The Mirror and the Canyon: Reflected Images, Echoed Voices

The Mirror and the Canyon: *Reflected Images, Echoed Voices*How evidence of GW's performing arts integration model is used to build support for arts education integration and to promote sustainability

#### Introduction

Since 2005, Global Writes (GW) has brought performing arts, embedded within English language arts instruction and supported by technology, to students, teachers, and schools in cities across the nation. To date, GW has implemented three Arts in Education Model Development and Dissemination (AEMDD) grant projects funded by the U.S. Department of Education (USDOE): *POETRY Express* in the Bronx, NY; *Honoring Student Voices* in Chicago, IL and the Bronx, NY; and *Tale of Two Cities* in San Francisco, CA. Through these AEMDD projects, GW has explored the question, "Can a successful model for performing arts, which is integrated with literacy instruction and use of 21<sup>st</sup> century technologies, be replicated to positively impact students in various public school districts across the country?" Since its inception, GW has utilized best practices in the fields of performing arts and English literacy education, as well as insights learned from local evaluations, to build a strong and sustainable model of integrating performing arts with a group of high-needs public schools.

GW was formally established seven years after GW staff began collaborating with middle schools in the Bronx, NY for the *BRONX WRITeS* project. This project, started in 1998 as a partnership with DreamYard, an arts education organization that provides teaching artists residences for K-12 schools in the Bronx, and later led to securing the first GW AEMDD research grant in 2003 to implement and evaluate *POETRY Express*. After incorporating into a nonprofit in 2005, GW used the experience, data, and foundational information gathered from *BRONX WRITeS* and *POETRY Express* to develop the GW model for arts integration with the implementation of two more AEMDD funded projects, *Honoring Student Voices* and *Tale of Two Cities*. Recently, the model has been expanded in additional places such as Maine where the project now includes three new schools. As the model has evolved, GW developed a community of practice with over 40 schools across the country that is grounded in traditional classroom experiences in the arts and English language learning as well as 21<sup>st</sup> century technologies.

The GW model is comprised of five major elements: 1) partnering with school districts and local arts organizations; 2) integrating performing arts and literacy instruction through inschool residencies with teaching artists; 3) using technology to engage students and accommodate different modalities of learning; 4) hosting authentic opportunities for student poetry performance; and 5) establishing mentorship networks with schools and arts organizations.

The GW model of institutional collaboration and arts integration is a unique and innovative approach that builds local partnerships between schools and arts organizations to effect transformation in the areas of teacher practice and effectiveness, school culture and environment, and student development and achievement. Drawing selectively from transformational learning theory, as advanced by Jack Mezirow (2000) and Edward W. Taylor (2007), the GW model aims to transform student and teacher experiences with the arts by breaking down the traditional boundaries of the classroom and school, by opening up new perspectives on instructional practice, by demonstrating the power of collaboration, and by providing tools and structures to build and sustain learning communities.

Through local partnerships between schools and arts organizations forged by GW, classroom teachers and local teaching artists build collaborative relationships to maximize student potential for learning through the arts. The inclusion of teaching artists in the GW model is supported by research from Stevenson and Deasy (2005) who found that "partnerships were an

important catalyst for creating new dynamics in schools" and that "the most effective experiences for teachers in integrating performing arts into other content areas occurred when there was an opportunity provided to partner with practicing artists in their classroom." The GW projects foster these partnerships by working with local arts partners to provide in-classroom residencies, utilizing a team teaching approach with English language arts instructors. In AMEDD GW projects, participating teachers work with GW staff and teaching artists to develop curriculum maps connecting elements of poetry with school-based literacy curricula and state standards. During the residencies, teachers and artists plan weekly lessons to implement poetry writing and performance instruction in the classroom.

GW's model of integrating performing arts into literacy instruction is designed to create a "third space." Defined by Stevenson and Deasy (2005) as the classroom environment where students create works of art or interact with art, bringing their own knowledge, experience and imagination to bear on the sharing, interpretation or critique of art, "third spaces" also refer to the relationships forged by working with the arts, and the context these relationships create for teaching and learning. Activities in the GW model are intended to develop "third spaces" between and among students, teachers and teaching artists in the classroom (impacting individuals); between and among classes across participating schools (impacting whole-school culture); and between and among the participating schools and arts partner organizations within each location (impacting institutional and community culture).

