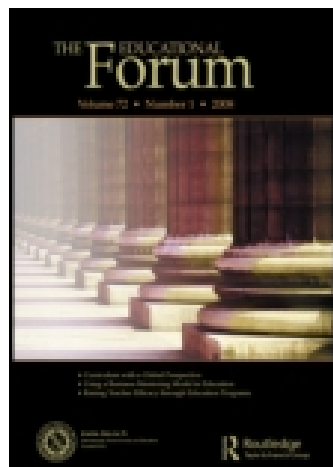


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Positive Impact of Arts Integration on Student Academic Achievement in English Language Arts

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Positive Impact of Arts Integration on Student Academic Achievement in English Language Arts

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Abstract

Amid the high-stakes testing environments in today's schools, we argue that high-quality arts integration positively influences student academic achievement. Drawing on a longitudinal study of an intensive multi-art integration model implemented in public elementary schools in the Los Angeles area, we found consistent and significant gains in student proficiency on standardized tests of English Language Arts when compared to matched comparison school sites with standalone arts programming.

Key words: *arts integration, elementary education, English Language Learners, standardized test scores.*

From Maxine Greene's work, we know that engaging with the arts can evoke a state of "wide-awakeness"—fostering creativity as well as developing the language and consciousness to see the potential for transformation in the world (Greene, 1995). Yet the debate continues over the value of art in schools. Is art for art's sake enough? Does further potentiality exist? While we acknowledge the ability of the arts to "add value" in children's lives, its wider academic impact is an important area for further investigation considering the disproportionate weight that students' standardized test scores continue to carry in school policy, pedagogical approaches, and funding decisions. Enrichment programs, such as the arts, are frequently cut in order to drive student performance in language arts and mathematics—the focal points of most standardized exams.

Positive Impact of Arts Integration

However, a mounting body of evidence from National Education Longitudinal Studies (NELS) and elsewhere suggests that the arts have positive long-term impact on college access, academic success, and greater civic involvement later in life (Catterall, 2009). Still, we know little about the approaches to arts learning that have greater short- and long-term academic and civic impact, particularly within K–12 settings. Existing research points to a variety of methods for implementing the arts in schools, and, likewise, there are multiple philosophical and practical underpinnings for the way community arts organizations partner with schools to deliver the arts to students. Researchers, educators, and policy makers alike are interested in the impact of these programs. However, there are few studies on the impact of arts integration and less rigorous documentation of high-quality arts integration models that have the potential to be scalable.

This study explores the effects of an intensive arts programming and arts integration model implemented by one community arts organization, Inner-City Arts (ICA). ICA has a unique school arts program partnership model with Los Angeles Unified School District (LAUSD), called the Learning and Achieving Through the Arts (LATA) model. In the LATA model, public school teachers learn a variety of art forms alongside their students over the course of a school year. This approach is supplemented through a series of high-quality professional development programs targeted at building contextualized academic bridges between these stand-alone experiences in the arts and other academic areas, particularly emphasizing the connections to literacy and language through the arts. These connections are important for all students, but particularly in school districts that have high populations of English Language Learners (ELLs) and traditionally marginalized groups of students (e.g., low-income and ethnic minority students) who have a legacy of low standardized test scores. Over the course of our longitudinal study, we paired three treatment schools adhering to the LATA model with three matched comparison school sites receiving the district's stand-alone arts programming. Over 30 criteria were used to ensure comparability between treatment and control schools, including but not limited to similar baseline standardized test scores, attendance rates, reclassification rates, parent participation, school suspension, safety, student demographics (e.g., race and ethnicity, percentage of ELLs, percentage of students with disabilities, percentage eligible for free and reduced-lunch program), API scores and rank, API Similar Schools Rankings, ELL progress, total enrollment, quality of facilities, and other indicators of teacher quality. When comparing student standardized test scores in English Language Arts (ELA), results indicated that treatment schools significantly outperformed ($p < .01$) control schools on ELA measures in all years of the study, despite starting at levels significantly below control schools. This was similarly (and even more so) true for sub-populations of students designated as ELLs. This article summarizes both the LATA arts integration model and its positive impact on standardized measures of ELA.

