



# Poetry Out Loud Evaluation Plan

Updated  
August 1, 2018

Prepared for:  
National Endowment for the Arts (NEA)

Prepared by:  
Social Policy Research Associates (SPR)  
Contract #: C17-05



This page was intentionally left blank.

# Contents

- Introduction to the POL Evaluation Plan ..... 1
- A Review of the Literature ..... 4
- Revisiting the Logic Model and Evaluation Planning Matrices..... 20
- Data Collection ..... 28
- Data Analysis ..... 46
- Deliverables and Timeline ..... 52
- Next Steps for the Evaluation ..... 56
- Appendix A: Study Framing Document..... A-1
- Appendix B: Bibliography ..... B-1
- Appendix C: Power Analysis ..... C-9
- Appendix D: Customizable Email for School Recruitment ..... D-1
- Appendix E: Consent and Assent Forms ..... E-1
- Appendix F: Interview and Focus Group Protocols ..... F-1
- Appendix G: Survey Instrument ..... G-1
- Appendix H: Survey Instrument Technical Details: Scale Validity and Reliability ..... H-1

This page was intentionally left blank.

## Introduction to the POL Evaluation Plan

The National Endowment for the Arts (NEA) commissioned a multi-year study to better understand student-level outcomes associated with the Poetry Out Loud program implemented under optimal conditions. In December 2016, the NEA awarded Social Policy Research Associates (SPR) a contract to conduct the study over a 29-month period — December 2016 through April 2019.<sup>1</sup> This evaluation plan builds on the foundational work of the Study Framing Document (see Appendix A) and presents the revised and final evaluation design. The document that follows opens with a review of the literature; it next presents the plan for data collection and data analysis; and it presents an overview of the project’s deliverables and timeline. Finally, it presents next steps for the evaluation.

### Poetry Out Loud (POL) Program Overview

This study is a new data collection request, and the data to be collected are not available elsewhere unless collected through this information collection. The data collection activities are planned for September 2018 through June 2019. The study will provide the National Endowment for the Arts (NEA) a better understanding of student-level outcomes associated with the Poetry Out Loud program.

Since its founding in 2005, Poetry Out Loud (POL) is a national arts education program implemented annually that encourages the study of great poetry. The program consists of a tiered poetry recitation competition to high schools across the country supported by free educational materials. Beginning at the classroom level typically during the fall semester, winners will advance to a school-wide competition, then to a regional competition (if implemented in the state), then to a state competition, and ultimately to the national finals in Washington, DC, held in late April or early May. The program is a partnership among the National Endowment for the Arts (NEA), the Poetry Foundation,<sup>2</sup> and the state and jurisdictional arts agencies of the United States. POL serves more than 3 million students and 50,000 teachers from 10,000 schools in every state plus Washington, DC, the US Virgin Islands, and Puerto Rico.

Information about the competition and instructional resources is provided through the Poetry Out Loud website ([poetryoutloud.org](http://poetryoutloud.org)). Participating teachers use the Poetry Out Loud toolkit (including the [Teacher’s Guide](#) and classroom posters) and online resources (including [lesson plans](#), [learning recitation videos](#), and [information on how to run a competition](#)) to teach poetry recitation and run classroom competitions. Students select, memorize, and recite poems from an [online anthology](#) of more than 900 classic and contemporary poems. Information on [evaluation criteria and judging](#) is also publicly available on the website.

---

<sup>1</sup> The NEA later approved a one-year no-cost extension to allow the research team to begin collecting data in Fall 2018 rather than Fall 2017, thus extending the project to April 2020. These changes will be reflected in the Gantt chart in the Deliverables and Timeline section.

<sup>2</sup> The Poetry Foundation, publisher of *Poetry* magazine, is an independent literary organization committed to a vigorous presence for poetry in our culture.



Poetry Out Loud is implemented in schools and classrooms in generally one of two ways—requiring mandatory student participation or allowing students to voluntarily participate in the program. Mandatory participation means that a teacher requires his or her entire class(es) to participate in the Poetry Out Loud program. Some schools may additionally require grade-level participation or even school-wide participation. In contrast, some schools may opt to have students voluntarily participate in the program. This means that students self-select to participate in Poetry Out Loud whether this is in the classroom or in an after-school club.

Each organizing partner makes significant contribution to program planning and implementation. Each year, the NEA and Poetry Foundation collaboratively: develop or update the content and design of all Poetry Out Loud program materials (including the Teacher’s Guide, anthology, poster, and website); coordinate and provides technical assistance to program managers at the state arts agencies; plan the Poetry Out Loud National Finals; and invest in expanding the program’s reach to new audiences. The NEA provides funding to state arts agencies to implement the program and to run the national finals as well as support and resources for state and local-level partners, teachers, and students. The Poetry Foundation provides funding for the program’s prizes, travel, permissions, website, materials, and distribution of materials in addition to support and resources for state and local-level partners, teachers, and students. Each state arts agency is responsible for administering Poetry Out Loud in their state. This includes publicizing the program, recruiting schools to implement Poetry Out Loud in the classroom, and conducting a state competition. Each state arts agency receives an NEA grant of \$17,500 to assist with expenses of Poetry Out Loud program coordination.

The study supports the Agency’s FY 2018-2022 Strategic Plan, which seeks in part to “expand and promote evidence of the value and impact of the arts for the benefit of the American people” (Strategic Objective 3.2). The current evaluation study will be the first since 2008. The prior implementation evaluation, which was commissioned by the Poetry Foundation, focused on the reach, support, and engagement with POL by students and participating schools, providing compelling evidence that the program had continued to grow (over the course of the three years) and reach increasingly diverse students, rural schools, and schools with and without existing strong arts programs. Additionally, the evaluation found that POL helped to facilitate both the engagement and retention of teachers by providing them resources to bolster existing curricula. With respect to student-level outcomes, the evaluation focused largely on poetry appreciation and engagement. However, since the evaluation engaged only state-level POL student champions, these study findings are not assumed to be representative of POL participants in general.

The current evaluation was requested by NEA senior leadership and program partners who seek to build upon the past evaluation by increasing understanding of POL’s impact on student participants. Specifically, agency and partner staff expressed interest in understanding the impact of POL on students who had not volunteered to participate – that is, students whose teachers required their participation in POL (“mandatory student participation”) – in order to reduce or eliminate the bias associated with self-selection. The study will focus on assessing student outcomes in poetry appreciation and engagement, but also student-level outcomes associated with social and emotional development, and academics. In order to more fully



understand the impact of POL, a quasi-experimental design was sought that established a comparison group of students who did not participate in POL.

Program managers are also interested in understanding the effectiveness of the program when it is implemented under conditions promoted by the POL partners as optimal. The current study is structured as an efficacy study in order to examine the student-level benefits of this program under these optimal conditions. Because POL programming varies across schools and not all schools that implement POL do so under optimally conditions, the present study is not intended to be representative of the entire universe of schools implementing POL.



## A Review of the Literature

POL is a national program, available to schools in every state. Given the breadth of the program’s scope and the specificity of its design (having students study, memorize, and perform poetry), and the required rigor of our evaluation design (mixed methods, and quasi-experimental design), we conducted a broad sweep of the literature to ensure that our review included not only research that addressed outcomes in areas aligned with this evaluation (poetry appreciation and engagement, academic achievement and engagement, and socio-emotional development), but also research that provides us with a comprehensive understanding of the different research designs and methods employed in relevant studies. The first half of the literature review focuses on outcomes of interest for the POL evaluations as examined in arts education and poetry-specific research. In it, the research team looks at research on populations, settings, and art forms similar to POL, as well as at some studies of programs different from POL but which the research team felt shed light on the evaluation. The second half of the literature review focuses on methodology—especially issues of selection bias in research and ways to address those issues.

Ultimately, our team reviewed 84 documents. Because many touched upon multiple areas of interest that guided our literature review, the list is intentionally not mutually inclusive.<sup>3</sup> An overview of these areas of interest and the numbers of research documents in our review that address these areas is provided in Exhibit 1.

---

<sup>3</sup> We identified sources primarily using the search engine Google Scholar—an index that includes a wide range of scholarly literature and most peer-reviewed journals. Variations of the following search terms were used to identify relevant literature: “Quasi-experimental design and poetry,” “school poetry program,” “poetry engagement in the classroom/high school,” “assessing poetry engagement in students,” “evaluation of poetry programs,” “poetry and verbal development/literacy,” “poetry recitation program,” “poetry and positive outcomes for students,” “poetry and socio-emotional outcomes,” “poetry and academic outcomes,” “attitudes towards reading and writing,” “literacy and the arts,” “evaluations of school arts programs,” “evaluation of school theater/performing arts programs,” “theater arts and academic outcomes,” “arts participation and academic outcomes/socio-emotional outcomes,” and “evaluation of/school public speaking programs.” Literature identified with these search terms was examined for relevance and reviewed more thoroughly if determined to be relevant. We also drew on the NEA website’s archive of working papers, “Research: Art Works”, as well as on direct recommendations from the NEA and on the arts-related research of our own team.

The research team also conducted a review of validated measures and instruments used in education and arts research, which informed the development of the evaluation survey instrument. Search terms for the instrument review included: “measures of life-long learning in high school,” “measures of communication abilities,” “communication skills-self assessment,” “openness to diverse perspectives instruments,” “measuring 21<sup>st</sup> century skills,” “measuring student engagement,” “measuring socio-emotional development/learning,” “attitudes/anxiety about public speaking scale,” “attitudes towards poetry scale,” and “assessing poetry engagement in high school,” and “measuring high schoolers’ attitudes towards reading and writing.”





## Exhibit 1. Literature Review Overview

Areas of Interest	# of Sources
<b>Age Range</b>	
High school	23
Middle school	20
< Elementary school	10
Adult	7
<b>Context</b>	
Provides Context <sup>4</sup>	31
<b>Design</b>	
Qualitative	15
Quasi-experimental	12
Meta-analysis/Lit Review	9
Descriptive	3
Case Study	3
Experimental	3
Correlational	15
<b>Data Collection Method</b>	
Survey	17
Interview	14
Existing Data	9
Observational	2
Other	17
<b>Outcomes</b>	
Socio-emotional	20
Academic	18
Literacy	14
Other	7
School Engagement	6
Poetry Appreciation	5
Community/Civic Engagement	20
<b>Population</b>	
General Youth	29
Low Socioeconomic Status	5
Other	5
English Language Learner	4
Minority	2
Teachers	29
<b>Setting</b>	
School Based	27

<sup>4</sup> This category includes sources such as The Arts and Education: New Opportunities for Research (Arts Education Partnership, 2004) and Benchmarking for Success: Ensuring U.S. Students Receive a World-Class Education (National Governor’s Association and Council of Chief State School Officers 2008), publications that provided the research team with topical or methodological background, while not necessarily being research studies or directly applicable ones.



Areas of Interest	# of Sources
Community Based	4
Extracurricular	4
Study Focus	
Poetry	21
Arts Education General	15
Theater	6
Other	1
Public Speaking	21

## Situating Poetry in the Research Base

Poetry is language that focuses on rhythm, sound, image, and other aesthetic or experimental qualities more than sense-making. The National Endowment for the Arts and the Poetry Foundation created POL based on a clear valuing of the multidimensional and multisensorial facets of poetry. POL’s design aims to support students in reaping the benefit of poetry study, memorization and performance, recognizing that dynamic poetry study can not only strengthen student performance in English Language Arts, but support students in public speaking, self-confidence, and learning about literary history. The purpose of the current evaluation is to examine the degree to which these and other outcomes are affected by participation in POL.

However, there are challenges to systematically assessing the effect of poetry programming on student outcomes. Despite the multidimensional and sensorial characteristics of poetry, it is not generally characterized as part of ‘the arts’ in school settings. That is, unlike music, dance, visual art, and theater—which are characterized as ‘arts’ and often taught as part of distinct arts modules—poetry is typically categorized as an English/Language Arts (ELA) curricular element. For example, a recent study of arts education in K-12 public schools mentions creative writing and poetry only once (Parsad and Spiegelman, 2012). At the same time, poetry—especially poetry memorization and recitation—is rarely, if ever, distinguished in research or educational standards from other aspects of the ELA curriculum. For example, the Common Core standards for ELA mention poetry in relation to “Reading” standards and analyzing “Range, Quality, and Complexity” of texts, but not in “Speaking & Listening” or in “Writing.” Similarly, neither the National Council of Teachers of English (NCTE) nor the English Language Arts Standards mention poetry specifically. There is a great deal of research focusing on the importance of ELA curricula for a variety of student outcomes. Common Core, the current set of national standards for ELA and math sponsored by the Council of Chief State School Officers (CCSSO) and the National Governors Association Center for Best Practices, prides itself on having been developed on a foundation of extensive scholarly research and evidence (NGA, CCSSO and Achieve, 2008). And yet, because poetry tends to be grouped with ELA at large, there is no deep research base that can tell us about the value of poetry programs like Poetry Out Loud for student outcomes.



## Arts Participation and Academic Achievement Generally

Because the body of empirical research on poetry studies is scant, we broadened our literature review to look at arts participation generally, looking specifically at studies focused on outcomes that were similar to those of POL. The body of research demonstrating a strong statistical link between participation in the arts and impacts in areas deemed critical by researchers and arts proponents is not robust. As Thomas (2016) notes, most arts and arts education research is primarily descriptive in nature, making it challenging to assert with confidence whether participation in the arts will result in strong academic performance. Still, the existing research yields interesting correlative findings from which we can build. For example, we reviewed several studies that investigate the links between arts participation and academic outcomes, measured largely through correlations between arts involvement and standardized test scores. Some looked at outcomes more generally (e.g., Inoa, 2014; Catterall, Chapleau and Iwanaga, 1999; and Harland et al., 2000), as measured by standardized test scores.<sup>5</sup>

There were a few studies that were cited frequently. This includes a study by Vaughn and Winner (2000), who examined the relationship between number of years of arts participation and SAT scores. (This study is also discussed in the methodology section.) They found that students who participated in more years of arts classes had high math, verbal, and composite SAT scores. Given our evaluation’s investigation into outcomes related to the performative aspect of POL, it is interesting to note that the researchers also found that participation in theater had the highest correlation with SAT verbal scores. Catterall and colleagues’ 1999 examination of the National Educational Longitudinal Study (NELS) data also found that participation in the arts over a long period of time resulted in consistently higher academic outcomes by the 12<sup>th</sup> grade when compared to non-arts involved students. Like Vaughn and Winner, their findings also indicated that sustained involvement in theater arts was linked to improvements in reading proficiency, gains in self-concept, and higher levels of empathy and tolerance. In 2012, Catterall et al. (also discussed in the methodology section) expanded their analysis, looking at data from four different longitudinal studies to examine the relationship between arts participation and academic outcomes, focusing specifically on youth from “economically and socially disadvantaged backgrounds.” Catterall and colleagues found that arts-engaged youth from socially and economically disadvantaged backgrounds had stronger achievement outcomes than similarly disadvantaged youth who were not arts-engaged.

