day summer seminar focused on various arts integration strategies and instructional resources.

Data is collected through annual surveys, logs and

agendas from professional learning events, notes from teacher leaders' interactions with colleagues, along with scores and proficiency levels from standardized literacy assessments administered annually to students in grades 3-5. Each year a survey is administered to teachers collecting data on the extent to which they feel their school context is one that supports their implementation of arts integration. These items are taken from two scales.

Specifically, the *Implementation Leadership Scale* (ILS) measures the degree to which leaders engage in specific behaviors that are supportive of implementation of evidence-based programs, in this case arts integration [12]. The *Implementation Climate Scale* (ICS) measures the degree to which there is a strategic climate supportive of implementing evidence-based programs, such as recognition of use, rewards, training support, etc., [13]. Both the ILS and the ICS include responses ranging from 1 (Not at all) to 5 (To a great extent).

In addition, researchers developed a survey related to teachers' perceptions of the quality, usefulness and relevance of professional learning, confidence in the use of arts integration, and solicited suggestions for improvements to the structure and content of professional learning sessions. Teacher leaders and school leaders were also asked to provide qualitative reflections on the progress of the project and suggestions for improvements. Because some schools experience larger percentages of teacher turnover than others, this formative feedback allows ArtsNOW to shape professional learning in a way that is customized for each school, meeting the needs of the teachers.

3. Results

Initial results from the first three years of the five year grant provide promising evidence of the ability of arts integration to impact students' literacy skills as well as teachers' job satisfaction and engagement. The project is scheduled to conclude in 2026, and researchers will continue to administer surveys and collect data from participating schools. Results presented below provide early indicators of the extent to which professional learning and coaching support is impacting teachers.

3.1. Teacher perceptions of leader support

A key target of REALAI is to create an environment that is supportive of teachers' use of arts integration. This is accomplished, in part, through leadership coaching, including an annual retreat with school leaders to collaborate on strategies to create a school climate that supports the use of arts integration. One performance measure states "Leaders demonstrate a 10% increase from pre to post in

teacher perceptions measured on the *Implementation Leadership Scale*" [14]. The average score on the pre-administration of the ILS in 2023 was 4.26. The table below shows increases in the percentage of teachers indicating these leader behaviors occur to a 'moderate' or 'large' extent, indicating progress from 2023 to 2024.

Table 1. Teacher perceptions of leader support

% Moderate/Large extent		
	2023	2024
Our school administration has established clear standards for the use of arts integration.	74.7	77.5
My principal developed a plan to facilitate implementation of arts integration.	78.9	84.3
Our school administration recognizes teachers' efforts to successfully implement arts integration.	79.0	88.3
Our school administration supports teachers' efforts to use arts integration.	90.6	92.2

Another performance measure targets a 10% increase from pre to post on the *Implementation Climate Scale*. This survey was administered at the kickoff events in Summer of 2022, and again in March 2023 and May 2024 as a follow-up to measure progress. At baseline, the average ICS rating was 3.83. A 10% increase represents a target of 4.21 by 2025.

The schools project have already exceeded the target, which is a promising indicator of staff buy-in and the potential for continued success with this project. Results indicated a solid context or climate within which to sustain the use of arts-integrated literacy instruction even if teacher turnover occurs. For example, 80% of teachers indicated their staff often help new team members with arts integration and 74% indicated their school recruits staff who value arts integration. This should support teachers' growth by adopting arts integration as a literacy strategy.

3.2. Teacher confidence in arts integration

Each year a survey is administered to teachers collecting data on the extent to which they feel confident in their ability to integrate the arts with literacy and ELA content. In 2024, the number of responses per school ranged from 6 to 30, with a total of 102 responses to the survey, an increase over the previous year. At baseline, on a scale of 1 (Not at all confident) to 5 (Highly confident), the average across all schools was 3.22 out of 5. The performance

measure targets a 10% increase over baseline, so the target is 3.54 by year 5. In Year 2, the overall average was 3.48, which indicated an improvement of 8% from Year 1 to Year 2. This average increased further, to 3.81 in Year 3, which represents an improvement of 18% over baseline, surpassing the overall target for the grant. In Year 3, 17 of 102 (16.7%) teachers rated themselves as ‘highly confident integrating the arts’, compared to only 4.2% in Year 2 who rated themselves as ‘highly confident’. We expect with an additional year of professional learning support in 2024/25, teachers will become more comfortable with arts integration. It is also interesting to note a moderate positive correlation between the teachers’ reported average number of arts integrated lessons delivered per month in 2023-24 and their 2024 confidence rating. (Pearson $r(90) = .31, p < .003$)

In Year 3 of the project (2023-24), 93% of teachers agreed the professional learning was high-quality and valuable, ranging from 86% to 97% agreement across the schools, which was similar to Year 2 results. In addition, two items measured teachers’ turnover intentions (“I am more likely to remain in teaching if I can use arts integration”) and engagement (“Arts integration increases my enjoyment of teaching”), which has been monitored in other ArtsNOW projects indicating positive trends. In 2024, 80% of REALAI teachers agreed that being able to use arts integration increased the likelihood they would remain in teaching and 90% agreed arts integration increases their enjoyment of teaching. This speaks to the potential for arts integration professional learning and support to contribute to reduced teacher turnover.