Collectively, this work points to the broader impact that the arts can have on other academic areas when used in concert with high-quality models of arts integration. We argue that an arts-integrated approach such as the LATA model has implications for educators' practices, suggesting that targeting both effective stand-alone and high-quality arts integration has far-reaching and immediate impact on K–5 classroom academic achievement. Additionally, this study points to the ways that renewed educational policy efforts

can emphasize the arts integration strategies that can have broader impact on student academic achievement—moving us away from instrumental either/or arguments. Last, we highlight implications for future research, which necessitates clarifying the types and qualities of the arts programming as we look to document the added value of arts education in today's schools.

The Arts, Schools, and Community Arts Organization Partnership Models

Public schools and community arts organization partnerships have been popular in the United States, particularly in large urban districts, stemming back to the 1960s and 1970s (Remer, 1996). Reflecting this trend, in the late 1990s and early 2000s, the U.S. Department of Education (USDOE) and the National Endowment for the Arts (NEA) began to take a greater interest in documenting and evaluating such partnerships, resulting in extensive reviews of partnership models and outcomes (Arts Education Partnership, 2002; Burnaford, 2007; Dreeszen, Aprill, & Deasy 1999).

Results from these wide-scale evaluations demonstrate that school and community arts organization partnerships may implement a variety of arts delivery formats. For example, visiting or teaching artists (i.e., outside practicing artists who may not be licensed educators themselves) may come into schools to collaborate with classroom teachers or deliver arts activities themselves directly. Alternatively, classroom teachers themselves may participate in professional development centered on cultivating high-quality and authentic arts instruction into stand-alone or core subject area lessons in mathematics, science, or language arts. Across these methodologies, we see several distinct approaches, including (a) art forms such as dance, drama, visual arts, or music being taught in depth or for their own sake; (b) art as a means to teach other academic areas or concepts (e.g., shaping the body like a particular letter to enhance literacy through dance or movement); or (c) art being used throughout the day to reinforce academic concepts and make the content more engaging (e.g., using warm and cool colors when creating maps in science class). Despite the range of and multiplicity of models documented in the arts, very little evidence exists regarding systematic comparisons of these models.

Our interest lies in identifying and studying effective models in arts education that support both deeper engagement in the arts, holistic development of the child, and greater overall academic achievement. This study focuses on the LATA model, which is a collective and systemic model for bringing art to the core of learning. With this model, three interconnected strands of programming are implemented:

1. Providing students high quality, standards-based, sequential instruction in the arts to cultivate arts skills while fostering language development
2. Providing gateway experiences, extended professional development, and supportive coaching for non-arts classroom teachers to grow their potential as art educators
3. Augmenting these activities with additional experiences that encourage whole schools to embrace the arts strategy and build creative learning classrooms

The ICA/LAUSD partnership engaged all of these philosophical aspects at different points by entwining curricular concepts with dynamic arts experiences and by

Positive Impact of Arts Integration

creating opportunities for participants to simultaneously engage as collaborative teachers, students, and artists. Arts integration was seen as a holistic approach to engaging and enhancing the school community in the following ways: developing children's English oral language skills through conversation and critique about art projects; fostering creativity, abstract thinking, and personal expression through drama, painting, drawing and ceramics; allowing for extended focus and concentration through studio work sessions; and encouraging teamwork, negotiated social skills, community-building, and respect for others through collaborative projects. Beyond individual lessons or projects, arts integration was viewed as a tool to expand a vibrant and cohesive school culture.