## Arts Participation and English Language Arts Outcomes

While the studies mentioned in the previous section provided some useful insights about the connections between arts participation and academic outcomes in general, and the potential influence of *sustained* arts involvement on academic outcomes generally, they did not tell us enough about the potential connections between specific kinds of arts participation and outcomes for high school students focused in ELA in particular. Indeed, in its 2004 report, “The

---

<sup>5</sup> Although, below, in the section on Addressing Relevant Methodological Issues, we discuss some issues with the lack of statistically significant findings or other limitations in study design, laying the groundwork for the mixed-method POL evaluation design.



Arts and Education: New Opportunities for Research,” the Arts Education Task Force reported a dearth of research on the connection between the arts and older students’ language and literacy development, noting that most work done in this research area is focused on younger children.

Our review of the literature confirmed this gap, though the studies by Vaughn and Winner (2000), and Catterall, Chapleau and Iwanaga (1999) indicate that there is some connection between ELA outcomes and *performing* that warrants further study. Indeed, Podlozny’s (2000) meta-analysis of experimental studies examining the links between drama instruction and verbal development and achievement yielded interesting results. This meta-analysis included 80 studies involving a range of children and youth engaged in school-based drama, and that used at least one measure of verbal achievement (oral measures of understanding, written measures of understanding, reading achievement, reading readiness, oral language development, vocabulary, and writing). The study found strong correlations between drama instruction and verbal achievement outcomes on six of the seven areas (vocabulary was the only area where the correlation was not significant). Interestingly, there were significant effects for both enacted and non-enacted texts (though, not surprisingly, the effects for the enacted texts were larger).<sup>6</sup> The finding that drama instruction can improve both enacted and non-enacted texts is intriguing, providing some evidence that the potential verbal development and achievement benefits of arts programs may extend beyond program participation.

### Poetry Studies and English Language Arts Outcomes

Studies on the academic effects of studying poetry (and especially the effects of memorization and recitation of poetry) at the high school level are few, and those that exist are generally small in scale and qualitative in nature. For example, a rare study that examined poetry memorization and recitation in a school setting (Athanases, 2005) focused on a single 10<sup>th</sup> grade classroom where students selected a poem (written by someone other than themselves) to recite to their classmates at the end of the unit. Using ethnographic methods such as classroom observations, observation of poem recitation rehearsals, and student reflections, Athanases found that the students strengthened their ability in writing about poetry, and in using and applying concepts such as assessment of dramatic situation and subtext. While not generalizable, the methods are instructive and the findings of this study point to the potential power of the performative aspect of poetry study and how it is connected to strong literacy practices. Indeed, Fisher and Frey (2007) named reading aloud as a literacy strategy that works, noting that hearing others perform and hearing themselves read are effective strategies for facilitating fluent reading skills. Moreover, reading poetry out loud can lead to greater enjoyment of (and therefore engagement in) poetry and literature in general. A study by Crozer (2014) demonstrated that framing poetry curriculum and instruction as “play” for a sample of fourth, fifth and sixth grade students increased both student and teacher engagement with literature. Similarly, in a study by Ivey and Broaddus (2001), which included surveys and interviews of 1,765 sixth grade students in 23 schools and follow-up interviews with 31 students, students reported strong enjoyment around reading poetry and plays out loud.

---

<sup>6</sup> Enacted texts were acted out in class, while non-enacted were simply read.



Research focused on adults indicate that poetry engagement may also be shaped by teacher effectiveness. Findings from “Poetry in America” (Schwartz et al., 2006)—the first national, in-depth survey of people’s attitudes about and experiences with poetry—provided insights around adults’ reading and listening habits, early experiences with and perceptions of poetry, and how people took in poetry. One major finding of interest for our study is that a sizeable portion of the survey’s 1000 respondents (both those who identified as current poetry users and non-users) indicated that teachers were influential in people’s early experiences with poetry. The role of effective teaching is an important line of analysis to consider in our evaluation, particularly given POL’s focus on giving teachers the support they need to teach poetry effectively and with confidence.

Some literature suggests that poetry engagement can also be influenced by the *medium* used to teach poetry. Hughes (2009), for example, looked at how performance and the medium for teaching poetry influence outcomes. In particular, Hughes studied the performative aspect of digital new media—the way in which the creation and posting of content foregrounds the persona of the content creator/poster—as a mechanism for teaching and creating poetry. She collected data from a single classroom of 28 students in Ontario, Canada, using photographic and video documentation and semi-structured interviews. A key finding was that students were more excited and engaged with poetry after participating. While this research was focused on a poetry writing program and digital media, many of the same elements fostered via the medium are present in POL. For example, the performative aspect, the audience focus (students shared their poems with the class), and the collaborative ethos described by Hughes are aspects that are also present in POL. The study provides a compelling argument that alternative modes of teaching poetry that draw on performative elements—such as, in POL’s case, the frame of the competition—are key to increasing student engagement.

In addition to increased engagement in poetry and literature, some poetry-focused research also highlights outcomes related to stronger understandings of poetry and poetry constructs (e.g. meter, form, diction, metaphor), increased student confidence in their own understanding of poetry (and teacher assessment of student understanding), and increased skill development in English Language Arts. For example, Koukis (2010) conducted a study of 19 under-performing students, examining if, after a 10-week poetry reading and writing workshop in tracked English classes, they thought of themselves as more successful English students. The study also examined the extent to which students’ knowledge of poetry increased, poetry sections of standardized tests improved, and knowledge of poetry-related concepts improved. Findings indicate that students had a better understanding and knowledge of poetry after the workshops, and their test scores on literacy concepts and terms improved. Focus groups and interviews also indicated that students developed a clearer understanding of metaphor and other poetry terms.

Wiseman (2010, 2011) studied 22 eighth-grade students’ responses to a year-long poetry program implemented via weekly 45-minute workshops in students’ English classrooms and taught by a teaching artist from the community. Workshops focused on having the students write and read poetry and often included contemporary hip-hop and rap songs among the poems taught. Wiseman used ethnographic and observational methods to document students’ experiences and responses to the program throughout the year. Findings included positive outcomes in areas aligned with POL’s goals, including improved reading comprehension



specifically regarding poetry, comfort with poetic devices, analytical capacity, self-confidence as it pertains to self-expression, and “creative manipulation of emotional and social topics while integrating and expanding students’ language” (2011, p. 76).

## Arts Participation and Socio-emotional Development

While the “value” of the arts (including poetry) is often measured by its ability to influence academic outcomes, there is also a body of research that investigates the value that arts participation has in supporting various aspects of socio-emotional development (e.g., self-concept, self-confidence, positive behavioral change). While most empirical studies are small, one mixed methods study conducted in England by Harland et al. (2000) was significantly large and focused on students at the high school level.<sup>7</sup> This study included the administration of over 2,200 surveys to 11<sup>th</sup> graders at 22 schools, qualitative case studies of five secondary schools noted for having strong arts reputations, and an examination of performance on national academic tests for 27,607 students in 152 schools. In terms of socio-emotional outcomes, intriguing findings emerged from the case studies. School administrators reported that the arts contributed to a more positive school culture by encouraging a positive, cohesive atmosphere, while students reported that participation in arts classes provided opportunities to learn about social and cultural issues, and contributed to their personal and social development. They also reported having enriched expressive skills and an increased sense of self-confidence as a result of arts participation.

The scope and scale of Harland’s study was not typical.<sup>8</sup> Much of the research linking the arts and socio-emotional outcomes investigates programs that use the arts—specifically the dramatic arts—as a kind of *therapeutic* intervention. Daykin et al. (2008) conducted a comprehensive review of research on the impact of performing arts participation on adolescent health and behavior and found that all the studies that met their quality standards for inclusion into the review were focused on drama interventions, leading the researchers to conclude that there is “relatively little reporting of evaluated non-drama interventions within non-clinical settings” (p. 12).

Daykin et al.’s finding that research into the connection between performative arts and emotional health is largely focused in the dramatic arts is not surprising and confirms our assumptions that investigations into theater-focused research would support our efforts to evaluate the connections between the performative aspects of POL and the project’s desired outcomes. This makes sense given the element of “play” in this art form, which enables participants to safely try on different roles and points of view when they recite. It creates a space

---

<sup>7</sup> England and the United States have very different school systems; thus, while the team found the findings of interest, it remains circumspect about their broad applicability to the current study.

<sup>8</sup> Elpus (2013) also conducted a large-scale study looking at the connections between arts education and positive youth development, using data from the National Longitudinal Study of Adolescent Health. While his study yielded interesting results, some of which link arts education to positive behavioral outcomes, some of the specific indicators used (e.g., drinking, substance abuse, levels of sexual activity, suspension) are not useful for the purposes of our study. However we found his methods instructive and discuss them further in the methods section of this literature review.



for participants to question a character’s choices, the motivation for those choices, and the life contexts that may have shaped those choices. This creates opportunities for the development of theory of mind<sup>9</sup> and empathy, which is foundational for positive behavioral change. However, empirical studies measuring empathy development in general are largely focused in early childhood—there are few studies that concretely link the development of empathy with participation in the arts, particularly for high school age youth (Goldstein, 2011).<sup>10</sup>

Still, Daykin et al.’s review of the literature was useful, indicating evidence of a positive relationship between drama participation and peer interactions and social skills. Some of the studies they highlight include a randomized control trial study by McArdle et al. (2002), which yielded some evidence of student-reported improvement in self-concept as well as teacher-reported improvements in behavior, however, this study was focused on a very specific and younger target population (‘at-risk’ 11-year-olds). Daykin et al. also highlight a mixed methods study by Walsh-Bowers and Basso (1999) that was intriguing to our team because the length of the drama intervention is longer than most interventions (15-weeks) and is therefore more closely aligned to the POL program time frame, and because it incorporated teachers’ perspectives in their data collection methods. In fact, the study found significant improvements in students’ social skills, as reported by teachers, though student reports did not support this finding, which we find useful to think about as we work to ensure that our evaluation design triangulates and clearly distinguishes findings across data collection groups and strategies.

In our review of the empirical research linking arts and socio-emotional outcomes, we were intentional about seeking out research studies that took place *in schools*, in order to align the research contexts with the POL program. Again, we found that what little empirical research exists is theater-based and often has a specific intervention focus. Joronen (2012), for example, conducted a controlled study of a school-based theater arts program designed to enhance social relationships and reduce bullying. (Joronen is also discussed in the methodology section.) The

---

<sup>9</sup> Theory of mind refers to our general understanding of what others may be thinking or feeling [Wellman, Cross, & Watson (2001), cited in Goldstein (2011)].

<sup>10</sup> Goldstein’s (2011) study about the relationship between the development of social-cognitive skills and different forms of arts participation offers suggestive findings, particularly in terms of the development of empathy through acting. Empathy, understood as an emotional response to another’s emotional state, has been previously linked to participation in the arts and has been shown to be related to the development of critical social skills during adolescence such as increased understanding of perspectives of others (which in turns helps in problem solving and avoiding conflict). Her findings indicate that acting, rather than music or other types of arts, appear to be a conducive medium to develop empathy because as students develop their characters, they focus on learning about them and thinking about the characters’ motivations and emotions.



researchers used one scale focused on social relationships from a School Well-Being profile to measure social relationships and bullying before and after the theater program intervention. The researchers found a statistically significant effect on social relationships and a decrease in bullying victimization. Kim and Boyns (2015) examined the effects of a five-week theater intervention for a small sample of autistic teens (N=18) which culminated in a public performance of a musical about the autism spectrum. The findings from this quasi-experimental, non-equivalent group design study included significant increases in comfort with others, self-esteem, and empathy.

While the research described above helped to inform our thinking about where to focus our energies in our investigation into the socio-emotional outcomes related to POL, it is important to note that the studies above do not align well with POL in numerous ways. They differ in terms of target populations (most studies are focused on younger children whereas POL is focused on high school-aged youth), in specificity (some target ‘at-risk’ youth or youth on the autism spectrum, whereas POL does not specify a target population beyond high school age), and in intention (many of the programs are designed to address specific behaviors or attitudes, whereas POL is focused on the study of poetry, with no social interventionist aims.) And finally, of course, the research above is focused on drama, which helps us to think about links that can be made around the performance aspect of POL, but it does not help us to understand the ways in which poetry study can support improved socio-emotional outcomes.

## Poetry and Socio-emotional Development

The literature base linking poetry with socio-emotional outcomes is thin, and largely includes studies of programs that took place in non-school-based settings. These include several studies of poetry programs for youth that are located only partly in schools (Weinstein 2010) or fully in non-school locations such as libraries or juvenile detention centers (Crawford Barniskis, 2012; Lazzari, Amundson and Jackson, 2005). Weinstein (2010) conducted a multi-year study of youth spoken word (YSW) programming using ethnographic methods. She collected data by being a participant-observer at in- and out-of-school workshops and via interviews with youth poets, teaching artists, program administrators, and classroom teachers. She found that teenagers who participate in YSW programs identify multiple personal and social benefits from their participation. They begin to see themselves as writers and to act on that self-perception, and they report positive effects on self-confidence, sense of self-efficacy, belonging, and purpose through participation in the poetry programs. Weinstein also cites several other studies of spoken word programs (Fisher, 2003, 2005, 2007; Holbrook and Salinger, 2006; Jocson, 2006; and Weiss and Herndon, 2001), noting that evaluations of those programs have shown increased participant confidence, self-efficacy, and understanding of genre and process.