Student activities in all of GW AEMDD projects are centered on classroom-based residencies and are aligned with several key components attributed by Stevenson and Deasy (2005) as elements needed for successful arts integration programs in schools to support the academic achievement of at-risk student populations. (See Table 1). The GW model also incorporates performing arts and technology to engage student learners in multiple modalities that support diverse learning styles and address components of the International Society for Technology in Education National Education Technology Standards for Teachers (ISTE NETS-T), which include facilitating and inspiring student learning and creativity, designing and developing digital age learning experiences and assessments, modeling digital age work and learning, promoting and modeling digital citizenship and responsibility, and engaging in professional growth and leadership (ISTE, 2009. Classroom-based interventions for students include residencies providing instruction in writing original poetry and the art of performance, and poetry performances for authentic audiences including local community-based and inter-city poetry slam sessions. GW takes an exceptional approach to using technology with students by focusing on the use of high-level multimedia tools and authoring applications that allow students to create, edit, and publish their own work. Using a variety of technologies affords GW the opportunity to engage the visual, auditory and kinesthetic learner in a way that will best serve their ability to process, create and synthesize new information (Giles, 2010). Indeed, as suggested in the National Education Technology Plan (2010): "The challenge for our education system is to leverage technology to create relevant learning experiences that mirror students' daily lives and the reality of their futures."(USDOE, 2010).

Table 1 Matrix of Stevenson and Deasy Research Elements Identified in Arts Programs that Support Academic Achievement

Research Element:	Stevenson & Deasy (2005) Definition:	Global Writes Approach:
Student as an Artist	Students develop a third space where they draw on their lived world and what they have learned from their teachers to create and express something new.	<ul> <li>Students are engaged in a writing process in developing their own poetry.</li> <li>Students use technology for writing, editing and publishing their work.</li> </ul>
Student as a Contributor	The dimension of the art experience that culminates in a product that has value to oneself and an external audience. This is particularly important for students who recently immigrated to the US and are struggling with reading and speaking English.	<ul> <li>Students prepare a final version of selected poems from their original collection and use performance skills to engage in a Poetry Slam Competition with other participating schools.</li> <li>Students are encouraged to write and perform poetry in their native language.</li> </ul>
Self-Efficacy	The ability to stand up and express an idea and back up that idea with feelings and to be themselves. When students have a real audience they are preparing for, they create a self-imposed set of high standards. They demand a high level of quality from each other and themselves.	<ul> <li>Students are engaged in peer editing activities to prepare their poems and performances for slam competition.</li> <li>Videoconferencing technology is used for students to share their original work with other students as well as authentic audiences across other cities and states.</li> <li>Digital media is used for recording students' work for feedback in the classroom.</li> </ul>
Adaptive Expertise	Students develop the ability to apply what they are learning to new situations and experiences in school and in daily life. Students become progressively more competent at the routine procedures or technical aspects of all subjects.	• Students who participate in the original model have also shown success in other subjects, such as History Debate Teams and various public speaking activities.
Learning from Artists	Partnerships with teaching artists allow for advanced skills in the art form in a classroom. Artists also bring their own experiences of personal growth and development fostered by their careers in the arts.	<ul> <li>Participating teachers are partnered with a teaching artist for a 10-week writing and performance workshop session.</li> <li>Non-arts teachers learn strategies for developing poetry and performance in their classrooms.</li> <li>Access to the expertise of a professional writer and performing artist provide real world experiences.</li> </ul>

GW's experiences implementing three AEMDD grants have continued to inform the program model via the use of data from research to formatively refine the model. For example, in order to support the collaborative relationships forged between schools and arts organizations, findings from implementation research for *POETRY Express* and *Honoring Student Voices* informed the evolution of the GW model to include mentorship between experienced and newly implementing school staff and arts partners. In the current AEMDD project, *Tale of Two Cities*, which grew from the *POETRY Express* and *Honoring Student Voices* project, experienced teachers and arts partners based in the Bronx have provided mentorship to new GW participants in San Francisco, CA via video-conferencing and other communications technologies. The use of these technologies has been especially useful to the sustainability, replication, and refinement of the model, which aligns with the findings from Fulton and Riel (2008), who write, Communications technology provides promising opportunities for collaborative learning environments for teachers in which they can reflect on practice with colleagues, share expertise in a distributed knowledge framework, and build a common understanding of new instructional approaches, standards, and curriculum (Fulton, Riel, 2008).

GW projects also have used videoconferencing for peer mentoring and collaboration, connecting students in schools across the country to share their work in the classroom and through poetry slam competitions to engage all learners at their own highest levels. The mentor relationships created via the *Tale of Two Cities* project among arts organizations, teachers, and students in cities across the nation are a catalyst for the continued development and replicability of the GW model.

The initial *BRONX WRITeS* model and the resulting evolved GW model have maintained success with youth grades 3-12, because the elements reflect the embodiment of what it means to "educate the whole child." Many of the principles found in Universal Design for Learning (National Center for Universal Design for Learning, 2011), which give all individuals equal opportunities to learn, are embedded in the components of the program. For example, during the writing workshop, the artist-in-residence provides a safe environment where students are able to write and share personal topics. Both teacher and teaching artist serve as models and mentors sharing their own personal writing to foster a climate of mutual respect and a level of comfort for the students. The innovative use of social networking tools and videoconferencing during the editing and revising phases of the program helps to build student confidence and contributes to one another's affective development. Social and emotional learning opportunities are aligned with the academic challenges of sharing with an authentic audience.