Gauging the Impact of the Arts

Prior research on the effects of arts integration in schools has focused on the effects of specific art forms on students and academics (e.g., An, Caprero, & Tillman 2013; van der Veen, 2012), while other work has examined the development of literacy practices through drama, dance, music, and visual arts as social semiotics, or communication systems (Cowan & Albers, 2006). Similarly, work has been done to lay out qualities of a successful school in an urban area utilizing arts integration (Riggins-Newby, 2003), but this study focused on the impact of whole-school, intensive, multi-arts instruction on elementary students' standardized test scores in ELA and the links to English Language Development more generally. However, this focus does not dismiss the high levels of arts learning happening in this and other arts integrated models (e.g., Catterall & Pepler, 2007; Pepler, Catterall, & Feilen, 2009; Pepler & Catterall, in preparation). Well-conceived arts integration models can support both arts learning and traditional academic achievement valued in today's standardized tests. As Greene (1995) said, interaction with the arts awakens imagination, which in turn allows the world (including other disciplines and subject areas) and school to be seen and experienced in new and varying ways.

There are few prior quasi-experimental (those that have outcome measures, treatments, and experimental units, but do not use random assignment) and/or experimental designs (similar to quasi-experimental studies but have true random group assignment, which is rarely done in educational research) that seek to test the impact of arts integration on academic achievement. In Winner's (2000) extensive review of published and unpublished studies on the impact of arts on academics from 1950–1998, and also in her recently updated international review (2013), she found particularly few studies on this topic with experimental or quasi-experimental designs. Most prior work consisted of correlational studies, which have a host of limitations, including self-selection biases. Furthermore, the few existing experimental studies Winner uncovered did not show a significant overall effect size of arts programming on academic achievement, neither for multiple arts integration nor for separate arts instruction. In her discussion she posited possible explanations for why such studies fail to produce collective positive results, including the following: (a) The programs examined were not implemented long-term, with most running for a year or less (in contrast to LATA's multiyear programming); (b) impact was measured via multiple choice tests, and arts impact may be "messier" to detect than that (although LATA was able to measure impact via standardized test scores); and (c) perhaps teachers failed to teach academic skills transfer explicitly in

these studies. In contrast, we explain the LATA teaching model in detail to account for questions of implementation.

The quasi-experimental study of the LATA model explores the effects of a quality arts integration program on student test scores using virtually the same population of students in naturally occurring control and treatment school cohorts. This is not a retrospective study, but rather a unique occasion to document the academic achievement gains of students over time under near-laboratory conditions. We have matched comparison sites with three treatment schools participating in the LATA program immediately, while three control schools in the same neighborhood await their turn to engage with the program as it grows outward over a period of several years. Under these conditions, we have been able to document significant academic gains for treatment students overall, and for ELL treatment students in particular, when compared to control student achievement on standardized test scores.

Methodology

The current study employed a quasi-experimental design, wherein schools that were assigned to participate in the model were compared to control schools with matched characteristics. Since we were interested in whole school improvement, a matched comparison was the strongest design for this study as it would be impossible to randomly assign students to schools. The current study makes comparisons across multiple cohorts and across schools to examine the model's longitudinal impact on school-wide academic achievement in English language measures.

Community Arts Organization: Inner-City Arts

The study's partnering community arts organization, Inner-City Arts (ICA), is an arts education provider that serves youth in the "skid row" area of Los Angeles Unified School District (LAUSD). In our prior work, we have summarized ICA's general programmatic goals as the following:

Teaching the students self-expression through drawing, painting, and sculpture; fostering English Language Development through vocabulary building and use of oral language to critique and discuss student work; teaching the students to engage their senses, particularly touch and sight, to discover the colors, textures, values and shapes of everyday objects; and inspiring a keen sense of observation and focus as they express themselves through their artwork. (Catterall & Peppler, 2007, pp. 3–4)

The ICA campus is equipped with nearly a city block full of professional-quality studio and performance spaces (spanning spaces for dance, drama, ceramics, visual arts, photography, animation, music, digital arts, and many other art forms), and brings students to the campus from the local schools to work with professional teaching artists. It was built to serve as a safe, beautiful environment in downtown Los Angeles. ICA provides arts education for children during the school day, in after school programs, and in focused workshops on weekends. There are also programs for parents, educators, and community members. While ICA has a variety of arts partnership models, the LATA model is central to its elementary school programming.