Crawford Barniskis (2012) conducted a mixed methods study rooted in grounded theory<sup>11</sup>, which examined teens’ experiences in arts programs hosted by the public library and its influence on civic engagement. This was a particularly intriguing study, given its focus on civic engagement—

---

<sup>11</sup> Grounded theory is an inductive methodology, in which conceptual categories emerge during the research and inform the research as it continues.





an outcome not touched on by any of the other poetry-specific studies we reviewed. The program consisted of sessions on graffiti, digital photography, poetry, drawing, and dance. Fourteen teens, ages 12-18, participated in the study. Participants completed short surveys assessing their civic and social attitudes and they participated in focus groups and interviews at the end of the six-session program. Participants shared that the program facilitated a sense of belonging, social connection, creativity, and a sense of being valued. The author suggests that these represent key values that facilitate civic engagement, an area of interest for us as a measure of social and emotional development.

Finally, Arts Education Partnership (2004) suggests that further research should explore the relationship between arts participation and student resilience and the role of the arts in helping young people cope in difficult situations as well as to become active change agents in their schools and communities.

## Methodological Issues: Addressing Self-Selection Issues and Strengthening Causality Claims

Almost two decades after Winner and Hetland (2000) concluded there was insufficient evidence to make causality claims about the effects of arts involvement and a variety of student outcomes, several studies have attempted to address this gap. The challenge has been that while correlational studies find positive and statistically significant relationships between involvement in the arts and student outcomes (Catterall, Chapleau, and Iwanaga, 1999; Catterall, Dumais, Hampden-Thompson, 2012; Vaughn and Winner, 2000), the findings, though robust, have not supported a causal-effect relationship between the two. This relationship is important for those who are interested in establishing whether art programs or increased youth involvement in the arts have an impact on student outcomes—that is, statistically significant effects that can be attributed to a program or intervention. The following paragraphs describe how selection bias has been identified in the research and how it has hindered researchers' ability to make causality claims. It then describes how research has utilized various research designs and techniques to strengthen causality inferences. The section concludes with a commentary on the advantages of utilizing mixed methods in advancing our understanding of program effects—in this case POL—and the potential for mixed method research to strengthen causal inquiries.

### Issues of Selection Bias: Improved Designs, Better Controls

Researchers who have examined the relationship between involvement in the arts and student outcomes using correlational designs, have mentioned the difficulty in addressing sources of selection bias. Bias occurs in research because of the effects of a mechanism used to select individuals or units for inclusion in the study. For example, Winner and Cooper (2000) mention that students who are highly involved in the arts are also those who are typically more engaged in school. Thus, it is quite possible that students do “better” not because of their involvement in the arts, as they found in their research, but because of their high levels of engagement in school. Other research identifies similar sources of bias. As described earlier, Vaughn and Winner (2000) find that there is a link between arts involvement and SAT scores but note that the positive difference in achievement between students who were highly involved in the arts and



those who were not may be explained by the fact that students who tend to participate in arts activities were already high achievers.

More recent work examining engagement in the arts and academic achievement using large longitudinal secondary datasets—see results described earlier in the literature review—also conclude that the results of their work do not support making causal claims (Catterall, Dumais, & Hampden-Thompson, 2012).<sup>12</sup> Even though students who were highly involved in the arts consistently demonstrate more positive outcomes than students who do not engage as much with the arts, their research does not help explain the mechanisms by which participating in the arts influence student outcomes. Because their research uses secondary data that had already been collected, there were no viable ways to address selection bias.

How do more recent studies try to address these sources of student selection bias? Current research emphasizes the importance of improved research designs and better controlled studies. A fundamental concept in the discussions of causal attribution is the issue of comparison. Specifically, the ability to compare outcomes between two groups that are similar except for the treatment, program, or intervention of interest. Using a comparison group, one can infer that the differences between those who experience the treatment and those who did not are only attributable to the treatment itself and not to other factors.

Random assignment is considered by many to be the ideal type of design that supports causal inference (NRC, 2002; US DOE, IES, and NCES, 2011). In this literature review, we found a few studies that utilized random assignment to examine the relationship between arts and student outcomes. For example, Inoa et al. (2014), conducted a study using multi-stage cluster randomized design to select four schools to implement a program where theater arts were infused in the curriculum and four to serve as a control group. The study's goal was to examine the effect of integrating theater arts into the curriculum and examine its impact in students' literacy and mathematics achievement. The researchers found that even though students who were in the theater arts infused programs consistently outperformed those in the control schools, most of the differences were not statistically significant. As limitations of the study, the researchers mention that the lack of statistically significant findings may have been a result of small samples,<sup>13</sup> underscoring the issue that insufficient statistical power is a potential threat to the validity of findings. Moreover, beyond the issue of non-statistical findings, we think that Inoa and his colleagues could have addressed other sources of bias that might have explained their findings. For example, the authors could have included details about how schools' buy-in could

---

<sup>12</sup> These data sets include four major longitudinal data collection efforts: National Education Longitudinal Study (NELS:88), the Early Childhood Longitudinal Study - Kindergarten (ECLS-K), the Education Longitudinal Study of 2002 (ELS:200) and the National Longitudinal Survey of Youth (NLSY97).

<sup>13</sup> Insufficient statistical power is also present in other studies we reviewed, including Goldstein (201) and Thomas (2016). Low statistical power due to low sample size of studies, small effects, or both, negatively affect the likelihood that a statistically significant finding reflects, in fact, a true effect.



have made a difference in the results or if there were differences in implementation—issues discussed in more detail below.<sup>14</sup>

When randomization is not feasible, researchers rely on quasi-experimental approaches to try and approximate the underlying logic of the experiments where the researchers can randomly assign units into treatment and control. The goal in these studies is to synthetically create a comparison group that only differs from the treatment group in terms of the intervention and thereby address issues of bias. In recent years, several research studies examine the relationship between the arts and student outcomes using these types of methods. For example, Elpus's (2013) study examining postsecondary outcomes of youth involved in the arts (visual arts, music, dance, drama, and films and media arts) used a series of observable covariates and statistical controls to address the differences that exist between students who elect to study arts and students who do not. As mentioned previously, prior research suggests substantial differences exist between students who elect and students who do not elect to study arts. Elpus's (2013) use of propensity score matching seeks to address the issue of selection bias by adjusting for a series of observable covariates that are theoretically related to students' selection into art classes. As the author notes, selection into the arts is a complex phenomenon that has not been fully addressed in prior research. Nevertheless, literature does provide strong evidence that gender, race/ethnicity, language proficiency, student prior achievement, and parental education are linked to selection into arts classes.

Other quasi-experimental studies employ similar strategies to control for issues of bias and then utilize techniques that help isolate causal effects of the intervention or program. For example, Thomas' (2016) evaluation of a music education intervention matched treatment and control schools via propensity score matching using average daily attendance, percentage of low income students, and passing rates in a standardized state test. Then, to evaluate the impact of the program, she utilized a difference-in-difference approach to estimate the difference of outcome effects before and after the program took place, for both the treatment and the control group. Because the treatment and control groups were initially matched, the assumption of the model is that it accounts for unobserved factors that affect treatment and control in similar ways.

In another quasi-experimental study, Martin and his colleagues (2013) carefully discuss the importance of controlling for covariates. Their work validates that controlling for covariates such as age, gender, language background, parental education, and prior achievement are vital to the understanding of arts participation variance beyond these differences. In addition to accounting for these aspects, Martin et al. (2013) also control for prior measures of academic motivation and engagement. In doing so, they addressed another source of bias Winner and Cooper's (2000) research had identified. Their findings suggested that participating in the arts may be associated with greater engagement in school and this relationship could have explained the higher levels of achievement observed in students who participated in the arts compared to those who did not.

---

<sup>14</sup> Behavioral experiments that were conducted in controlled environments with small numbers of participants such as Rauscher (1997) were not included in our review because these studies are very different from studies conducted at schools. For a meta-analysis review of experiments see Podlozny's (2000).



## Other Sources of Bias at the Institutional and Implementation Levels

Controlling for selection bias at the student-level has been one of the primary contributions of quasi-experimental research. However, as several studies we reviewed point out, there are other sources of bias at the organizational and the implementation level that may come into play. For example, Joronen's et al. (2014) controlled evaluation of a drama program to enhance social relationships finds that matching strategies may not be able to control for other sources of selection bias operating at the school level. The authors pose that part of the reason why the drama intervention in their study might have been effective is that the school that implemented the intervention could have been more willing to participate in the intervention than the comparison school. This initial school buy-in may be indicative of their preference to engage in the promotion of social health, which was the research outcome of interest. "Institutional" selection biases of other types can be more difficult to detect, particularly if one is not familiar with complex environments such as schools.

Research in schools is challenging because of the complexity of the environment where interventions or programs take place. There are numerous factors that are continuously at work influencing students' outcomes and this makes it challenging to isolate the effect of any one intervention/program on student outcomes. Other sources of bias could potentially exist at the school level, including systematic reasons why students access or do not access specific programs. For example, students who have demonstrated stronger ability in an academic subject may systematically be assigned to teachers or classrooms where the teacher has additional expertise in the specific teaching of that area (Darling-Hammond, 1998). Another example of how the school context may interact with the potential effects of an intervention or program is the additional opportunities students are offered at school, especially if they are related with the outcome of interest (Eccles et al. 2003). More specifically, thinking about students' involvement in school art activities, one would think it is important to determine whether schools have a strong extracurricular offering or offer additional support for students to improve the outcomes of interest at the time the intervention or program is implemented. However, of the quantitative studies reviewed here, we found only a few described or accounted for these contextual differences. To help think through potential sources of bias, either at the student or at the institutional level, it can be helpful to have a better understanding of the context in which the intervention or program takes place. A more nuanced understanding about how processes of implementation take place can also be helpful in thinking through alternative explanations that could account for observed differences in outcomes—an advantage of mixed methods research, which we address later in this section.

In addition to the context, another point of criticism that is often made about quantitative studies is that they tend to say too little about the interventions or programs themselves and often fail to address the degree or quality of their implementation. The need to address these elements is substantiated by research. Findings from implementation research studies have demonstrated that programs can vary substantially in the quality, amount of exposure to the intervention or program, staff facility in delivery of the content of the intervention, and instructional strategies employed to deliver the interventions' content (Durlak, 2015; Century and Cassata, 2016).



As mentioned before, one of the criticisms of Inoa and colleagues' (2014) research is the lack of discussion of the actual program and of other aspects of program implementation. Beyond the lack of statistical significant findings, their report does not address programmatic factors that could have given additional insight into their non-statistically significant findings. For example, the researchers do not explain how the program was expected to improve language arts and mathematics learning and do not offer details about the program itself beyond the normative hours with which it was supposed to be carried out. Additionally, there was no discussion about differences in implementation of the program or variations in the intensity or approaches teachers used to teach the content. A better description of these elements would indeed have been useful to advance other research.

As other studies show, the details of the program and its implementation matter. For example, Joronen's et al. (2011) study found that program intensity—that is, greater exposure to the intervention—influenced the outcomes they examined. Their results—described earlier in the literature review—indicate that while the effect of the program they evaluated was statistically significant for the high-intensity intervention classes, it was not significant for those where the intervention classes were low-intensity. Martin's et al. (2013) findings indicate that arts participation and engagement was a good predictor of both academic and nonacademic outcomes. They emphasize that the extent to which students are engaged with arts participation is a better predictor of academic outcomes than is sheer quantity of arts participation; that is, the quality of the arts education programming is critical.

Qualitative research may help address some of the knowledge gaps about programs. Harding and Seefeldt (2013) describe how qualitative research can provide valuable insights into some of the challenges of causal inference. These include obtaining information about the components and characteristics of a program or intervention. As mentioned earlier in this section, many quantitative studies tend to give minimal information about the program or intervention they study and as a result it is difficult to assess what the program/intervention is and if it is comparable to others. Qualitative research can also offer insights on how selection into the program/intervention takes place, which is of critical interest to quantitative inquiry. In addition, qualitative research can also inform the measurement of concepts, offer description of causal mechanisms, and be helpful in explaining the heterogeneity of effects.

However, the majority of the qualitative studies reviewed were not focused on questions about why or how the programs work. Mostly, the qualitative studies in our review focused on understanding students' beliefs, perspectives, and subjective experiences related to poetry and poetry appreciation.

Given the limitations of quantitative research and the potential for qualitative methods to fill in the gaps, we believe a mixed method approach to the evaluation of POL will enable us to understand whether participation in POL has an impact on student outcomes, and will also provide us with insights as to *how* and *why* it does or does not impact outcomes. While our literature review yielded few studies using a mixed methods approach, we know that by bringing together different quantitative and qualitative methodologies to inform research questions, mixed methods are optimally equipped to provide more thorough answers to our research questions. Mixed methods leverage the strength of quantitative methods to generalize results



along with the strength of qualitative research to understand the program and its implementation—*how* the program works. Qualitative research can also play an important role in studies seeking to make their causality inferences more robust.

The systematic use of triangulation of quantitative and qualitative data sources in mixed methods studies has the potential to strengthen conclusions, especially when several pieces of evidence point in the same direction. Mixed methods offer the opportunity of leveraging a variety of data sources obtained by different approaches to inform research questions. In addition to reinforcing findings, qualitative information is uniquely equipped to add depth to them.

The review of the literature confirms the outcomes of interest for the study and the planned methodological approach for collecting data and measuring those outcomes. In the next section, we review key aspects of the framing document—the logic model and the evaluation planning matrices.



This page was intentionally left blank.



## Revisiting the Logic Model and Evaluation Planning Matrices

The Study Framing Document, an early study design deliverable that presented POL’s logic model and the study’s research questions and evaluation planning matrices that map research questions to the outcomes of interest for the study—appears in full in this evaluation plan as Appendix A.<sup>15</sup> The logic model and matrices are also presented here in the body of the text, for ease of demonstrating how the logic model is foundational to the evaluation (while also having a broader purpose) and how the outcomes and indicators identified in the matrices were confirmed as appropriate measures by the literature review just presented. The logic model is shown in Exhibit 2 and the matrices follow in Exhibits 4, 5, and 6.