3.3. Student growth in literacy achievement

State ELA assessments are used to measure student progress in terms of literacy skills and reading ability. All schools administer state ELA assessments to students in grade 3 and up. Each district provides a data file to researchers annually, with a unique identifying number that permits linking of student scores over multiple school years. Data includes individual scale scores, as well as performance levels. Four performance levels range from ‘Does not meet expectations’ (Level 1) to Meets or Exceeds Expectations (Levels 3 and 4, respectively). The primary student measure required by U.S. Department of Education for all IAL grantees tracks the percentage of fourth graders participating in the project who demonstrate individual student growth (i.e., an improvement in their achievement) over the previous year on state literacy assessments. The target set by U.S. DOE is 30%. In 2024, REALAI schools exceeded the target by far, with 78% of 4th grade students improving their scale score over the prior year, and 46% of 4th graders either improving their performance level over the prior year or maintaining a score of proficient or higher in both years. Data is

based on students in 4th and 5th grade in 2024, who had a reading test score in both 2023 and 2024.

Another student achievement target is the percent of 3rd-5th grade students meeting or exceeding expectations will increase by 12 percentage points over baseline (2022). Given the baseline of 26.5% meeting or exceeding expectations, results show early signs of progress. An increase of 5.4 percentage points in Year 3, from 26.5% to 31.9% indicates incremental progress toward our goal of improving by 12 percentage points by the end of the grant. Four out of five schools improved proficiency rates from Year 2 to Year 3. In fact, Forest Hills, the school showing the largest growth in reading achievement with an increase of 11.4 percentage points over baseline, is the same school that demonstrated the largest growth in average confidence among teachers and exceeded the target for the average number of arts-integrated lessons delivered per month. Further, Forest Hills and Cottageville Elementary Schools both improved from ratings of “Below Average” to “Average” on their state accountability system (‘report card’) this year. Like Forest Hills, Cottageville also exceeded the target for the average number of arts-integrated lessons per month and showed a 24% increase in teachers’ confidence with arts integration. This demonstrates a relationship between the use of arts integration and improved literacy achievement.

Due to student mobility, many of the students enrolled in REALAI schools as third graders in the first year of the grant, 2021-22, are no longer enrolled. For example, in 2022, assessment data was available for 402 third grade students. However, when 2022 data was merged (by student identifying number) with 2023 and 2024 data, only 284 students were enrolled in REALAI schools all three of those years. It is important to analyze data from the subset, or cohort, of students who remained enrolled in REALAI schools for the entirety of the intervention, with increased opportunities to build their literacy skills through the arts over multiple school years. Since implementation began in 2022-23, achievement data from this year’s fifth graders includes those who have had two years of exposure to learning through the arts and includes baseline performance prior to implementation. Overall, 75% of the students enrolled in REALAI schools at the beginning of the grant remained enrolled through Year 3, Spring 2024. A repeated measures ANOVA indicated significant within-group change in scale score from 2022 to 2024. ($F(2,594)=512.11, p < .001$) Results showed an overall increase of almost 10 percentage points in proficiency rates, with improvement in all five grant schools. This is promising evidence of the impact arts integration is beginning to have on students’ reading achievement.

4. Conclusion

REALAI has provided the opportunity to impact

literacy instruction through authentic arts integration. Through an earlier, similar federal grant focused on literacy, implemented during the pandemic, ArtsNOW had to modify our face-to-face professional learning support and were recognized by the U.S. Department of Education as a model for being able to “pivot” to a virtual environment, while still meeting our grant goals. Through that project, on which REALAI is based, two schools showing the largest gains in reading achievement were the same two schools showing the largest gain in teachers’ confidence with arts integration and the most frequent use, with 80% or more of teachers using arts integration strategies at least weekly. One grant school exceeded the performance target, improving 17.2 percentage points above the pre-Covid baseline and almost 15 percentage points over the post-Covid baseline. Many of the strategies and lessons developed through this earlier project have provided the foundation for REALAI, and as a result, similar results are anticipated by the end of this project in 2026. ArtsNOW has begun to support REALAI’s school and district leaders with sustainability planning and creating a structure through which teachers can support each other with the use of arts integration and share integrated lessons across classrooms and grade levels. ArtsNOW continually works to share best practices with others so that they, too, might be able to utilize arts integration strategies in their own classrooms, while improving student literacy.

5. References

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