Each of the GW projects, since the inception of *BRONX WRITeS*, has served to help GW refine and develop the project model. Data gleaned from research findings have provided information and recommendations to customize the approach to individual locations as well as add project components (e.g., mentoring). Throughout this process, the GW team has embraced the metaphor of "the mirror and the canyon" by formatively reflecting on the model of practice. Through each subsequent AEMDD project, GW has continually improved the program model by "looking in the mirror," building on what works, as evidenced through research, and then tailoring the program to meet the needs of individual schools and arts organization partners in each location. Through documentation and feedback gathered from participating students, teachers, and arts partners as part of the research on the model, GW has also learned to "listen to the echo." As GW continues on a journey of arts integration from classroom to classroom, school to school, and city to city, these stories are validating the program's impact on learning and teaching practice through the integration of arts and technology into English literacy instruction.

Continuous reflections informed by data have helped guide GW forward in its vision to *teach locally, share globally, and build community*, while the "echoes" have promoted GW's efforts for sustainability among current education partners and continued growth through public dissemination. The next section of the paper provides an overview of three GW research studies, supported by AEMDD funding. The subsequent section discusses GW's sustainability and dissemination efforts, drawing support from the research.

### **Methodology and Research Findings**

This section describes the methodology and findings across three GW AEMDD projects: *POETRY Express* (2003-2006; Bronx, NY), *Honoring Student Voices* (2006-2010; Bronx, NY and Chicago, IL), and *Tale of Two Cities* (2010-2014; San Francisco, CA). Project goals for the GW AEMDD projects were focused on several areas, including: increasing students' oral and written communication and deepening their appreciation for the arts, increasing teachers' proficiency in leading literacy instruction and integrating the performing arts and technology with the core curriculum, and sustaining and replicating the project beyond the federal funding period. Each of the three projects underwent Institutional Review Board (IRB) review and received approval in each of the project years. IRB reviews were conducted by Metis's internal IRB, as well as the school districts in each project location, including NYC, Chicago, and San Francisco.

#### **GW Study Designs**

The first GW AEMDD study, *POETRY* (Providing Opportunities for Expression through Technology Resources for Youth) *Express*, was conducted in ten New York City (NYC) public elementary and middle schools. Project activities included elementary and middle school classroom residencies, teaching the art of performance poetry, and videoconferencing to allow student sharing and poetry slams. Metis Associates, the independent project evaluators, employed a quasi-experimental design to examine the impact of the treatment intervention on students. Students and teachers in six schools comprised the treatment group, <sup>i</sup> and students and teachers in four demographically similar schools comprised the comparison group. Each treatment school was matched to a comparison school based on similarities in baseline schoolwide demographic and achievement data.

The evaluation study of *POETRY Express* followed two cohorts of students through each of the three project years (2003-2006) and into a no-cost extension year (2007). The first cohort consisted of fifth grade students (students who entered third grade during the first year of project implementation). The second cohort consisted of eighth-grade students (students who entered sixth-grade during the first year of project implementation). One hundred sixty-four treatment students (53.6 percent of the total treatment group) and one hundred ninety-three control students (45.4 percent of the total comparison group) participated in all three years of the study. Baseline school-wide demographic data from school year 2003-2004 are presented for each of the matched treatment and comparison schools in Table 2.<sup>ii</sup>

Table 2 *POETRY Express* Baseline (2003-2004) School-wide Demographic Data

School	Grades	Enrollment	% Free or	%	% ELL	% Proficient
	Served	N	Reduced	Minority		or Above in
			Lunch			ELA
Treatment 1	K-6	961	92.3	99.0	29.6	24.4
Treatment 2	K-6	544	90.1	96.6	27.3	17.8
Treatment 3	K-8	891	99.4	99.6	23.2	23.5
Treatment 4	5-8	1664	90.8	99.3	25.6	19.7
Comparison 1	PK-5	964	99.7	99.7	22.3	17.9
Comparison 2	K-6	606	90.6	98.8	23.2	27.3
Comparison 3	K-8	1070	95.9	99.4	25.6	19.0
Comparison 4	5-8	1398	81.9	99.6	18.3	19.9

To establish baseline equivalence, independent-samples t-tests were conducted to test whether schools in the treatment condition and those in the control condition were equivalent on school-level baseline measures (e.g., demographics and ELA achievement). The results indicate that there were no statistically significant differences between the treatment and control schools at baseline.

GW was awarded AEMDD funds to implement a second demonstration project, *Honoring Student Voices* in 2006. *Honoring Student Voices* targeted high-need (Title I and designated academically underperforming) middle schools in NYC and in Chicago, providing teachers and students in these schools with intensive workshops in the art of poetry and performance. Metis employed a cluster randomized design to evaluate this project. Six schools in each city were assigned randomly to either the treatment or the control condition, resulting in six treatment and six control schools in total across the two cities. The evaluation tracked students and teachers in the treatment and control schools over the course of three years of program implementation from sixth grade (2007-2008) through eighth grade (2009-2010) to assess cumulative impacts

The *Honoring Student Voices* study targeted students in middle school, following two cohorts of students in New York City and Chicago from sixth to eighth grade throughout the three years of project implementation. In total, 700 students across the two cities participated in at least one year of project implementation. More than 300 students received treatment in all three years of program implementation. Table 3 presents baseline (school year 2006-2007) demographic data on participating treatment and control students.