---

<sup>15</sup> Note that the Study Framing Document is considered a developmental document for this study; the evaluation plan presents updated content and should be considered the most up-to-date presentation of the logic model and matrices.





## Exhibit 2. Logic Model

**Mission Statement:** A national recitation contest supported by the National Endowment for the Arts (NEA), Poetry Foundation, and State and Jurisdictional Arts Agencies (SAAs), **Poetry Out Loud** encourages the nation's youth to learn about great poetry through memorization and recitation, helping students master public speaking skills, build self-confidence, and learn about literary history.

Inputs	Strategies	Anticipated Outcomes	Impact
<p>POL leverages <b>strong partnerships</b> to ensure consistent, high quality programming:</p> <ul style="list-style-type: none"> <li>The <b>NEA</b> provides funding for SAAs to implement the program and to run the National Finals as well as support and resources for state and local-level partners, teachers, and students.</li> <li>The <b>Poetry Foundation</b> provides funding for the program's prizes, travel, permissions, website, materials, and distribution of materials in addition to support and resources for state and local level partners, teachers, and students.</li> <li><b>State Arts Agencies</b> publicize the program, recruit teachers and schools to participate, and develop and conduct the state-level finals program.<sup>1</sup></li> </ul>	<p>POL seeks to elevate poetry and harness its power to support student development by:</p> <ul style="list-style-type: none"> <li>Developing and providing easy access to a robust, diverse, and growing anthology of poetry</li> <li>Engaging students in thoughtful, complex curricula that encourages deep engagement with and analysis of poetry</li> <li>Providing educators with easy access to strong, tested poetry curriculum</li> <li>Providing a comprehensive package of teaching tools and resources to support effective instruction</li> <li>Nurturing and promoting the expressive and performative aspect of poetry</li> <li>Creating a highly visible, national performance venue to challenge students and celebrate their accomplishments</li> </ul>	<ul style="list-style-type: none"> <li>Students' capacity to analyze poetry grows</li> <li>Students' engagement in learning increases</li> <li>Students' knowledge of literary history increases</li> <li>Students' language arts proficiency grows</li> </ul>	<p><b>Students' Academic Skills &amp; Performance are Strengthened</b></p>
		<ul style="list-style-type: none"> <li>Students' confidence increases</li> <li>Students' sense of self/identity grows</li> <li>Students' engagement in the larger school community grows</li> </ul>	<p><b>Students' Social and Emotional Health Improves</b></p>
		<ul style="list-style-type: none"> <li>More teachers exposed to arts education programming</li> <li>Teachers' knowledge and appreciation of poetry increases</li> <li>Teachers strengthen their ability to effectively teach poetry</li> <li>Teachers' enthusiasm for teaching poetry increases</li> </ul>	<p><b>Teacher Knowledge of &amp; Confidence in Teaching Poetry Increases</b></p>
		<ul style="list-style-type: none"> <li>Students and community experience increased exposure to poetry</li> <li>Students and community express appreciation for arts programming and poetry</li> <li>Students and community are exposed to the work of State Arts Agencies, NEA, &amp; the Poetry Foundation</li> <li>Students and community members increase their participation in arts programming</li> </ul>	<p><b>Awareness and Appreciation of Poetry and Arts Programming Increases</b></p>
<p><b>Contextual Factors</b></p> <p>There are a number of external factors that can affect POL implementation and outcomes, including (but not limited to):</p> <ul style="list-style-type: none"> <li>Prior experience with POL</li> <li>Years of teaching experience and efficacy in teaching poetry</li> <li>Socioeconomic factors that can impact learning (e.g. poverty rates)</li> <li>School social/cultural context</li> </ul>			

<sup>1</sup> Some SAAs supplement NEA funds with additional state funds and/or private donations, or establish organizational partnerships, that enable special trainings and workshops for participating students and teachers or add to the prize amounts.



Note that the three research domains for which we have developed evaluation planning matrices (see below) closely overlap, but do not exactly align with the four impact areas shown in the logic model. In part, this is because the NEA requested a study that is more focused on *student outcomes* than teacher and community outcomes; thus, our research domains focus primarily on students. Outcomes related to teachers and communities are not a focus of this study, though we will present findings related to both in the likely event that they will emerge as a natural and related part of our inquiry process. Slight alignment shifts are also due to the fact that the logic model has been revised since the study was launched; assisting the NEA and program partners with the revision was part of SPR’s charge in conducting the study. The first two matrices are focused on (1) student academic engagement and performance and (2) student socio-emotional development, respectively. These domains map almost exactly to their respective impact areas on the logic models. The third research domain—student poetry and appreciation—is overlapping with its impact area, but with an important difference in that it focuses on outcomes associated with students; whereas, the logic model impact area encompasses community members as well. Exhibit 3 shows the relationship of research domains to logic model impact areas.

**Exhibit 3. Research Domains and Logic Model Impact Areas**

Research Domain	Logic Model Impact Area
Student Academic Engagement and Performance	Students’ Academic Skills and Performance are Strengthened
Student Social and Emotional Development	Students’ Social and Emotional Health Increases
Student Poetry Appreciation and Engagement	Awareness and Appreciation of Poetry and Arts Programming Increases <sup>16</sup>
	Teacher Knowledge of and Confidence in Teaching Poetry Increases

Exhibits 3, 4, and 5 map research questions for each domain to desired outcomes, constructs, indicators, and data sources.

<sup>16</sup> Like the research domain, this impact area includes students; however, unlike the research domain, it also includes outcomes associated with community members.



### Exhibit 4. Academic Engagement and Performance

Research Questions	Outcomes				Constructs	Indicators	Data Source				
	↑Learn/Engage	↑Analytical Cap	↑Lit History	↑ELA Proficiency			Student Records	Student Surveys	Student Interviews	Teacher Interviews	Admin Interviews
Does student participation in POL correlate with increased academic engagement in English classes and/or in school more generally?					<ul style="list-style-type: none"> <li>- Academic engagement in English classes</li> <li>- Academic engagement in school</li> <li>- Academic motivation in school</li> <li>- Post high school aspirations</li> </ul>	<ul style="list-style-type: none"> <li>- # absences</li> <li>- # suspensions</li> <li>- Relevant results from interviews and surveys</li> </ul>					
						<ul style="list-style-type: none"> <li>- Academic achievement in English classes and in school</li> </ul>	<ul style="list-style-type: none"> <li>- Standardized ELA scale scores</li> <li>- Standardized ELA proficiency scores</li> <li>- Relevant ELA assessments</li> <li>- Student GPA</li> </ul>				
Does POL have a positive impact on students' reading comprehension and/or analytical skills (particularly regarding poetry)?					<ul style="list-style-type: none"> <li>- Reading comprehension</li> <li>- Analytical skills reading poetry</li> </ul>	<ul style="list-style-type: none"> <li>- Scale scores in standardized test scores in reading comprehension</li> </ul>					
Are POL students more likely to be comfortable using metaphor, simile, or a wider vocabulary in writing or in speaking after the program?					<ul style="list-style-type: none"> <li>- Comfort with different poetry forms and devices</li> <li>- Vocabulary development</li> </ul>	<ul style="list-style-type: none"> <li>- Relevant results from interviews</li> </ul>					



### Exhibit 5. Social and Emotional Development

Research Questions	Outcomes				Constructs	Indicators	Data Source				
	Confidence ↑	Sense of Self ↑	Community Engagement ↑	Art Prog ↑			Student Records	Student Surveys	Student Interviews	Teacher Interviews	Admin Interviews
Do students experience increased self-confidence in: their public speaking abilities, social skills, intellectual abilities, or in general after participating in POL?					- Self-confidence	- Scaled survey scores related to confidence in public speaking - Relevant results from interviews					
Do students feel more secure, empowered, and/or articulate in expressing themselves after participating in POL?					- Self-confidence - Empowerment	- Scaled scores related to comfort with self-expression - Relevant results from interviews					
Are students more likely to engage in civic activities during or after participation in POL?					- Civic engagement and leadership	- Survey scores related to participation in community activities - Survey scores related to involvement in student leadership - Relevant results from interviews					
Are students more likely to engage in extracurricular activities during or after participation in POL?					- In- and Out-of-School engagement	- Survey scores related to participation in extracurricular activities, school clubs, and/or after school programs - Relevant results from interviews					



### Exhibit 6. Poetry Appreciation and Engagement

Research Questions	Outcomes			Constructs	Indicators	Data Source				
	Poetry Exposure ←	Arts Appreciation ←	Exposure to SAA/NEA/PF ←			Student Records	Student Surveys	Student Interviews	Teacher Interviews	Admin Interviews
Does participating in POL correlate with students' increasing their likelihood of reading or writing poetry for pleasure?				<ul style="list-style-type: none"> <li>- Behaviors related to reading poetry</li> <li>- Behaviors related to writing poetry</li> </ul>	<ul style="list-style-type: none"> <li>- Agreement with reading poetry</li> <li>- Agreement with writing poetry</li> <li>- Relevant results from interviews and surveys</li> </ul>					
Does POL promote the sharing of poems among students and if so, by what means? Do students talk about poetry or POL on social media networks after the participation versus before?				<ul style="list-style-type: none"> <li>- Sharing poetry with peers</li> <li>- Sharing poetry via social media (Facebook, Instagram)</li> </ul>	<ul style="list-style-type: none"> <li>- Frequency scale of poetry exchanges via social media type</li> <li>- Relevant results from interviews and surveys</li> </ul>					
Does a teacher or a school's participation in POL correlate with greater incorporation of poetry in classroom/school instruction?				<ul style="list-style-type: none"> <li>- Increased poetry content in curriculum</li> </ul>	<ul style="list-style-type: none"> <li>- Frequency scale of poetry inclusion in curriculum</li> <li>- Relevant results from interviews</li> </ul>					
Does POL participation correlate with any attitudinal changes toward poetry, academics, public speaking/performing, or post high school aspirations?				<ul style="list-style-type: none"> <li>- Attitudes toward poetry</li> <li>- Attitudes toward public speaking</li> <li>- Post high school aspirations</li> </ul>	<ul style="list-style-type: none"> <li>- Scale of attitude toward poetry</li> <li>- Scale of comfort with public speaking</li> <li>- Attitude about finishing HS</li> <li>- % planning to go to college</li> <li>- Relevant results from interviews</li> </ul>					



## Brief Overview of the Evaluation Design

The purpose of the evaluation of the Poetry Out Loud program is to understand student-level outcomes associated with the implementation of POL programs. The evaluation is mixed method, combining a quasi-experimental design involving a treatment group of students participating in POL and a comparison group of non-participating students from the same schools. The quasi-experimental design will include pre- and post-student surveys for the treatment and comparison groups, analysis of student record data for all students (treatment and comparison), coupled with qualitative on-site data collection to help understand POL program implementation<sup>17</sup> and the counterfactual (i.e., the experiences of those in the comparison group). This design will allow the research team to analyze all outcomes of interest. It also helps us to provide insight into the factors affecting those outcomes and to identify how outcomes have changed after implementation of the program.

To learn about the efficacy of the Poetry Out Loud program, SPR will select a purposive sample of 10 POL-participating schools across the U.S. to conduct quantitative and qualitative data collection activities. In consultation with the NEA, SAA staff, and other project partners, SPR will recruit school sites that meet the criteria to be part of the study. Specific details about school site selection are addressed in detail in the section that follows. As noted in the evaluation planning matrices, the study is guided by a series of research questions focused on the assessment of the program's impact in three different domains: students' academic engagement and performance, poetry engagement and appreciation, and socio-emotional development.

---

<sup>17</sup> A detailed understanding of the counter-factual—the programming that the comparison group, students not participating in POL receive—is important, but the scope of the study precludes site visits long enough to observe non-participating classrooms and interview non-participating teachers and students. Thus, our interview protocols for participating teachers will include a few questions about what poetry programming would look like in the absence of POL participation.



This page was intentionally left blank.



## Data Collection

We plan to select a purposive sample of 10 schools to include in the study from about 1,360 schools in 18 high-performing states. Because the NEA is interested in assessing Poetry Out Loud program outcomes in schools located in states that provide optimal conditions for program success, schools will be selected only from states that offer these conditions. Based on the NEA program staff's years of experience, the NEA's criteria to determine whether states offer optimal conditions for the POL programs are as follows:

- states should have an overall count of participating students exceeding 2,500;
- an overall count of participating schools exceeding 20;
- presence of ancillary activities supporting state finals competitions, direct student exposure to a working artist, and celebratory activities for students and families such as a welcome banquet or reception;
- formal teacher recognition at the state level;
- opportunities for winning students to perform at local arts events throughout the state;
- strong support for the POL program from executive leadership at the state arts agency;
- workshops for teachers and/or students facilitated by the state arts agency;
- matching or overmatching of POL grant money with funds from the state arts agency;
- and an annual program assessment.

According to the NEA, 18 states meet many of these conditions although they do not necessarily need to meet them all in order to be considered high-performing POL states.<sup>18</sup> Using NEA data files from these states, we obtained information about students in POL-participating schools in each of those 18 states. As Exhibit 7 below shows, there were about 1,360 participating schools and over 190,000 participating students in the school year (SY) 2015-16.<sup>19</sup> This exhibit also shows there was quite a bit of variation in the number of schools participating in POL across states and in the number of students participating in each school, as some schools reported having only one participating student and others reported well over 1000.

---

<sup>18</sup> These states are California, Georgia, Massachusetts, Minnesota, Mississippi, Missouri, Montana, Nevada, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Tennessee, Texas, Virginia, Washington, and West Virginia.

<sup>19</sup> We excluded 21 schools from the original files NEA provided because these were marked as "withdrew" or "TBA," or did not clearly report the number of participating students or school location..