Description of the LATA Model

The LATA model aims to enhance English language skills and competencies through the arts, especially for traditionally marginalized subpopulations, such as ELLs. LATA promotes active engagement in the learning process through full-school engagement with arts-centered learning, teacher training, and school-wide activities. The first component of the model and the focus of this article centers around providing students with high-quality, standards-based, sequential instruction in the arts to cultivate arts skills while fostering language development through core arts instruction. This includes arts learning centered on visual and performing arts standards, arts curricula aimed at positively influencing ELA achievement, and studio sessions that model creative learning environments that are applicable to the classroom. At the core of all arts instruction, the California Visual and Performing Arts (VAPA) standards were addressed for this model of arts instruction (e.g., “Use theatrical skills to dramatize events and concepts from other curriculum areas” for fifth grade theater, or “Create a work of art based on the observation of objects and scenes in daily life” for third grade visual arts.).

Students and teachers in the LATA program schools travel to the ICA campus two days a week to co-participate in art classes in multiple art forms: visual art including drawing, painting, photography, ceramics, and sculpture; and performing art like dance, music, and drama, as well as animation.

Besides hands-on arts experiences, teachers also participated in professional development focused on arts integration, provided by ICA on-site in schools. A coaching model called Supporting Teachers for Arts-Infused Classrooms (STAIC) was launched in service of supporting teachers in having the tools and strategies to create classrooms where the arts are a vehicle for students to be engaged learners, with diverse learning needs being met by a diverse spectrum of arts-based pedagogical strategies. Classroom teachers were introduced to new methodologies that allow for the creation of creative learning environments in the classroom, and collaborated directly with art instructors to develop arts-integrated lesson plans with continued use of the visual, performing, and new media arts strategies in all subject areas. In-session training, post-session support, and follow-up support were all included in this coaching model, as student learning of content was seen as a shared responsibility of classroom teachers and teaching artists through a reciprocal approach.

The planning and training meetings were highly collaborative and addressed the needs of the educators as well as their students. This support model, in addition to family and community culmination showcase events, intentionally created a whole-school arts integration culture in which students and teachers learn together and from each other.

The LATA partnership began in the 2010–2011 school year, and at the time of this writing had concluded the third year of the program in 2012–2013. Baseline measures were gathered during the 2009–2010 school year.

Participants

LAUSD is the second largest school district in the United States, behind only New York City (National Center for Education Statistics, 2013). The district serves the entire

Table 1. Select Comparisons of Treatment and Control School Demographics at the Start of the Study

<i>School</i>	<i>Condition</i>	<i>Student demographics</i>	<i>% ELLs</i>	<i>% FRPL</i>
School A	Treatment	57% Latino, 31% Asian, 5% Filipino, 7% other	64%	69%
School L	Control	51% Latino, 40% Asian, 1% Filipino, 8% other	64%	68%
School B	Treatment	86% Latino, 8% Asian, 3% Filipino, 3% other	60%	100%
School M	Control	85% Latino, 4% Asian, 6% Filipino, 5% other	49%	100%
School C	Treatment	73% Latino, 7% Asian, 10% Filipino, 10% other	54%	100%
School N	Control	84% Latino, 5% Asian, 9% Filipino, 2% other	56%	100%

Note. ELL = English Language Learners; FRPL = free and reduced price lunch.

city of Los Angeles, as well as several surrounding municipalities and unincorporated areas. Three control schools and three treatment schools from the school district participated in this project. The treatment schools identified shared the characteristic of enrolling large percentages of low-performing ELLs (with first languages ranging commonly in Korean, Spanish, Tagalog, and Bengali, among many other languages spoken by families at these schools) and were also within a feeder pattern of elementary and middle schools matriculating to a common high school. Over 30 criteria were used to ensure reasonable comparability between treatment and matched comparison control schools, including but not limited to similar baseline standardized test scores, attendance rates, reclassification rates, parent participation, school suspension, safety, student demographics (e.g., race and ethnicity, percentage of ELLs, percentage of students with disabilities, percentage eligible for free and reduced-lunch program), API scores and rank, API Similar Schools Rankings, ELL progress, total enrollment, quality of facilities, and other indicators of teacher quality. The selected treatment and control schools are compared briefly in Table 1, with sample criteria that were matched across sites.