Table 3

Honoring Student Voices Baseline (2006-2007) Participating Student Demographic Data

Study Group	N	% Free or	%	%	% Special	% Proficient
	Participating	Reduced	Minority	ELL	Ed	or Above in
	Students	Lunch				ELA
NYC						
Treatment	263	97.0	99.3	26.2	19.0	33.3
Control	296	91.2	97.7	20.9	27.0	39.4
Chicago						
Treatment	167	92.8	98.2	17.4	4.2	26.2
Control	190	87.9	98.5	2.1	6.3	23.5

Similar to *Poetry Express*, independent-samples t-tests revealed that schools in the treatment condition and those in the control condition were equivalent on school-level baseline measures (e.g., demographics and ELA achievement) with no statistically significant differences between the treatment and control schools at baseline.

A third AEMDD-funded project is currently underway in partnership with the San Francisco Unified School District and the Performing Arts Workshop (the Workshop). Similar to the *Honoring Student Voices* project, the evaluation is using a cluster randomized design for the evaluation of the *Tale of Two Cities* project. A total of six eligible middle schools in San Francisco were randomly assigned to either the treatment or the control group, resulting in three schools in each condition. The *Tale of Two Cities* project is currently in its final year of implementation. At the project end (2014), the study will have followed three cohorts of treatment and control students across three years of program implementation (2011-2014). The first cohort includes students who entered sixth grade during the first implementation year (2011-2012), following the students in seventh grade during the second implementation year (2012-2013) and in eighth grade during the final year (2013-2014). The second cohort includes students who entered sixth grade during the second year of implementation, and during the final project year, the project will serve students in sixth, seventh, and eighth grade in their ELA classes. Table 4 presents demographic data for the first cohort of students during the 2011-2012 baseline year.<sup>iii</sup>

Table 4

Tale of Two Cities Baseline (2011-2012) Participating Student Demographic Data

Study Group	N Participating	% Minority	% ELL	% Special	% Proficient
	Students			Ed	or Above in
					ELA
Treatment	315	94.7	27.0	18.1	40.7
Control	556	92.6	28.4	15.5	41.0

As was the case with *Poetry Express* and *Honoring Student Voices*, independent-samples t-tests revealed no statistically significant differences between the treatment and control schools at baseline.

For all three AEMDD projects, participating students and teachers in the treatment schools engaged in both the program and research activities. As part of the study design,

students and teachers in comparison or control schools participated in the research activities only. The research design in the latter studies allowed for comparisons of growth or change between treatment groups, to provide evidence to demonstrate program effects.

#### Measures

For each GW AEMDD study, the respective evaluations employed a multi-method approach to measure the outcomes of the respective project objectives. Impact on student achievement in English Language Arts (ELA) was assessed through longitudinal analyses of student standardized test scores on state ELA exams. Pre- and post- surveys were also administered to both teachers and students on an annual basis. Additional research activities included locally developed poetry performance and writing skills rubrics for students, observations of program activities, and interviews and focus groups with school and program staff.

Student surveys used for all the GW AEMDD studies were designed to assess students' attitudes towards literacy, school, and general learning. For *POETRY Express*, the student survey was developed locally in collaboration with Metis and GW staff. For *Honoring Student Voices* and *Tale of Two Cities*, student surveys were expanded to measure students' motivation around four specific goal orientations: task involvement, effort, competition, and social concern. Questions pertaining to these goal orientations were used from four whole scales of the *Inventory of School Motivation* (ISM) by (McInerney & Sinclair, 1992), a published and validated instrument designed for use with students in middle and high school.

## **Impact on Student ELA Literacy**

Longitudinal analyses on student achievement data conducted for the *POETRY Express* and *Honoring Student Voices* projects provide evidence of impact on student ELA achievement outcomes. As The *Tale of Two Cities* project is still in progress, final analyses are not yet available.

In *POETRY Express*, analyses of the sixth-grade cohort student achievement test scores indicated that the treatment group students outscored comparison group students on the 2007 New York State ELA test. The mean scale score for the treatment group was 8.6 points higher than the mean scale score for the comparison group, after controlling for baseline ELA achievement in 2004 (ES=0.35; *p*<0.05). Furthermore, treatment students made greater gains than control students, after controlling for ELL, Special Education, and Free and Reduced Lunch status. Results of logistic regressions from the first project implementation year (2004) to final year (2006) indicate that that treatment students were 2.3 times as likely as control students to be proficient in reading by 2006 (p<0.001). Analyses of logistic regressions conducted from the first project implementation year (2004) through one year past the end of the project (2007) showed that treatment students were 1.7 times as likely as control students to be proficient in reading by 2007 (p<0.01).