## Exhibit 7. Participating Schools and Participating Students in High-performing POL States

State	Total Number Schools in POL	Total Number Students in POL	Average # of Students in POL Schools	Min Students per School	Max Students per School
California	223	31,098	139	1	1,750
Georgia	88	13,365	152	2	2,100
Massachusetts	87	21,219	244	2	1,850
Minnesota	38	2,707	71	3	450
Mississippi	68	5,512	81	1	1,000
Missouri	29	4,134	143	6	468
Montana	60	5,633	94	10	800
Nevada	48	2,751	57	1	230
New Hampshire	41	8,178	199	5	1,300
New Jersey	160	27,155	170	2	2,000
New York	125	13,245	105	2	1,200
Ohio	56	9,276	166	4	875
Pennsylvania	123	6,744	55	1	650
Tennessee	29	3,927	135	4	1,520
Texas	26	2,220	85	3	900
Virginia	50	7,446	149	1	780
Washington	70	21,357	305	2	1,300
West Virginia	41	4,584	112	3	740
<b>Total</b>	<b>1,362</b>	<b>190,551</b>			

### Identifying and Recruiting Schools to Participate in the Study

Efficacy studies such as this one enable us to examine the benefits of an intervention under optimal conditions for the implementation of the Poetry Out Loud program in schools. Because the phenomena of interest are observed under optimal conditions, this maximizes the likelihood of observing program effects, if these exist. In addition, to reduce sources of self-selection bias, SPR will recruit schools where POL programming is mandatory at least on one grade level. (1) states are optimally implementing Poetry Out Loud;<sup>20</sup> (2) schools are implementing mandatory

<sup>20</sup> As noted in Part A, schools will be selected from states that are optimally implementing POL. Optimal conditions as determined by the Poetry Out Loud program partners are as follows: states should have an overall count of participating students exceeding 2,500; an overall count of participating schools exceeding 20; presence of ancillary activities supporting state finals competitions, direct student exposure to a working artist, and celebratory activities



POL programming in at least one grade level;<sup>21</sup> (3) schools meet the necessary conditions to implement the study, including having a minimum of 900 POL-participating students and about 900 non-participants who are matched using propensity score methods, allowing the implementation of a school-wide online survey, and having the ability to provide student-level data for all students in the school; and (4) schools possess other features so as to achieve a good mix of school sites primarily in terms of geography, and secondarily in terms of locale (urban/rural) and student body composition.

## Identifying and Recruiting Optimally Implementing POL Schools

To identify schools that are optimally implementing Poetry Out Loud and have mandatory POL programming in at least one grade level, the SPR research team will begin working with the NEA staff to contact State Arts Agency officers in optimally implementing states to obtain recommendations on which schools would meet the study's criteria. To aid in this effort, SPR will develop an introductory email—to be sent by the NEA, on NEA letterhead—explaining the aims of study, outlining the criteria for school selection, and requesting a meeting to discuss their recommendations for schools that meet the criteria along with other preliminary information necessary to determine eligibility. In the initial email for SAAs we will outline (1) the purpose of the study, (2) outline the school characteristics that would best fit the aims and needs of the study we are asking them to identify, and (3) what the research the research activities of the study will entail. NEA and/or SPR staff will discuss the request with SAAs by phone.

To make it easier to ask those schools and districts SAAs to identify as candidates to participate in the study, the research team will begin recruitment efforts by requesting that the NEA and State Art Agency officials send principals and school district superintendents a letter of support to encourage participation in the research and introducing SPR. The team will provide some basic language for the NEA and State Art Agency officials that they can use to draft the letter, customizing with relevant additional detail. Based on experience recruiting other sites for research studies, having the support of a high-level entity that provides funding for the program being evaluated can make an important positive difference in the recruitment process. Overall, we think that expressed support from the NEA and state arts agency will increase the likelihood that schools and district administrators to participate in the study. The letters will list some of the benefits of participation for schools and districts, such as: (1) an opportunity for districts and schools to learn how others are implementing POL; (2) an opportunity for districts and schools to

---

for students and families such as a welcome banquet or reception; formal teacher recognition at the state level; opportunities for winning students to perform at local arts events throughout the state; strong support for the POL program from executive leadership at the state arts agency; workshops for teachers and/or students facilitated by the state arts agency; matching or overmatching of POL grant money with funds from the state arts agency; and an annual program assessment. Eighteen states were identified by the NEA and the Poetry Foundation as optimally implementing POL.

<sup>21</sup> NEA defined “mandatory” participation at the classroom level as individual teachers deciding that their class will participate in POL and that every student in the class will be required to select and memorize a poem and compete in the classroom and/or school competition. Mandatory participation at the grade level is when all teachers in a particular grade or grades agree to participate in POL and require all students in that grade level to select and memorize a poem and compete in the classroom and/or school competition. Selecting schools with mandatory participation prevents self-selection bias in the sample.



participate in research that examines how POL programming benefits youth; (3) the chance to contribute to a knowledge base with rigorous evidence about incorporating POL programming in schools, which will provide information that policymakers and educators across the country can use (i.e. participating in the study is a way to give back); and (4) possibility of professional development opportunities as related to POL and free resources that they can share with their students at no cost.

Once SPR has a final list of recommended schools that implement mandatory grade level POL programs from where to recruit from and a letter from NEA/SAs has been sent to the school principals and school superintendents, we will commence contacting schools. Overall, the team expects to contact about 30 schools and school districts and reach final agreements to participate in the study with 10 of them.

SPR will first contact school principals via email. The initial communication will contain key information about the study and will let principals know that the research team would like to schedule a 15-minute phone conversation.<sup>22</sup> The purpose of the call is to briefly describe the purpose of the study and the research activities we plan to undertake. The phone call will also be used to determine whether the selected school meets the necessary criteria for the study and find out if the principal would be willing to participate in the research activities. During the call, after a brief overview of the study, the research team will talk with principals about a number of issues related to helping determine if their school will be appropriate for the study and if they would be willing to participate. The following list includes topics that the team will explore with the principals. The topics will also help the team prepare to work with the school in order to implement the study there.<sup>23</sup> Topics of conversation may include:

- Why the school decided to participate in Poetry Out Loud
- Benefits of participating in Poetry Out Loud
- Additional funding or in-kind resources for POL
- Details about how POL is implemented – (mandatory for the whole school, by grade, by class)
- Duration of participation in Poetry Out Loud
- Details about the English Language Arts department
- Presence of teaching artists at the school
- School guidelines for teachers to obtain Professional Development
- Details about students and school-issued email addresses
- Details about student record data
- How the school measures ELA academic achievement

---

<sup>22</sup> These details of the letter (and, in more detail, the phone call) will include (1) the purpose of the study, (2) preview of school characteristics that would best fit the aims and needs of the study, (3) what the research team will be asking of schools, (4) what data the team will collect and (5) how the data will be used, and (6) benefits of participating in the study.

<sup>23</sup> Before conducting the site questionnaire, the research team will already have a list of information about the school. This information includes: Total student enrollment, Number of POL participants, school geographic location, school locale (urban/suburban/rural), percent of students participating in free and reduced lunch, percent of minority students.



- Standardized assessments used by school and how student GPA is calculated
- Existence of school district level data sharing agreements for research purposes
- Details about what activities will occur if the school decides to participate in the study
- Use of passive parental consent in the school
- Exploring how the research team could implement the school-wide survey

Once we assess the school site information and determine which schools meet the criteria for the study, the research team will then contact the school superintendent’s office using a similar process as the one followed with the school principals. The main goal of communicating with the school district officers is to obtain additional information and determine school site eligibility which also includes establishing data sharing agreements to access de-identified student-level data with some and make sure we follow the research protocol in school sites within the district. There are important topics to discuss with school district personnel, including the process for obtaining student-level data, restrictions on student-level variables that can be released, the process for establishing data sharing agreements, permission to conduct student surveys within the school, and parental consent. Because this research is not under contract with the Department of Education, it is likely that the Family Educational Rights and Privacy Act (FERPA) will require parental consent to allow data collection activities. Additionally, because the research involves direct interaction with students, all districts are likely to require obtaining parental consent (see in Appendix E). In this respect, SPR will pursue a passive consent strategy. The preliminary list of topics for school district personnel include items such as:

- School district history of collaboration with a research consortium or researchers
- School district process for establishing data sharing agreements to provide de-identified student level data for research purposes
- School district capacity to provide student record data for all students for a specific school
- How students who participate in Poetry Out Loud are identified in student record data
- Details about what research activities would include
- Process for school sites to gain approval from the district to engage in research activities
- School district guidelines around using passive parental consent
- Process and guidelines for obtaining de-identified student data for research purposes
- Exploration of what would facilitate the school district’s willingness to collaborate with NEA and the State Arts Agency to carry out this research
- Potential impediments to the school district participating in the research

The team recognizes that not all school districts will be willing or able to agree to the full list of requests. However, the team has included various steps in the recruitment process to increase the likelihood of recruiting schools that will be able to provide the most comprehensive support for the study.

### Identifying Schools That Meet Criteria for the Study

There are three important criteria schools need to meet to participate in the study: (1) mandatory implementation of POL programming in at least one grade level, (2) number of



students participating and not participating in POL and (3) willingness/ability to participate in all three research activities (online student survey; student and teacher interviews; and provision of student-level record data). The first criteria, identifying schools that implement mandatory participation is intended to minimize student self-selection. In regard to the second criteria, one of the primary goals for this study is to be able to carry out the research using a quasi-experimental design which aims to enhance the strength of causal inference that can be made. To make this possible, each of the schools in the purposive sample will need to have 900 or more students participating in POL and at least as many non-POL participants.

In regard to the third criteria, agreement to participate in all phases of the research, the recruitment strategy builds in steps to assess which schools will be able to participate fully in the research.

### Obtaining a Good Mix of Schools

After finalizing the list of school site recommendations, the research team will provide a description of these schools in terms of geographic location, locale (urban/suburban/rural), and student body composition. For this, we will first obtain schools' information using Common Core of Data (CCD) from the NCES. As the selection process is underway, the research team will look at the mix of schools and assess the quality of the mix by prioritizing school site location and secondarily, to other school site characteristics. The objective is primarily to ensure school sites are well dispersed across the U.S. and secondarily to diversify the mix of schools in terms of other school characteristics.

### Student Surveys

SPR will conduct online pre- and post-surveys for all students who will be participating in POL during SY2018-19. The research team will also survey students who did not participate in the program.<sup>24</sup> The pre- and post-student surveys are designed to gather the necessary data to answer the research questions of interest. To measure changes in responses and determine whether the program has had an impact on a variety of outcomes, survey data will be collected before and after POL programming has occurred (and before and after standard ELA curriculum for non-participants).

### Designing the Survey Instrument and Cognitive Testing

Informed by the literature review, the research team began developing the survey instrument by identifying existing measurement scales and survey items that will yield information about each of the three domains of interest: 1) students' academic engagement and motivation, 2) social and emotional development, and 3) poetry appreciation and engagement. Measurement scales are the indicators that will be used to answer the research questions guiding the evaluation.

---

<sup>24</sup> As discussed earlier in the report, gathering survey data for non-POL participants strengthens the ability of making inferences about the effects of the program. Without a comparison group, it is not possible to determine the impact of POL participation on student outcomes.



Before delving into each of the three domains, it is important to describe how measurement scales are useful in designing the instrument and how these are expected to yield the necessary information about specific constructs. Constructs can be defined as concepts that cannot be directly observed nor can they be directly measured (e.g. intelligence, motivation). For this reason, researchers have actively developed measurement scales composed of a collection of purposely selected items (also known as indicators) that are interrelated and that together represent a specific underlying construct (Carifio and Perla, 2007). Indicators in this case are the direct measures that provide specific information. In general, scales are preferred over single survey questions because they are composed of multiple indicators that have been previously subjected to reliability and validity tests and are backed by empirical evidence that shows the items together serve as proxies for a specific construct (Clark and Watson, 1995; DeVellis, 2003). Thus, constructs are inferred from direct measurements of multiple items, indicators, or variables, that theoretically are related (Borsboom et al., 2003). For example, the construct of student academic engagement can theoretically be represented by a variety of behaviors, including students' level of effort, their ability to persist at different tasks, as well as their intrinsic motivation toward learning and enthusiasm toward engaging in school activities. All together, these behaviors make up our notion of academic engagement. Importantly, the more that is known about the theoretical foundations of a particular construct, the more likely it is to find reliable, valid, and useful scales available to measure that construct.

As described in the logic model (p. 20), it is hypothesized that POL participation is associated with a variety of outcomes. Participation is expected to be associated with students' academic engagement and academic achievement. It is also expected to be related to the development of certain students' socio-emotional competencies such as self-confidence or empathy. It is also expected that participation in POL will help develop a variety of student skills such as public speaking and the ability to communicate effectively. Lastly, participation in POL is expected to generate changes in attitudes toward poetry and how students interact with poetry in a meaningful way. The following sections present each of the three domains; outline the constructs of interest that will ultimately be included in the preliminary draft of the survey instrument (see Appendix G), and make explicit how the evaluation objectives, the research questions, and constructs are connected.

### ***Academic Engagement and Motivation, and Achievement***




Generally, student academic engagement can be defined as the level of participation and intrinsic interest that a student demonstrates in school. Engagement in schoolwork involves a variety of behaviors such as effort and persistence and a variety of attitudes toward learning and toward school. Using the evaluation research questions as a guide, the research team selected the constructs that would yield data to help inform the research questions. Drawing from the literature, the team then searched for measurement scales for the constructs that were identified. To select the measurement scales or survey items, the research team gave preference to instruments that have previously been implemented and that provide thorough technical information about the validity and reliability of the scales they utilize. Exhibit 9 shows how the research questions related to academic engagement, motivation, and achievement are connected to the constructs, and which indicators will measure the underlying construct. Lastly, it mentions the survey instruments used to draw each of the indicators. Technical information



about the validity and reliability properties of the measurement scales are included in the survey instrument draft (see Appendix H).