All participating schools served students from kindergarten to grade 5. While all schools in this school district included arts in the elementary school curriculum, only the three treatment schools were involved in the LATA model, as opposed to the stand-alone arts programming that was offered at the comparison sites as well as at most schools in the district at the time of the study. This stand-alone arts programming was delivered by LAUSD on many of the same art forms as offered through the LATA model, although classes were conducted at the schools as opposed to on the ICA campus. Control teachers did not have access to the arts training or LATA professional development programs. Participation in the arts activities was also considered to be optional for the classroom teachers.

Data Sources and Analytical Techniques

This study employed publicly available standardized test score information on control and treatment schools obtained via the public portal of the LAUSD Web site. The percent of students proficient in ELA was compared at baseline and for years one–three of the implementation of the LATA model using descriptive statistics and chi-square tests of significance to identify statistical differences in gains between control and treatment

Positive Impact of Arts Integration

schools overall, and for subpopulations of interest, including gains in the number ELL students considered proficient.

Student standardized test scores. Comparisons in performance were made by looking at scores on the California State Test of English Language Arts (CST-ELA), a standardized test taken by second through fifth grade students. The number of students annually tested as well as the number of students performing at and above proficiency levels are provided for treatment and control schools in Table 2. Additionally, we examined the number of ELLs that were considered to be proficient, which also can be found in Table 2.

Data analysis. Comparisons of percentages of students performing at or above proficiency in ELA were made in respect to the baseline scores (i.e., the 2009–2010 test scores) and for program years one–three (i.e., 2011–2013 test scores). We compared descriptive statistics and created visualizations of descriptive data through graphs of the test scores of the total population and for the ELL subgroups. After identifying comparisons with wide margins, we utilized chi-square tests of independence to evaluate whether the differences found between control and treatment performance for both the overall populations and the ELL

Table 2. Numbers and Percentages of Students Achieving Proficiency on CST-ELA Standardized Test (Whole School Population and Sub-Population of English Language Learners)

		Whole school			English Language Learners		
		Number of students proficient/ number tested (N)	Percent proficient in ELA	Percent gain in student ELA proficiency	Number of students proficient/ number tested (N)	Percent proficient in ELA	Percent gain in student ELA proficiency
Treatment schools (N = 3)	Baseline	948/1885	50%	–	269/961	28%	–
	Year 1	1077/1762	62%	12%	396/897	44%	16%
	Year 2	1055/1673	63%	13%	375/802	47%	19%
	Year 3	923/1551	60%	10%	250/663	38%	10%
	Average percent gain	11%			15%		
Control schools (N = 3)	Baseline	652/1192	55%	–	183/546	34%	–
	Year 1	655/1198	55%	0%	191/547	35%	1%
	Year 2	657/1195	55%	0%	195/564	35%	1%
	Year 3	626/1211	52%	–3%	172/569	30%	–4%
	Average percent gain	–1%			–1%		

Note. CST-ELA = California State Test of English Language Arts; ELA = English Language Arts.

students were significant. A chi-square test of independence is a simple cross-tabulation that compares expected and actual differences between groups to determine whether they are due to chance or are operating statistically independently. In this case, condition (control or treatment) was cross-tabulated against performance (passing or failing the ELA exam) to see how expected gains compared with actual gains for students in both groups.