Table 5
Summary of Logistic Regression: *POETRY Express* Student Reading Proficiency (2004-2006)

	POETRY Express Students				
		(N=730)			
Predictor	В	SE B	$e^B$		
Treatment Status	.850***	.183	2.339		
English Language Learner Status	-20.915	4463.989	.000		
Reading Proficiency (baseline)	2.817***	.335	16.723		
Special Education Status	512	.445	.599		
Free or Reduced Price Lunch Status	007	.209	.993		
Constant	-1.035***	.307	.355		

*Note:*  $R^2 = .270$  (Cox & Snell), .368 (Nagelkerke). \*p < .05. \*\*p < .01. \*\*\*p < .001.

Table 6 Summary of Logistic Regression: *POETRY Express* Student Reading Proficiency (2004-2006)

	POETRY Express Students (N=730)				
Predictor	В	SE B	$e^{B}$		
Treatment Status	.584**	.217	1.793		
English Language Learner Status	-1.393**	.536	.248		
Reading Proficiency (baseline)	1.488***	.248	4.428		
Special Education Status	-1.014	.743	.363		
Free or Reduced Price Lunch Status	1.677***	.348	5.348		
Constant	-3.463***	.369	.031		

*Note:*  $R^2 = .108$  (Cox & Snell), .183 (Nagelkerke). \*p < .05. \*\*p < .01. \*\*\*p < .001.

These findings are underscored by data gathered for the *Honoring Student Voices* project. Tables 7 and 8 present mean scale scores on New York State ELA and Chicago ISAT Reading assessments for students in the treatment and control groups, as well as the results of repeated measures ANOVA analyses. For the NYC cohort, results of a repeated measure ANOVA revealed that the patterns of change over time differed significantly by group. Although mean scale scores generally increased from 2006 to 2010, this growth was not steady. The treatment group mean scale score increased from 2006 to 2009; however, mean scores for both groups declined from 2009 to 2010. The differences were significantly larger for control group students than for treatment group students (ES=0.22; p<0.05). For the Chicago cohort, mean scale scores increased significantly over time from 2006 to 2010 for both groups. Results of repeated measures ANOVA indicate a statistically significant difference between groups, in favor of the control group, in rate of growth over time (ES=0.38; p<0.05). While the treatment group mean scale score increased consistently over time (from baseline to 2010), the control group mean

scale score stabilized from 2008 to 2009 and then sharply increased from 2009 to 2010. Longitudinal results of logistic regressions (Table 9) indicate that all treatment students made greater gains than control students, after controlling for ELL, Special Education, and Free and Reduced Lunch status, with analyses showing that treatment students were 2.2 times as likely as control students to be proficient in reading by 2010 (p<0.01).

Table 7

Honoring Student Voices Student English Proficiency Means and Standard Deviations<sup>iv</sup> (2007-2010)

		NY	C	Chica	ıgo
		Treatment	Control	Treatment	Control
		(N=204)	(N=199)	(N=75)	(N=42)
Spring	Mean	646.41	639.48	213.51	205.55
2006	Standard Deviation	27.126	32.515	26.37	30.44
Spring	Mean	648.11	646.95	222.98	216.69
2007	Standard Deviation	21.084	27.105	26.58	29.11
Spring	Mean	649.02	642.70	235.80	233.64
2008	Standard Deviation	18.371	22.240	27.18	25.30
Spring	Mean	657.24	654.93	241.31	233.71
2009	Standard Deviation	15.335	15.141	24.99	28.91
Spring	Mean	650.46	642.89	249.56	251.81
2010	Standard Deviation	17.586	16.630	20.89	27.11

Table 8
Results of Repeated Measures ANOVA: *Honoring Student Voices*Student Reading Proficiency (2007-2010)

Source		NYC			Chicago	
	F	p	Cohen's d	F	p	Cohen's d
Time	31.504	<.001***	0.74	181.315	<.001***	2.76
Study Group	3.982	.047*	0.26	0.752	.388	0.18
Time*Group	2.755	.040*	0.22	3.336	.014*	0.38
*p < .05. **p < .	01. ***p < .0	01.				

Table 9
Summary of Logistic Regression: *Honoring Student Voices*Student Reading Proficiency (2007-2010)

	Honoring Student Voices Students (N=890)			
Predictor	В	SE B	$e^{B}$	
Treatment Status English Language Learner Status ELA Achievement Test Proficiency (baseline) Special Education Status	.773** 760* 2.951*** 751	.253 .370 .260	2.167 .468 19.127 .472	
Free or Reduced Price Lunch Status	746*	.315	.474	
Constant	-2.399***	.307	.091	

*Note:*  $R^2 = .206$  (Cox & Snell), .387 (Nagelkerke). \*p < .05. \*\*p < .01. \*\*\*p < .001.