### Exhibit 9. Academic Engagement, Motivation, and Performance

Research Questions	Outcomes	Constructs	Indicators	Survey Instruments		
	Learning Engagement	Analytical Cap	ELA Proficiency			
Does student participation in POL correlate with increased academic engagement in English classes and/or in school more generally?				<ul style="list-style-type: none"> <li>- Academic engagement in school</li> <li>- Academic engagement in English classes</li> <li>- Academic motivation in school</li> <li>- Measure of school climate</li> <li>- College aspirations</li> </ul>	<ul style="list-style-type: none"> <li>- Survey questions assessing overall interest in learning (Q1)</li> <li>- Academic engagement in English classes: assessing interest in the class and the topics covered, as well as the general disposition towards the class (Q2)</li> <li>- Academic motivation in school: assessing willingness to do well in school and ability to persevere (Q1)</li> <li>- Measure of school climate: include feelings of belonging and relationship with peers and teachers (Q3)</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">Student Engagement in School Questionnaire (SESQ)–(Q1)</a></li> <li><a href="#">Chicago Public Schools: 5Essentials Survey –(Q2)</a></li> <li><a href="#">California Healthy Kids Survey (CHSK) – (Q3)</a></li> </ul>
					<ul style="list-style-type: none"> <li>- Academic achievement in English classes and in school</li> </ul>	<ul style="list-style-type: none"> <li>- Students' self-reported measure of academic achievement in school (Q7) and in their English class (Q8)</li> </ul>





At this stage, the draft of the survey instrument includes items that help answer the research questions about the relationship between POL participation and academic engagement, motivation, and achievement, and includes items that intend to measure the development of skills related to POL participation (e.g., communication skills and comfort with public speaking). In addition, the instrument includes items about constructs that yield indirect, yet relevant, information about students' context, such as perceptions about school climate, frequency of participation in extracurricular activities (a construct also present in the social and emotional domain), and an item related to academic aspirations.








### ***Social and Emotional Outcomes***

Broadly speaking, social and emotional development encompasses a wide variety of processes through which students acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, develop self-awareness, feel and show empathy for others, develop skills to establish and maintain positive relationships, and apply decision-making skills to social situations in ways that contribute to the well-being of the student and her community (Hamedani and Darling-Hammond, 2015; Durlak, 2011). From this wide variety of processes, the research team focused only on key constructs that are either more directly related to the research questions guiding the evaluation or those for which there is previous research highlighting their importance (see for example Goldstein, 2011).

Specifically, for this domain of social and emotional development, the survey instrument draft includes measures related to the constructs of self-confidence, sense of empowerment and self-expression, certain prosocial attitudes and behaviors, and other indicators of civic participation and volunteerism. After identifying the constructs, the research team reviewed a variety of existing instruments and selected specific scales and survey items. Exhibit 10 includes the research questions in the social and emotional domain, lists the constructs along with item indicators and mentions the indicators that serve as measures of the constructs. Notably, as researchers have indicated, attention to the social and emotional aspects of education become more relevant since these aspects, also known as “non-cognitive factors” or “soft skills,” are also strong predictors of student success (Darling-Hammond, 2015; Goldstein, 2011).



### Exhibit 10. Social and Emotional Development

Research Questions	Outcomes			Constructs	Indicators	Survey Instruments
	Confidence	Sense Of Self	Community Engagement			
Do students experience increased self-confidence in their public speaking abilities, social skills, intellectual abilities or, in general, after participating in POL?				- Self-confidence	<ul style="list-style-type: none"> <li>- Scales measuring self-confidence in social skills; intellectual abilities (Q10)</li> <li>- Scale related to self-confidence in public speaking (Q6)</li> <li>- Scale measuring comfort participating in group discussions (engagement with peers) (Q6)</li> </ul>	California Healthy Kids Survey – Youth Reliance & Development Module (Q10) AND PRCA-24 (Q6)
Do students feel more secure, empowered, and/or articulate in expressing themselves after participating in POL?				- Self-confidence	- Scale related to comfort with self-expression (Q6/Q6a)	PRCA-24 (Q6/6a)
				- Empowerment & leadership	- Scale related to confidence in solving issues (Q10) and taking leadership roles (Q11)	California Healthy Kids Survey – Core Module (Q10) Common Measure: Leadership Development (Q11)
Are students more likely to engage in extracurricular activities during or after participation in POL?				- In- and Out-of-School engagement	- Survey scores related to participation in extracurricular activities, school clubs, and/or after school programs (Q5)	California Healthy Kids Survey – Core Module (Q5)








### ***Poetry Appreciation and Engagement***

Several features of POL are intended to promote students' poetry appreciation and engagement and, therefore, it is hypothesized that participation in POL will impact constructs in this domain. In contrast to the previous two domains, the measurement of poetry appreciation and engagement is underdeveloped. During the literature review, the research team identified only a handful of instruments and none them had information about their technical features readily available. To develop items, the research team either drew on or adapted questions from existing instruments. In the end, the research team identified five different constructs: general attitudes toward poetry, and attitudes toward reading, writing, memorizing, and reciting poetry. To be able to provide information for research questions in the domain, the instrument includes questions about sharing poetry with peers and sharing poetry via social media. Lastly, because in high performing schools, the majority of students will have been exposed to the program in some form, the instrument includes a survey item about POL participation and student participation in POL competitions in previous years.

Exhibit 11 shows the research questions guiding the poetry appreciation and engagement domain and lists the constructs the research team identified. Along with the constructs, it mentions the specific indicators that would serve to measure each of the constructs.



### Exhibit 11. Poetry Appreciation and Engagement

Research Questions	Outcomes		Constructs	Indicators	Survey Instruments
	Poetry Exposure	Arts Appreciation			
Does participating in POL correlate with students' increasing their likelihood of reading or writing poetry for pleasure?			- Behaviors regarding reading poetry	- Survey item measuring agreement with reading poetry for pleasure (Q12)	POL Student Survey AND Koukis (2010)
			- Behaviors regarding writing poetry	- Survey item measuring agreement with writing poetry for pleasure (Q12)	
Does POL promote the sharing of poems among students and, if so, by what means?			- Sharing poetry with peers	- Survey items measuring agreement with sharing poetry among peers (Q12)	POL Student Survey AND internally generated survey item
Do students talk about poetry or POL on social media networks after the participation versus before?			- Sharing poetry via social media (Facebook, Instagram)	- Survey items measuring frequency of poetry exchanges via social media (Q20)	
Does POL participation correlate with any attitudinal changes toward poetry, academics, public speaking/performing, or post-high school aspirations?			- Attitudes toward poetry (general)	- Survey item measuring attitudes about toward poetry (Q12)	POL Student Survey AND Koukis (2010)
			- Attitudes toward poetry (memorization)	- Survey item measuring attitudes about poetry toward memorization (Q12)	
			- Attitudes toward poetry (recitation)	- Survey item measuring attitudes about poetry toward recitation (Q12)	
			- Attitudes toward public speaking*		
			- Post high school aspirations*		

Note: Survey items marked with and "\*" were already included in prior sections.



The next steps involved in the survey design are to share with the NEA team and the technical review group the draft of the survey instrument and gather their feedback to refine the survey (see Appendix G). Once the review and revision period is complete, the research team will finalize the instrument and prepare to conduct cognitive testing for the survey instrument.

### ***Cognitive Testing***

The primary objective of the cognitive testing phase is to investigate whether the survey questions are being interpreted as originally intended--that is, to determine whether respondents understand the questions correctly and whether they can provide accurate answers. During the cognitive testing process, researchers will be looking for survey items that respondents misunderstand or items where respondents experience additional difficulty in answering. Other problems answering survey questions can arise if respondents do not fully comprehend the question, interpret the question differently than was intended, or if respondents do not have previous information or understanding to be able to answer the question.

To prepare for cognitive testing, the research team will first select a purposive sample of high school students preferably from different grades, gender, ethnic/racial and linguistic background to conduct nine or fewer cognitive interviews. Members of our research team will administer a draft questionnaire and conduct the cognitive interviews following common approaches to the interview: think aloud (ask respondent to share thoughts as they answer the questions) or active probing (ask specific targeted questions). Once these interviews have been conducted, the researchers will meet to compare notes and provide a summary of recommendations to address the issues encountered during their cognitive interviews. The research team will then summarize the results and make recommendations to modify the survey accordingly.

After collecting the survey data through cognitive interviews, the research team will then conduct exploratory analyses to assess the instrument validity and reliability. These exploratory analyses will assess the internal consistency of survey items that are intending to measure an underlying construct by calculating Cronbach's alphas. As part of the analyses, the research team will conduct preliminary construct and discriminant validity analyses of the instrument by calculating the correlations between items and determine their overall association. To do this, the research team will look at construct validity and test whether survey items that are expected to be related to each other are in fact closely co-varying. The final step of the cognitive testing process is to share a memo with NEA summarizing the findings.

After cognitive testing is complete and revisions to the survey instrument are complete, SPR will then submit the survey instrument along with the qualitative data collection instruments, to an institutional review board (IRB) for review of the research design as it pertains to human subjects. Thereafter, the team will also submit the survey, along with other required materials, to the Office of Management and Budget (OMB) for approval under the Paperwork Reduction Act. Both the IRB and the OMB review processes are described in the deliverables section below.



## Student Administrative Records

We will collect student-level administrative records from the selected schools after developing data sharing agreements with each of the school districts. During that process, we will submit a list of the student variables we are requesting. We intend to collect these variables for all students enrolled in the schools selected for the study. During the process of recruiting schools, we will provide a parental consent for the school to review and will request assistance sharing the form with all parents or guardians of students. The data we will ask for includes the following:

1. Unique identifiers for all students (with student proxy id generated by the school district)
2. Participation in POL identifier for current and prior academic year
3. Student-level demographic information (e.g., gender, race/ethnicity, free and reduced lunch status, special education, English learner)
4. Grade level
5. Relevant assessment data in English Language Arts and language proficiency tests for school year (SY) 2018-19 and if applicable one prior school academic year (SY2016-17); GPA and ELA end-of-course grades
6. Student-level records of attendance, suspensions, and expulsions

## Using a Baseline Test to Increase Precision

A large proportion of the variance in student test scores can be explained by students' prior achievement (Martin et al., 2013; Rivkin, Hanushek, & Kain, 2005). By estimating impacts with a regression model that uses prior achievement as one of the covariates, we can substantially increase the precision of the impact estimates, allowing us to detect smaller effects. The research team will pursue this model specification strategy if possible. An important aspect to consider is whether students have participated in POL in the prior year. Depending on what we find, we will adjust, using a different model for those students who have participated in the prior year and examine the differences with students who have participated in POL only once.

## Transferring and Archiving Data Securely

Protecting the confidentiality of sensitive data is a priority of the study team. SPR has adopted federal standards for the use, protection, processing, and storage of data. Our security policies, procedures, and safeguards are consistent with the Privacy Act, the Federal Information Security Management Act, OMB memoranda on data security and privacy, and National Institute of Standards and Technology security standards. Our approach to implementing security controls includes assigning dedicated security and privacy experts to each project and leveraging company-wide secure computing infrastructure and data handling practices. SPR secures sensitive information and strictly control access to it on a need-to-know and least-privilege basis.

The study team takes seriously the ethical and legal obligations associated with the collection of confidential data. Ensuring the secure handling of confidential data is accomplished via several mechanisms: obtaining suitability determinations for designated staff, training staff to recognize and handle sensitive data, using secure data transfer protocols, protecting computer systems from access by staff without favorable suitability determinations, limiting the use of personally



identifiable information (PII) in data, limiting access to secure data on a need-to-know basis, and creating data extract files from which identifying information has been removed. The assurances and limits of confidentiality will be made clear in all advance materials sent to recruit states and respondents. All data that includes PII from all study components will be housed on a disc drive in a locked cabinet at SPR; all non-PII study materials will be kept in a secure project folder, to which only the study team has access. Upon completion of the project, SPR will ensure the secure destruction of all data originally provided (i.e., data containing PII), employing digital or physical shredding of electronic or physical data. When disposing of electronic data containing PII, SPR uses secure deletion software that overwrites disks to a minimum of 7 times for reusable media (USB drives and harddrives) and physical destruction (cross cut shredding) for non-reusable media (e.g., CD/DVDs).

## Site Visits

In-person data collection is at the core of our qualitative data collection. Interviews with administrators, teachers, and students will allow us to document the “story” of POL in the optimally implementing schools selected for the study, from the initiation of participation through the reception of the program by students, including those who go on to compete at the state and national levels. Interview data will allow us to contextualize the quantitative findings from the pre/post assessments and the administrative data. We plan to visit at least 6 schools in our sample and conduct the remaining “school visits” remotely through video conferencing. During school visits, we will collect data by means of: (1) semi-structured interviews with POL-participating students and teachers following a prepared interview protocol; state arts agency administrators will be interviewed by phone prior to the site visit, also following a prepared protocol; (2) focus groups with POL-participating students; and (3) observations of program activities using an observation template. Interviews and focus groups add different elements to qualitative data collection. Interviews allow for intimate conversation between researchers and interviewees, while focus groups primarily allow us to hear from a larger number of youth. Also, one-on-one interviews can yield more personal information, while focus groups draw out the social story – how a community of students together experience the program. SPR will communicate with POL coordinators and teachers at our chosen schools well in advance to select and schedule an optimal time to visit/hold interviews. When possible, on-site visits will occur during a time when we can observe POL activity—a poetry lesson being taught, students practicing for school or state competitions, or on dates when competitions are being held.

Interviewers will use semi-structured interviews to capture the perspectives of the students, teachers, and administrators, and to document differences and similarities among respondents. SPR will make every effort possible to collect robust, reliable data as part of the site visit interviews. Site visitors will rely on structured interview protocols which will allow them to collect data consistently and systematically across the schools while still providing for some flexibility to pursue topics as they arise. We will also cover similar topics with each of the respondents to gain a fuller picture of the program and its effect on students and teachers. Actual schedules will differ depending on how many classrooms in each school are participating in POL, how many teachers are available to meet with us, how many students the teachers are



able to line up for interviews and focus groups, and how many teachers are available to have us observe in their classroom (on-site visits only).

The interview and focus group protocols will focus on collecting data about the program, about its organization and implementation, and about how the program influences the youth in the different outcome domains the evaluation is interested in. The interview protocols are in Appendix F. Exhibit 13 shows some of the topic areas to be covered.