Results

Percentage of Students Achieving Proficiency on ELA Assessments

To analyze standardized test scores in ELA and the numbers of students at or above proficiency, researchers compared the raw frequencies and percentages for the total population of students and for ELL students in both treatment and control groups (see Table 2). Column three in Table 2 presents the total number of students performing at or above proficiency over the total number tested for the baseline year through year three of the program. Overall, these findings indicated that treatment schools had an average 11% gain in the number of students that were proficient on ELA standardized tests compared to a change in control school average loss in students proficient in ELA of 1%. The differences in the percent of students proficient in ELA (in both total treatment and control school populations) can be seen in Figure 1.

After evaluating descriptive statistics, we performed chi-square tests of independence to examine differences between control/treatment scores at baseline, then to confirm significant differences in overall gains between control/treatment scores for years one–three. Cross-tabulating condition (treatment or control) and ELA proficiency (pass or fail) showed the difference between these variables was significant [chi-squared (1, $N = 3077$) > 0.000001 ; $p < .001$ at baseline], where a significantly lower percentage of treatment students passed the ELA test than expected (the effect size for this finding, phi, was 0.00002). This indicates that, at the start of our study, the ELA scores favored our control groups. However, beginning as early year 1 of our study (and consistently throughout each subsequent year), we found that our treatment schools had a significantly higher proportion of students at or above proficiency in ELA. For year 1, chi-squared (1, 2960) > 0.00098 ; $p < .01$ and phi was 0.00057; for year 2, chi-squared (1, 2868) > 0.00006 ; $p < .01$ and phi was 0.00015; and for year 3, chi-squared (1, 2762) > 0.00004 ; $p < .01$ and phi was

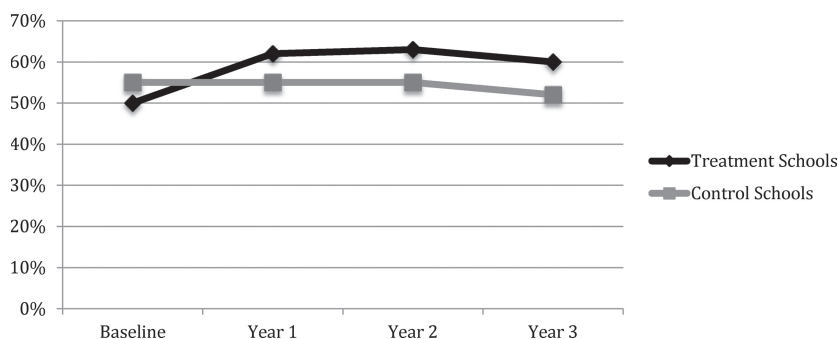


Figure 1. *Percent of students proficient in English Language Arts (treatment vs. control school total population).*

0.00012. Overall, in years one–three a higher percentage of treatment students passed the ELA test each year than expected. Similarly, the average gain comparisons for years one–three between control and treatment schools was significant and favored the treatment schools [chi-squared (1, $N = 2863$) > 0.00006 ; $p < .001$ and phi was 0.00014]. Overall, treatment students were significantly less likely than control students to pass the ELA exam at baseline, but more likely than control students to be proficient on the ELA exam in years one–three after receiving LATA arts programming and integration, providing strong support for the model at the school-wide level.

A Closer Look at ELL Students

The changes in percent proficiency were even more profound for ELLs in the LATA program. The average gain in percent proficient for ELL in treatment schools over the three program years from the baseline was 15% (see Table 2). This finding suggests that, as was intended in the design, the LATA arts integration model has special impact on the ELA development of ELL students. The differences in the percent of students proficient in ELA (in both treatment and control ELL populations) are depicted in Figure 2.