# **Impact on Social-Emotional Outcomes**

GW works to impact not only student achievement in English language arts, but also specifically related outcomes such as motivation, engagement, and other 21<sup>st</sup> century skills. These outcomes have been examined in all of the research studies on the GW model. For *POETRY Express*, student perceptions of changes were examined through the use of surveys of the treatment students a year after the project ended. Overall, students reported significantly more positive responses one year after the end of the *POETRY Express* program than they did at the start of the program (fall 2003). For example, significant increases were evident in students' pre- to post-program academic and literacy-specific motivation

Four ISM goal orientations included on the pre- and post- student surveys were analyzed for the *Honoring Student Voices* and *Tale of Two Cities* projects. For *Honoring Student Voices*, repeated measures ANOVAs were conducted to assess significant differences in gains in ISM scale scores over the full course of program implementation (2007-2010). Results of analyses examining change in responses over the course of three years of implementation are presented in Table10 for the NYC cohort of students. The repeated measures ANOVAs revealed that both treatment and control group means significantly declined over time on three of four goal orientation motivation scales: effort, competition, and social concern. On two of these scales (effort and social concern), there were significant differences (p<0.05) among groups in the rate of this change, with the control group declining more severely than the treatment group.

Table 10
Results of Repeated Measures ANOVA: *Honoring Student Voices* ISM Goal Motivation Scales (2007-2010)

Source	Task Involvement			Effort		
	F p Cohen's d		$\overline{\hspace{1cm}}$ $F$ $p$ $Cc$		Cohen's d	
Time	2.615	.108	0.25	27.984	<.001***	0.80
Study Group	0.941	.333	0.14	2.781	.097	0.26
Time*Group	1.083	.300	0.16	5.008	.026**	0.34

	Competition			Social Concern		
	F	p	Cohen's d	F	p	Cohen's d
Time	28.330	<.001***	0.80	19.872	<.001***	0.68
Study Group	0.505	.478	0.11	6.940	.009**	.040
Time*Group	0.331	.566	0.09	7.739	.006**	0.42

<sup>\*</sup>p < .05. \*\*p < .01. \*\*\*p < .001.

For the *Tale of Two Cities*, analyses of covariance (ANCOVA) were conducted to assess significant differences in gains in ISM after the second year of implementation (Table 11). Results from the analyses of covariance reveal that mean scores for the treatment students increase for the competition goal orientation motivation scales, while the mean scores for the control students decline. , a difference not considered significant. The results also indicate that mean scores for students in both the treatment and control groups declined from 2011 to 2012 on the remaining three goal orientation scales on the ISM: task involvement, effort and social concern. Differences between students in the treatment and control groups were significant only for the effort goal orientation motivation scale (p <0.05) based on an analysis of covariance.

Table 11
Results of Analysis of Covariance: *Tale of Two Cities*ISM Goal Motivation Scales (2007-2010)

ISM Goal		•	Spring 2011	Spring 2012	Pre to Post		
	Study Group	Total N	Mean Score	Mean Score	Mean Gain Score	F	Effect Size <sup>1</sup>
Task	Treatment	46	4.52	4.41	-0.1087	1.147	-0.150
Involvement	Control	113	4.40	4.19	-0.2087	1.14/	
Effort	Treatment	46	4.30	4.25	-0.0564	5.122*	-0.1918
EHOIT	Control	113	4.04	3.86	-0.1778	3.122	
Composition	Treatment	45	3.20	3.29	0.0933	0.462	0.1126
Competition	Control	111	3.21	3.19	-0.0162	0.462	-0.1136
Social	Treatment	45	4.08	4.00	-0.0800	0.005	0.0612
Concern	Control	111	3.78	3.75	-0.0302	0.005	0.0612

<sup>\*</sup>Denotes statistically significant difference between the gains in the treatment and control group at the p<0.05 level, based on an analysis of covariance.

<sup>1</sup> Effect size is a measure of the magnitude of the gains or losses, expressed in gain score standard deviation (SD) units. Effect sizes of about .2 are considered small; .5 medium; and .8 or greater are considered large.

### **Impact on Teachers**

Sustainability is an important outcome and a goal of good program implementation for any initiative. GW works with teachers on an ongoing basis to build the capacity of staff to ensure that the project model continues after funding activities have ended. This is evidenced in *Poetry Express* where teachers reported on surveys continuing to implement components of the model even after project funding ended. For example, all former treatment teachers reported integrating art instruction, authentic assessment and poetry into class lessons in the follow up year to the project. Improvements in teachers' skills and confidence levels were also sustained beyond the program implementation years. All participating teachers who responded to the survey reported they were at least somewhat skilled in teaching poetry and writing, and the large majority of them felt they could mentor other teachers in these areas either on their own or with some assistance.

Similar results for *Honoring Student Voices* teachers were found. After the final year of full implementation (spring 2010), the majority of participating treatment teachers reported confidence in their skills around teaching writing, poetry, and theater techniques. For example, more than three-quarters of responding teachers reported that they were very skilled in teaching writing. Similarly, nearly all teachers indicated they were somewhat or very skilled at teaching poetry. Additionally, all (100%) participating treatment school teachers who responded to the survey reported using authentic assessment strategies in classroom activities, specifically for literacy instruction.