### Exhibit 13. Interview Topics

#### Interviews and Focus Groups

Respondents	Topics to be Explored
SAA Administrators	Relationship between SAA and POL, especially support that would help contextualize findings; SAA’s role in implementation of POL; outcomes of interest to the SAA; impact on the larger arts community in the state; impact on SAA staff and organization
Teachers	Teacher background; experience with POL curriculum; intensity of POL programming; perceptions of student academic, socio-emotional, and poetry-specific outcomes; POL’s influence on the teacher and on the teacher’s teaching practice
Students	Participation in POL; feelings about poetry; poetry “use” (reading and writing for pleasure, sharing with peers, etc.); probing connections between poetry and academic outcomes and social and emotional development
Observations	
If possible, we will observe a POL unit being taught, students practicing for competitions, or a competition itself.	

In advance of the visit, we will share parental passive consent forms with the school staff and teachers who are helping to coordinate our visit in order that students can share them with their parents and gain passive consent to participate in interviews and focus groups. (That is, parents who object to their child participating in the study can return the form signed and that child will not be included in the study; all others will be included.) Youth participating in the study will themselves provide a verbal or electronic assent to participate. The passive consent and verbal and electronic assent language, which can be found in Appendix E, will go through the IRB approval process, described in the section on Deliverables and Timeline, below.

After each site visit is complete, the site visitor will prepare detailed notes in the form of a site visit write-up. Write-ups will describe key features of POL as observed and discussed at each school. The research team will develop a write-up template that mirrors the protocols, to ensure that systematic information is recorded during each site visit. We will use these write-ups to conduct the analysis and reporting described in the next chapter.

#### Technical Review Group





We have established and will convene a technical review group (TRG) to provide us with critical feedback to ensure high quality at the beginning, middle, and end of the study. The TRG will be convened three times: once to review and give input into the evaluation design; a second time in the middle of data collection, to review data collected thus far and any early analysis; and a third time, toward the end of the study, to review a draft of the final report. The TRG, which has already been recruited, includes experts in creative youth-development research and evaluation, data collection, and teaching. Recruited members to date are:

#### Creative Arts Education Research

- Sarah Cunningham, Executive Director for Research & Director, Arts Research Institute, School of the Arts, Virginia Commonwealth University
- Jonathan Herman, Executive Director, National Guild for Community Arts Education

#### Data Collection

- Jamal Abedi, Professor, University of California at Davis, School of Education

#### Educators

- Philip de Sa e Silva, Educator, St. Paul Academy, Minnesota
- Aimee Espiritu, Educator, Youth Speaks, Oakland, California
- Derek Fenner, Educator, Alameda County Office of Education, Oakland, California
- Andrea Santos, Educator, Logan High School, West Virginia

We consulted with POL program partners to develop a strong list of potential review group members that helped us to meet the partners' standards for quality assurance. We have budgeted to offer honoraria to individuals who serve as TRG members. We will allow ample time for the group to review the deliverables or other materials we share with them, and for our team to incorporate their feedback. To conserve on costs, we will convene this group via videoconference. Members of the NEA team will be invited to observe meetings and we will provide minutes of each meeting to the NEA project director and to group members.



## Data Analysis

In this section, we describe our plan for analyzing the data we collect.

### Quantitative Data Methods

There are two quantitative components of the POL evaluation included in the design, a pre- and post-student survey and the analyses of student administrative data using quasi-experimental techniques. Each of these components is described below.

#### Pre/Post Survey Analysis

As mentioned in the data collection section above, the analysis of the survey will start with examining preliminary data obtained through cognitive testing. After discussing the results of the cognitive testing with NEA staff and TRG members and making the necessary modifications to the survey items, the research team will then prepare to deploy the student online pre-survey across 10 schools. As pre-survey data becomes available, the research team will take a second look at the reliability measures and evaluate internal consistency of survey items for data quality assurance. Preliminary analyses of data will also examine the relationships between outcomes of interest (e.g., academic engagement, poetry appreciation and engagement, and social and emotional development) and other variables such as demographics, school of attendance, and other variables of interest, to gain a better understanding of the relationships between outcomes of interest and covariates.

Once the team deploys and obtains post-survey data, the first step will be identifying matched pairs to assess changes in the outcomes of interest. Depending on the availability of data for non-POL participants, the research team will determine the appropriate data analysis methods to examine change in outcomes between the pre- and the post-survey. For instance, if data is not available for students who do not participate in POL, analyses of student outcomes between pre- and post-surveys would be analyzed using paired t-tests to determine whether the mean change in the outcomes between the pre- to post- differed for students who participate in POL. If data are available for non-POL participants, the research team would be able to conduct other types of analysis including repeated measures ANOVA or analysis of covariance (ANCOVA). Repeated measures ANOVA is a procedure indicated to measure change for related groups (as opposed to independent groups) and it is used to detect overall differences between related means and thereby detect a treatment effect but not taking into account pre-test scores. The ANCOVA approach helps answer whether the post survey means, adjusted for pre-test scores, differ between the two groups. This procedure tests whether means, adjusted for pre-test scores, differ between the two groups, those who participate in POL and those who do not. ANCOVA uses the pre-scores as a covariate and post-scores as the dependent and accounts for



“treatment” as a factor. It is considered a more versatile method in situations where basic ANOVA assumptions are violated.<sup>25</sup> The general ANCOVA model is as follows:

$$\text{Post-score} = \beta_0 + \beta_1 I(\text{Intervention}) + \beta_2 \times \text{Pre-score} + \text{error}$$

For this model, *I (Intervention)* is an indicator variable. The indicator takes on values of either “0” or “1” for pretest-posttest data with only one intervention. For this model, a value of “1” indicates that a subject belongs to students who participated in POL and “0” that the subject is part of the group who did not participate in POL. ANCOVA (analysis of covariance) can be used to account for differences that exist between groups at the pre-test, which is likely given that the two groups will not be selected randomly (Bonate, 2000).

### Missing Survey Data

Although we will conduct the survey using methods (electronic administration and close work with school administrators and teachers) to ensure a reasonably high response rate (around 40%) to both pre- and post-surveys, it is very likely that some students’ data will be missing in either the pre- or the post-survey. Because missing data can have a significant effect on the conclusions that can be drawn from the data, SPR will look at whether certain responses are more likely to be missing and whether certain groups are more likely to have missing values than others. More specifically, we will calculate the response rate to understand survey non-response, one of the principal sources of error that can potentially bias the results.<sup>26</sup> To do this we will compare the characteristics of those who responded to the survey with the pool of program participants on various demographic characteristics (e.g., age, grade, gender, race and ethnicity). The pool of participants will be obtained from the student administrative data we receive from schools. Through this comparison, we will determine whether there are statistically significant differences between the actual and potential survey respondents. Depending on the results, we will determine if there is need to address non-response using additional statistical procedures such as weighting.

### Student-level Administrative Data

To analyze student academic outcome measures, including student test scores in English language arts and other student measures such as attendance and discipline records, we will use a quasi-experimental design (QED) approach. The QED component relies on student administrative data because these data are available for a rich pool of students, which will allow

---

<sup>25</sup> ANOVA assumptions state that 1) the dependent variable should be measured at the continuous level; 2) the independent variables should consist of two or more categorical, independent (unrelated) groups, and 3) there should be independence of observations. Because dependent variables in the study will likely be measured using Likert scales, the use of non-parametric tests such as the McNemar, Wilcoxon sign-rank tests to examine pre- and post-survey changes will also be useful to assess change. These tests are advisable because they make fewer assumptions about the distribution of responses among participants and do not rely on the data having normal distributions.

<sup>26</sup> Nonresponse bias is the imbalance that results when respondents differ in meaningful ways from those who did not answer the survey.



us to draw a similar comparison group to compare student outcomes. As mentioned earlier, we expect districts to provide student-level data for all students in the school.

The typical approach for evaluating the effectiveness of a program or intervention involves comparing the outcomes of individuals who participated in it with those who did not. Randomized experiments in which individuals are randomly assigned to the treatment and control groups are widely considered the gold standard in research because those conditions ensure that the treated and control groups are similar in terms of both their observed (e.g., race, sex, individual motivation) and other unobserved characteristics. These initial similarities between the two groups allow researchers to attribute any differences in outcomes to the program under evaluation. Because conducting randomized control trials in educational settings is particularly difficult due to logistical, ethical, or practical considerations it is common to utilize quasi-experimental designs instead.

As noted above, identifying an appropriate comparison group is critical to assessing the impacts of the POL programming. Thus, our quasi-experimental design will draw a comparison group from non-POL participants from the same schools. To build the comparison group that is as similar as POL participants we will use propensity score matching (PSM) to construct a comparison group that is most similar to the group that participates in POL programming at least on observable characteristics. To do this we will select a set of covariates from which we will estimate the propensity score. The selection of covariates will be based on previous research examining the relationships between variables of interests (e.g., age, gender, race/ethnic background, English Learner status, prior academic achievement).<sup>27</sup> Next, we will pool the data of POL and non-POL participants to estimate the propensity score  $[\Pr(X) = \Pr(T=1 | X)]$  for each subject. To estimate the propensity score for each subject will use a logit regression, with POL participation as the dependent measure, and a range of demographic and other characteristics as independent measures to establish the relative weights for each of the independent measures in “predicting” POL participation. It is useful to think of the propensity score as an individual prediction of the likelihood of an individual student participating in POL. The next step is to match each student in the group of students who participated in POL to another individual student in group that did not participate in the program. To do this, we plan to use the “nearest neighbor” approach in the selection process, meaning that we will select the comparison group member whose propensity score is closest to the respective POL participant. We also plan to use replacement, so that a potential comparison group member can be matched to several POL participants. Lastly, we will assess the matching and perform sensitivity tests to assess whether other approaches would be preferable before estimating the average POL participation effect on student outcomes.<sup>28</sup>

The expectation is that matching individuals in baseline characteristics will reduce group differences that we think might bias the outcomes of interest in some way (Rosenbaum and

---

<sup>27</sup> For example, previous research has found that students that have higher academic achievement to begin with are those who tend to be more involved in the arts. Thus, including a measure of achievement, that is baseline test scores as a covariate, will help address this potential source of bias.

<sup>28</sup> Other matching methods include caliper and radius matching, stratification/interval matching, or kernel matching.



Rubin, 1983). Essentially, PSM ensures that the group that participated in POL and the comparison group are as similar as possible with respect to observable characteristics. Thus, any observable differences could then be more confidently attributed to their participation in POL. Later models will also examine how the clustering of students at the school level impacts the outcomes of interest by using fixed effects, and present results for both models.

### Missing Administrative Data

Administrative data are typically available for the vast majority of students since schools have to collect these data routinely to meet federal and state accountability requirements. Nevertheless, as discussed previously with the survey data, we will assess the patterns of missing data and determine whether it is necessary to correct for missing data using other methods.

### Qualitative Data

Data analysis in qualitative research is often most effective when it occurs as an iterative process of collecting data, reflecting on emerging themes, refining hypotheses, and then starting another round of the process (Kleinman, Copp, and Henderson, 1997). Accordingly, we have designed the study so that data analysis begins during the interview visits, continues immediately after the focus groups, and concludes as the team synthesizes results with other data collection activities as part of the process of writing the final report.

Prior to conducting data analysis, SPR will send audio recordings of interviews and focus groups to a transcription firm, and each transcript then will be de-identified and assigned a unique research ID to ensure respondents' privacy. SPR will then analyze these transcripts, along with site visitors' observation notes, using qualitative data analysis software (NVivo). Using software to analyze this type of information supports effective data management because it allows the gathering of all qualitative data—in this case, observation notes, interview transcripts, and focus group transcripts—into a single database, and enables the research team to adopt a transparent and systematic approach to addressing each research question of interest. We will process the data in the three key stages described below.

**Classification.** SPR will classify each interview transcript according to key characteristics of the individual interviewed (such as grade, gender, race/ethnicity, and eligibility for free and reduced lunch), the school to which she or he attends, and the state in which he or she resides (for details of which we will look primarily to the interview with the state arts agency administrators). Focus group transcripts will also be classified based on school and state characteristics. These metadata will allow SPR to query the database and filter searches by a participant, school, or state characteristic to assess differences and trends. The metadata will also enable the study team to keep the NEA apprised about data collection.

**Coding.** The analysis team will read all transcripts and code passages according to a hierarchical coding scheme that maps to key research questions and mirrors the structure and themes of the interview protocols. We will develop an initial set of codes and add codes as necessary based on new themes identified during data collection debriefing meetings. One of the key benefits of using software to code the data is that it allows SPR to submit the coding scheme to the NEA for review and comment to ensure that the codes (1) align with the NEA's priorities for the final



report and (2) link the research questions and analysis in a way that supports the NEA's key interests. Each analysis team member will be assigned a limited set of themes to code in the data, ensuring that he or she is able to develop expertise in recognizing specific themes. In order to ensure inter-rater reliability we will have each member of the analysis team test code one to two interviews or focus group transcripts and compare the results, discussing discrepancies in coding and collectively deciding how to code any contentious items.

***Analysis.*** Once all transcripts have been coded, the team will use the software's querying features to explore the relationship between respondent and school or state characteristics, and perceptions of and experiences with POL. The team will conduct this analysis by using the codes identified during stakeholder interviews to query and filter for experiences with POL. Each team member will then prepare an internal analysis memo summarizing his or her findings, and these memos will form the basis for drafts of the final report.



This page was intentionally left blank.



## Deliverables and Timeline

In this section we review key deliverables, the institutional review board (IRB) process, and the study timeline.

There are five key deliverables associated with the study.

**Key Deliverable #1: Study Framing Document.** Completed March 31<sup>st</sup>, 2017. This report included the components listed below.

1. Summaries of key findings from the contractor's rapid scan of each of the following: previous research and evaluation publications related to POL; a relevant sampling of administrative and programmatic documents (e.g., grantees' final descriptive reports, student and teacher testimonials, interview transcripts, etc.) from POL grants to states made during the five-year period from fiscal year (FY) 2011 through FY 2015; and published or 'gray' literature about valuations of similar youth arts engagement projects.
2. Revised POL logic model and supporting narrative, including the program's inputs, activities, outputs, and short- and intermediate-level outcomes.
3. Recommendations for indicators for each proposed outcome, and the data sources, metrics, and/or methodologies that the contractor could use to assess these indicators.