After reflecting on the descriptive statistics for ELL students as a subgroup of interest, we performed chi-square tests of independence to examine differences in scores at baseline, then to confirm significant differences in overall gains between control/treatment scores for years one–three, for ELL students in particular. Cross-tabulating condition (treatment or control) and ELA proficiency (pass or fail) for ELL students showed that the difference between these variables was significant [chi-squared (1, $N = 1507$) $> 7.56789E-20$ at baseline; the effect size for this finding, phi, was 7.08648E-12]. Again, this indicated that our treatment students began the study significantly behind their peers at the control schools. However, this shifted beginning in year 1 of the study when our treatment ELL students began to significantly outperform their peers at the neighboring control schools. For year 1, chi-squared (1, 1444) > 0.001 and phi was 0.00017; for year 2, chi-squared (1, 1366) > 0.001 and phi was 0.00017; and for year 3, chi-squared (1, 1654) > 0.001 and phi was 0.00016. Similarly, average gain comparisons for years one–three between control and treatment schools was significant

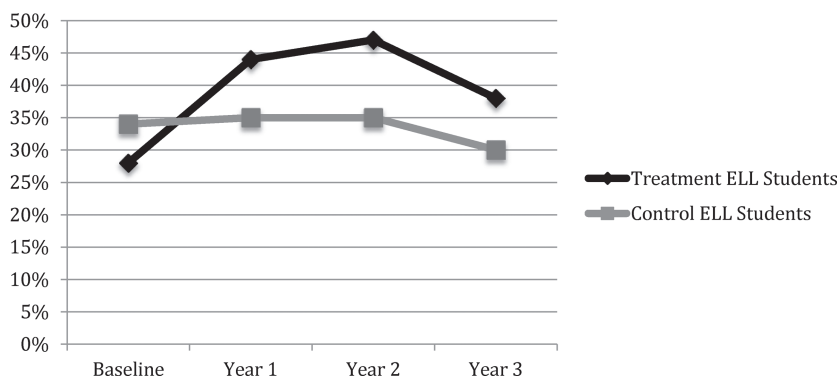


Figure 2. Percent of English Language Learner (ELL) students proficient in English Language Arts (treatment vs. control school ELL students).

[chi-squared (1, $N = 1873$) > 0.01336581 ; $p < .01$ and phi was 0.00267]. ELL treatment students were significantly more likely than ELL control students to pass the ELA exam in years one–three after participating in the LATA model of arts programming and integration. This provides further evidence of the efficacy of this model.

Limitations of the Current Study

The current investigation was not a true experimental study in that several factors were beyond our control (including that we were unable to assign students at random to one of our two conditions). For example, it is possible, and even likely, that in an area where families move fairly often, individual students may have moved around within the district throughout the data collection years. Students who started in a treatment school, then, could have moved to a control school another year, or vice versa. Since we were not able to examine test scores at an individual student level, we could not eliminate the possibilities of these types of biases in the data. While we do not claim that the results of this study are fully generalizable to all contexts and populations, we do believe the evidence is strong enough to suggest that similar whole-school arts integration models may have a positive impact in other schools and schooling districts that are worthy of further study and broader dissemination of the model.

Additionally, not all aspects of the model have been assessed here, and so there could be other potential interpretations of the findings. For example, perhaps the quality of the instruction differed by condition and could explain our group differences. As stated in the implications for research, further work is needed to better understand exactly what aspects of the model are leading to the success outlined here. We cannot currently make a causal link between the arts instruction and the gain in academic scores, although the evidence strongly suggests that this is the case.

Finally, we looked only at publically available school test score data rather than individual student test scores. Although individual student data may have provided interesting information, they would have been nearly impossible to obtain due to student privacy laws. Additionally, when looking at overall populations rather than specific subgroups, statistical significance was still observable; thus we believe more detailed individual student data may not have yielded particularly different or more useful results.

Discussion

Implications for Practice

The impact of the arts on ELA standardized test scores among treatment schools' student populations generally, and ELL subpopulations in particular, suggests that the LATA model of arts implementation has potential value for similar student groups for increased academic achievement in ELA. Teachers, administrators, and collaborative artists should recognize that this model may be one among multiple valuable program design strategies to choose from, especially if a central goal is supporting academics and standardized test score improvement. However, aspects of the model may be important when supporting transfer from the arts to other academic areas, including but likely not limited to (a) offering high-quality arts instruction that is led by teaching artists and held in professional-grade studios, (b) having regular classroom teachers participate alongside

Positive Impact of Arts Integration

their students in the arts (as opposed to grading papers or attending to other classroom needs), (c) offering targeted professional development to support links between the arts and other academic areas, and (d) stressing language development during student time in the arts.