In the spring 2012 teacher survey for *Tale of Two Cities* project, teachers were overwhelmingly supportive of the program. For example, one teacher wrote. "...Love this program. It has made me much more comfortable with poetry, my ability to teach poetry, and my ability to integrate poetry across content areas." Another teacher wrote, "I always feel like I could use more help in developing my teaching skills in this area [poetry and performance]. I am constantly looking to make my practice more effective and accessible."

#### **Limitations of Research**

Several limitations of the three GW studies should be noted, including small sample sizes, challenges gaining access to data for students, and limited responses from parents providing their consent to the study.

# Complexity and Use of Research

Overall, the GW model has been successful in its implementation. The program has varied by city in both implementation and outcomes, which may be due to differences in districts, schools, and teachers. Based on research findings from each subsequent iteration of the model, which identified the variations in implementation, GW has worked to enable customization of the program, ensuring that core elements are consistent across sites (e.g., video conferencing for poetry slams) but allowing for flexibility in implementation of the other aspects

of the program (e.g., scheduling of teaching artists). This use of research data has allowed GW to gather information from each implementation to refine the model in order serve a variety of populations, including ELL and special education students, in multiple locations nationally.

#### Discussion

POETRY Express, the first AEMDD implementation project and evaluation study, provided GW with an opportunity to test whether the initial program model, implemented in Bronx WRITeS in 1998, could generate valid research data to demonstrate the impact of arts and technology integration on student achievement in literacy and motivation. Prior to this study, only anecdotal evidence had been available to build support for the program among schools and local arts partners. With each new iteration of the GW model, from 2005 through the current time, findings on impact and implementation from the prior AEMDD studies have been used to refine the model of arts integration. In addition, data from each project have been used to help gain access to new organizations in order to spread the model nationally. For example, data from the POETRY Express project were used to help gain federal funding and district support in both NYC and Chicago for the Honoring Student Voices project. In turn, data from the Honoring Student Voices project in San Francisco. More recently, as part of the dissemination of the model, data from all the GW projects have been used to further expand the project in places such as Maine where the project now includes three new schools.

Following the success of *POETRY Express*, the GW team challenged itself to further test the program model with schools in urban settings outside of New York City by expanding to Chicago and San Francisco. Furthermore, new project activities, such as mentoring in the *Honoring Student Voices* project were added. For this mentoring component, GW worked to engage students from the Bronx, who had several years of experience in the *BRONX WRITeS* program, with new students in Chicago and New York City. The use of videoconferencing technology provided a platform for ongoing collaboration among students across the two cities. Students performed original poetry and provided critical feedback via a videoconferencing setup in their classroom, promoting student self-esteem and building empathy for other youth of diverse backgrounds in other locations around the country.

Implementing the GW model beyond New York City was not without its challenges and included a learning curve of working with a new school district with different administrative protocols and staff culture. Despite having research from the *POETRY Express* project to secure initial buy-in from the Chicago Public Schools district, replication of the GW model in participating schools took two years. Based on these experiences, GW published *Honoring Student Voices: A Guide to Integrating Arts Education with Literacy Instruction*. This handbook, which is publicly available online, includes sample units, lesson plans, activities and handouts; timelines and professional development guides; tips for implementation (e.g., for getting started, for building successful partnerships, for helping reluctant writers); and sample research instruments.

As GW continued to seek out new locations for expanding its program model, it took stock of the challenges it faced in Chicago when planning for its new iteration of AEMDD funds for the *Tale of Two Cities* project. Prior to partnering with local San Francisco schools, GW reached out to a local arts organization to bridge the gap between arts integration advocacy and the San Francisco Unified School District. The network of current and prior AEMDD grant recipients provided a natural link to engage in a partnership with The Workshop, which had a

successful history of experience in the San Francisco Unified School District schools and an existing Memorandum of Agreement with the district. Building on a newly formed partnership with The Workshop, initial buy-in and implementation of the GW model in San Francisco has been a smoother process. However, the current evaluation study faces additional challenges with commitments among the comparison schools in spite of GW efforts to provide a funding stipend to promote control school participation.

Reflecting on these challenges, GW staff have worked to create an environment of continual improvement and collaboration among current and previous sites. In addition to continuing the mentorship component of the model developed during Honoring Student Voices with students in the Tale of Two Cities project, mentorship has been expanded to include teachers and administrators. During the 2011-2012 school year, ten collaborative sessions were held between New York City and San Francisco. Teachers and teaching artists in treatment schools in San Francisco and mentoring schools in the Bronx have shared lessons with their students across the two cities on a bi-monthly basis. In addition, in response to our arts partners' need for ongoing sharing, GW introduced an online social network space called Ning (http://globalspeakEZ.ning.com) for teachers and teaching artists in the Tale of Two Cities *project* to share program resources and best practices through video-based lesson exemplars. Over the past three years, this social online space has grown in usage and contributions among the schools in both the Bronx and San Francisco. During this past year, students across the two cities have asked GW to provide a Ning space for students to share poems and provide critical feedback to one another on an ongoing basis. The student Ning (http://gwstudentspeakez. ning.com) is still in development and will be implemented during the final project year.

Evidence collected from the AEMDD projects has been used to promote the expansion of the GW model to new schools in the Bronx, to sustain the model and engage support for it in Chicago and San Francisco, and to engage new partners in the GW community. Live presentations, magazine publications and video documentation have provided digital archives of GW successes and helped to promote further engagement in GW work. In addition, GW has been mentioned in various publications that have focused on the model and research findings. For example, in April 2006, the First Minister of Scotland, Jack McConnell visited a Bronx middle school participating in the *Honoring Student Voices* project to gain insight into model programs that motivate middle school adolescents to stay focused on their education (Coyle, 2006). GW and the *Honoring Student Voices* project were later featured in *Edutopia Magazine* as a model program for arts integration in schools (Rubenstein, 2009). More recently, *GOOD Magazine* wrote a feature on GW poetry slams, a major performance element of the GW model, in *Bronx* (Dwyer, 2011).

Data collected as part of the research on these projects has been invaluable in applying for additional funding to support existing partners in the program. For example, in NYC, GW has received a NewYork State Council on the Arts (NYSCA) grant to test the use of iPads by the students in two schools that are currently part of the GW community. In addition, GW recently received a 21st Century Community Learning Centers grant to expand its model to after school programs and develop a family literacy program in 10 schools in the Bronx. This funding will allow GW to study the model's impact from 2013-2017 with 800 students and 200 adults per year. Once again, the program will leverage technology resources such as videoconferencing and mobile devices to bring student and family communities together across the ethnically diverse neighborhoods of the Bronx for writing or sharing a performance.

In the Bronx, the GW program not only has been sustained, but also has grown through the years. Now in the 15th year, the *BRONX WRITeS* and GW programs have impacted over 15,000 at risk students from over 40 schools in the nation. The legacy of successful practices that have helped to build continued support and promote sustainability are evidenced by the fact that of the four original schools that piloted the model in 1998, two are still program participants. The program began with four schools in the Bronx and presently boasts over forty classes in 17 schools across four cities. In addition, through the years, 26 schools have received grant funds from the USDOE or private foundations to implement the program and 15 of these are still serving students through arts integration programs. Although 14 schools never received grant funds, they have chosen to participate in the program and are able to sustain programming through local budgetary funding.

The use of 21st century technology tools in the program has also provided a unique opportunity for teachers to embrace the use of these technologies in their daily lessons. Survey data from both the *Honoring Student Voices* and *Tale of Two Cities* projects indicate that teachers who participated in the GW model increased their comfort with integration of technology with literacy instruction. The annual GW Winter Poetry Slam tournament, delivered via videoconference to at least 20 schools annually, is a hallmark of the program model and has impacted whole school communities.

Evidence from AEMDD projects has also supported the development of a National Education Association (NEA) grant in Lewiston, Maine and the engagement of a new partner organization, L/A Arts. This relationship began when a former DreamYard teaching artist moved to Maine and, based on the evidence of success of the program, decided to bring the model with him. Pleased with the opportunity for success that the relationship The Workshop helped to build with SFUSD, GW was drawn to L/A Arts as a new connection to forge a relationship with the Lewiston School District and create a new arts organization, *Maine Writes*. The program *Maine Writes* began with two elementary schools and one middle school in Lewiston in the 2012-2013 school year. All three Lewiston schools competed in the Winter GW slam tournament and two of the three schools won first place in their division. For the 2013-2014 school year, L/A Arts plans to expand the *Maine Writes* program, with GW support from GW, to five additional schools in the Lewiston School District.

The evidence gathered through the GW model from its inception today has been used in an iterative cycle of continual improvement. By embracing the aforementioned "mirror and the canyon" metaphor, GW has built on successes, addressed challenges, and "listened to the echo" of the program, enabling the organization to both refine and expand the model of arts integration. As GW continues to collect data through the AEMDD-funded Tale of Two Cities project, *Maine Writes*, the 21<sup>st</sup> Century Community Learning Centers grant, and the NYSCA and NEA grants, it is continuing to collect evidence to refine, sustain, and disseminate the arts integration model to schools throughout the nation.

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<sup>&</sup>lt;sup>1</sup> One of the treatment schools was broken into three schools after the baseline year.

ii School-wide data on students identified for special education was not available during the baseline year.

iii Data on students qualifying for free or reduced priced lunch was not available for the baseline year.

<sup>&</sup>lt;sup>iv</sup> English proficiency is based on New York State ELA (for the NYC cohort) and ISAT Reading (for the Chicago cohort) achievement tests.

<sup>&</sup>lt;sup>v</sup> Longitudinal baseline to post-implementation analyses for Chicago students could not be conducted since too few control students with consents completed surveys at both time points (fall 2007 and spring 2010).