This study is not a simple comparison of the presence or absence of arts programming in schools in terms of test score impact. Rather, it is an investigation of the impact of this program's arts integration model in particular. Since various forms of stand-alone arts programming were happening in this study's control schools throughout, the study offers insight into the potential mechanisms at play in supporting transfer from the arts to academic areas such as English language arts. This may provide a partial explanation about why there are inconsistent results with arts integration in the literature in general: The LATA model explicitly integrates content and makes connections to content both in and out of classrooms, while most models do not.

We have no intention of discounting any quality or value in the arts programming provided to the control schools. Instead we are arguing that stand-alone arts programming may be an inefficient way to influence standardized test score results. And like many educators or researchers, we see value in enriching curricular experiences for children via the arts with or without test score impact. Arts integration may potentially leverage so much more than enriched aesthetic experiences or "knowing about" art forms, and potentially, so much more may be gained through an emphasis on "doing." We do not have to just value art for art's sake, and the LATA model and outcomes demonstrate that by tapping into deeper literacies that bring "doing" to the center. Future studies, and we have some underway, could measure arts learning in addition to the impact of arts integration on student academic achievement to paint a fuller account of the student experience.

Implications for Policy

There are also practical implications here for policy makers, policy shapers, and investors who are interested in educational reform initiatives. When choosing, planning, supporting, or mandating arts programming for academic impact, design matters. LATA's multifaceted arts model, with supports for teachers in classrooms, via professional development, and on-campus arts studios, enjoyed sufficient funding to provide adequate staffing, training, and materials for a variety of art forms for children to engage in over the long term, and the results shined through in their standardized test scores. Concretely, this suggests that policy makers or other investors intent on enriching school experiences and outcomes for similar student populations should support and subsidize similar kinds of arts programming.

Some districts already have opportunities to implement programming like this, such as the ICA/LAUSD project, the Chicago Arts Partnerships in Education project in Chicago, and the Center of Creative Arts project in St. Louis. This work suggests guidelines for possible strategic programming design, modification, and expansion, perhaps particularly for large urban district partnerships seeking to problem solve the complex issue of chronically low standardized test scores. Additionally, there may be similarly successful yet distinctly different models of successful arts programming and partnerships in large urban districts that are

deserving of further study. While the LATA model is certainly not the only successful model, it may hold important clues to a progressive, holistic approach toward academic improvement.

Implications for Research

This study has several implications for future research that would continue to fill gaps in the literature. First, the findings of this study present data from a quasi-experimental study that documents that the LATA model had a significant impact on students' standardized test scores in ELA above and beyond control schools with stand-alone arts programming. The current study particularly highlighted the LATA model's impact on ELL students. However, several other subpopulations and groups had similar gains in the proportion of students at or above proficiency that could not be discussed in the scope of this article. Future research in this area should examine those results to provide a larger picture of the impact of the LATA model on standardized test scores.

Additionally, we recognize that gains on standardized test scores are not the only way, or even the best way, to denote the LATA model as a success. Another interesting avenue of research would be to look at the students' changes in art proficiency and creativity after the implementation. As the ability to think creatively is a valued function of the arts, this would be another avenue of exploration with utility. The teachers who participated in professional development as part of the program completed surveys before and after implementation, and these qualitative results could provide a useful view into the effect of the model on teacher practices and beliefs.

Last, we understand that empirical evidence for the link between arts and academics can still be tenuous or unclear at times. Researchers should continue to explore this connection and suggest effective design models for doing so. The various approaches that have been used to this end are interesting and informative, but it can prove difficult to compare such differing methods. For example, what are the core qualities and most effective strategies in arts integration? This is an important area of research and exploration, and work should continue to strengthen the evidence of this link.

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Positive Impact of Arts Integration

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