**Key Deliverable #2: POL Evaluation Plan.** To be submitted October 27, 2017. The evaluation plan detailed in the document includes:

1. An overview of research questions and POL program;
2. A description of the evaluation design;
3. A review of relevant literature;
4. Identification of data sources, data collection methods and instruments;
5. An analytical plan;
6. A sampling strategy;
7. An overall study timeline;
8. An approach to the protection of human subjects/consent strategy (as appropriate);
9. A communications and reporting plan.

**Key Deliverable #3: Draft Supporting Statements for Paperwork Reduction Act Information Collection Request.** Prepare draft supporting statements to support the NEA's information collection request (ICR) package(s) under the Paperwork Reduction Act. SPR shall provide the following documents to the NEA, which will then submit these documents to OMB.

1. 60 Day Federal Notice (submitted to NEA 3/31/17; posted in Federal Register 4/6/17)
2. 30 Day Federal Notice (TBD)
3. Information Clearance Package (Final Clearance Package estimated to be submitted to NEA 12/15/17)
  - OMB-i83 form
  - Supporting statement A
  - Supporting statement B





- Survey instruments
- Interview protocols (student, teacher and administrator protocols)
- Recruitment material
- Participant assent/consent forms (student, teacher, and administrator)
- Administrative data release request
- IRB approval letter

Although not listed as a key deliverable, the fact that the research team will be working with schools, that the team takes seriously the ethical and legal obligations associated with human subject data collection, and the reference to the IRB approval letter above make clear that the research team will also need to submit the study design and instruments to an institutional review board (IRB). A comprehensive IRB application will be submitted to Solutions IRB, an established independent and fully accredited review board that provides ethical review of quantitative and qualitative research and is experienced in social, behavioral, and education focused research review. The IRB application package will be comprised of a detailed description of all research activities including sampling, recruitment, risks and benefits of the research, consent procedures, secure data storage, and protections for participate confidentiality. In addition, supplemental documents will be submitted, including: interview guides, survey questions, recruitment materials, and consent/assent forms. Following the submission of the complete IRB package, the application will be reviewed by Solutions IRB. If necessary, SPR will address any outstanding issues, questions, or concerns in a revised submission. No research activities that involve human subjects will be conducted prior to receiving IRB approval. Any modifications to the design of the research study or study materials will be submitted to the IRB and will not be implemented until modifications are approved.

**Key Deliverable #4: POL Evaluation Report.** To be submitted November 16, 2019. The POL evaluation report will not exceed 80 pages in length (inclusive of appendices). The report shall include:

1. Executive summary;
2. Introduction and background;
3. Evaluation design and approach, including research questions, description of the evaluation design and methods, with copies of data collection instruments presented in an appendix;
4. Study findings, presented by research question;
5. Proposed revisions to the logic model and/or the measurement model from Key Deliverable #1;
6. Conclusions and recommendations for future POL guidelines development, grantee reporting requirements, and performance metrics.

**Key Deliverable #5: Supplemental Products.** To be submitted December 19, 2019. The supplemental products may include the following:

1. Graphic fact sheet(s) that capture the study's key findings in 1-2 pages;
2. Set of PowerPoint slides that summarize the study and its findings;
3. Selected quotes from a highly visible educator and/or poet regarding *POL*;



4. Interview transcripts and other raw data (all documents must be de-identified prior to submission to the program partners, as the program partners reserve the right to make the evaluation report and data resulting from this study publicly available).

Exhibit 14 shows the schedule of tasks and deliverables for the project.



This page was intentionally left blank.



## Next Steps for the Evaluation

Under the new timeline for the project, data collection will begin in the Fall of 2018. In order to be prepared for that data collection, the research team will undertake the following steps:

- Convene the TRG in July 2017 to review the evaluation plan;
- Revise the evaluation plan according to NEA, Poetry Foundation, and TRG comments in July-October 2017;
- Conduct cognitive testing of the instruments in October 2017;
- Submit the IRB package in November 2017. The IRB that the research team works with has only a few weeks' turnaround time once the package is submitted, compared to the much longer turnaround time for OMB PRA approval, and the bulk of the content to be included in the package will be developed with the evaluation plan and instrument development;
- Submit the PRA package to the NEA in December 2017 – February 2018;
- Recruit schools in May to July 2018;
- At the time of recruitment and right before data collection is to start in September 2018, the research team will work with the schools that agree to participate to schedule site visits, plan student record data transfer, and plan for administering the survey.





## Appendix A: Study Framing Document



This page was intentionally left blank.





# Poetry Out Loud Evaluation Study Framing Document

May 5, 2017

Prepared for:

National Endowment for the Arts

Prepared by:

Social Policy Research Associates  
Contract #: C17-05



This page was intentionally left blank.



## Contents

Introduction to the Study Framing Document .....	1
Poetry Out Loud (POL) Program Overview .....	1
Findings from the Previous Evaluation .....	1
Poetry Out Loud Logic Model .....	3
Introduction to the POL Evaluation .....	8
Next Steps .....	15



This page was intentionally left blank.



## Introduction to the Study Framing Document

The National Endowment for the Arts (NEA) commissioned a multi-year study to better understand student-level outcomes associated with the implementation of the Poetry Out Loud program under optimally implemented conditions. In December 2016, the NEA awarded Social Policy Research Associates (SPR) a contract to conduct the study over a 29-month period – December 2016 through April 2019. The Study Framing Document is intended to ground the evaluation by presenting the program’s conceptual framework and demonstrating the relationship between the research questions and the planned data collection activities. The document that follows opens with an introduction to POL, including an overview of findings from the previous evaluation; it next presents the logic model; it then presents a preliminary evaluation matrix, which maps outcomes and research questions to data collection activities and indicators. Finally, we offer next steps for the evaluation.

## Poetry Out Loud (POL) Program Overview

A national arts education program supported by the National Endowment for the Arts, Poetry Foundation, and state and jurisdictional arts agencies, Poetry Out Loud encourages the nation’s youth to learn about great poetry through memorization and recitation, helping students master public speaking skills, build self-confidence, and learn about literary history.<sup>1</sup>

The primary goals of the program are to strengthen students’ academic skills and performance, to support students’ social and emotional well-being, to help grow teachers’ knowledge of and confidence in teaching poetry, and to increase student and overall community awareness and appreciation of poetry and the arts. These goals map closely to the “impacts” envisioned in the program’s logic model, which we discuss in more detail in a subsequent section of the document.

The current evaluation will be the first since 2008 and will focus on assessing student outcomes in poetry appreciation and engagement, social and emotional development, and academics using a rigorous quasi-experimental design combined with qualitative data collection and analysis of program design and implementation in 10 sample sites.

Now in its eleventh year as a nationwide program (after a pilot year in 2005 during which the program was launched in two cities), POL has grown to serve more than 3 million students and 50,000 teachers from 10,000 schools in every state, Washington, DC, the US Virgin Islands, and Puerto Rico.<sup>2</sup>

## Findings from the Previous Evaluation

In the interest of identifying continuities with the previous evaluation of POL as well as identifying gaps in that research that can be informed by the new evaluation, we reviewed

---

<sup>1</sup> Poetry Out Loud logic model

<sup>2</sup> <http://www.poetryoutloud.org/about>

findings from the previous evaluation of POL.<sup>3</sup> The previous evaluation of POL (Rockman et al, 2008) was informed by three years of data drawn from school coordinator surveys, teacher surveys, state champion surveys, and teacher focus groups.

The annual reports produced by this prior evaluation focused on the reach, support, and engagement with POL by students and participating schools, providing compelling evidence that that the program had continued to grow (over the course of the three years) and reach increasingly diverse students, rural schools, and schools with and without existing strong arts programs. Additionally, the evaluation found that POL helped to facilitate both the engagement and retention of teachers by providing them resources to bolster existing curricula. With respect to student-level outcomes, the evaluation focused largely on poetry appreciation and engagement. The feedback solicited from students was a survey of students who were state champions in POL competitions.

Results from the student state champion survey found that:

- Every state champion/national finalist (100%) said they enjoyed studying and memorizing the poems;
- All the finalists (100%) said the experience got them excited about poetry recitation;
- Every finalist (100%) said that they had found new favorite poems and poets;
- 90.9% of finalists said they enjoyed participating in the contest;
- 90.9% said poetry was more important to them after participation in the program;
- 86% said that listening to others recite poetry helped develop their recitation skills;
- 81.8% said participating in POL increased their confidence or made them feel more at ease in front of an audience.

Teachers also echoed these points in their survey responses, suggesting that the finalist findings might also extend to the general participating student population:

- 91% of the teachers completing the survey agreed (56% somewhat, 34% strongly) that their students enjoyed studying and memorizing poems;
- 86% agreed their students will be more likely to read poetry for pleasure after participating in the program.

These findings map well to the “awareness and appreciation of poetry and arts programming” component of the logic model that we will describe in the next section. For example, these findings suggest that POL students experienced increased exposure to poetry and that they expressed appreciation for poetry. Some of the findings also pointed to the anticipated socio health outcomes that the NEA hopes students might have accrued by virtue of participating in the program. For example, the findings suggest that students’ confidence increased—one of the measures of socio-emotional health. However, there are numerous outcomes and impacts that the more formative-focused previous evaluation did not have a chance to explore. It is in those areas—including students’ academic skills and performance, and a more in-depth study of students’ social and emotional health—that the current evaluation can inform the NEA and the field at large. In addition, even for areas well-explored by the previous evaluation—specifically

---

<sup>3</sup> As planned by the project team, a more comprehensive literature review will be included in the Evaluation Plan.



student awareness and appreciation of poetry and arts programming—the current evaluation’s quasi-experimental design will allow us to provide more rigorous analysis of those and the other outcome areas. Having a comparison group of students not participating in POL will allow us to say with greater confidence whether student outcomes are correlated with POL participation. Further, the current study intends to collect data from all types of student participants, not just competition winners (who represent a very small subset of the participating student population).

In the section that follows, we introduce the logic model as a foundational document for both the program at large and the current evaluation.

## Poetry Out Loud Logic Model

Logic models serve as visual representations of program resources, strategies, desired outcomes and the relationships between them. They are useful tools that program staff and their evaluators can use to ensure that programs as implemented have fidelity to the intended program models and to track progress against specified goals. In February, SPR worked closely with members of the NEA POL team to update the POL logic model which, at the time, reflected the strategies and goals of POL when it was at a more nascent stage in its program development. The revised logic model, which more accurately reflects the program’s current strategies and goals, is included on page 8 in Exhibit 1.

The Poetry Foundation, co-creator of Poetry Out Loud, seeks to elevate the visibility and influence of poetry in our culture, and to “discover and celebrate the best poetry and place it before the largest possible audience.” The POL logic model articulates how the program works to meet these goals as well as other, more youth-development centered goals focused on academic outcomes and socio-emotional well-being. Stretched across the top of the logic model is POL’s mission, which is to *encourage the nations’ youth to learn about great poetry through memorization and recitation, helping students master public speaking skills, build self-confidence, and learn about literary history*. The mission provides contextual grounding for the elements of the logic model listed beneath it. The core elements of the logic model include the *inputs* provided by POL to support effective programming, *contextual factors* with the potential to affect POL implementation and outcomes, key *strategies* in program implementation, the anticipated *outcomes* that POL program partners hypothesize will result, and the key areas of *impact* that program staff ultimately hope to achieve through POL. These elements are described in detail in the following sections.

### Inputs

Implementing POL on a national scale is a complex endeavor. The POL program and its participants benefit from key partnerships with organizations and agencies, each of which bring strong assets (e.g., networks, knowledge, expertise) to support the program and its visibility, sustainability, and growth. Specifically:

- The **National Endowment for the Arts** provides funding to support the effective implementation of POL at multiple levels. In addition to funding the national POL competition, NEA provides funds that support state arts agencies to implement the



program within their states and to provide resources for state- and local-level partners, teachers, and students.

- The **Poetry Foundation** provides easy access to free educational materials for teachers and students. This includes a comprehensive curriculum package, teacher guides, and a robust online anthology of poetry that the Poetry Foundation maintains and updates regularly.
- **State Arts Agencies** oversee the implementation of POL in their states. To that end, their primary goals are to publicize the program, recruit teachers and schools to participate, and develop and conduct the state-level finals program. Some state arts agencies also supplement NEA funds with additional state funds and/or private donations, or establish organizational partnerships that enable special trainings and workshops for participating students and teachers or add to the prize amounts.

## Contextual Factors

Contextual factors are presented in line with inputs as factors that can affect POL implementation and outcomes. These include school, teacher, and student prior experience with POL; teacher's years of experience; socio-economic factors such as poverty rates among the student body that can impact learning; and the social and cultural context of the school. There are also differences across states in terms of deployment of POL funds, which can also affect outcomes. States spend their POL funds differently, depending on priorities and implementation capacity. Similarly, the extent to which states can support or augment the POL program with supplemental state and/or private resources differs by state and can also influence outcomes.

## Strategies

The inputs and strategies listed in the logic model are intrinsically tied together. That is, the *Inputs* column highlights the role of core project partners, each of which provide important resources to support participants and ensure quality programming, while the *Strategies* column articulates how these resources are operationalized. Core strategies include:

- **Providing Easy Access to a Robust Online Poetry Anthology.** POL aims to provide students and their communities with high quality poetry from authors from different time periods and diverse backgrounds. POL provides participating schools with access to this literature through its *online poetry anthology*. This anthology, which POL maintains and regularly updates, provides access to over 900 poems as well as other information to support poetry learning, such as a glossary of terms and poet biographies.
- **Providing Teachers with a Comprehensive Poetry Curriculum.** Recognizing that teaching poetry may feel challenging for some teachers, POL also developed a *comprehensive poetry curriculum*, complete with classroom materials, teaching guides, and all the information teachers would need to implement POL in their classrooms. POL offers this curriculum to all teachers, free of charge.
- **Sponsoring the National POL Competition and Leading Its Publicity Efforts.** Each year, POL sponsors a national competition which celebrates student efforts and challenges



students to share their love of poetry through creative expression. This competition ultimately results in the public performance of thousands of poetry recitations each year, raising the visibility of poetry, the POL program, and the agencies that support this work.

## Outcomes and Impacts

POL partners have identified four key areas of impact, each of which is connected to a set of anticipated outcomes associated with participation in POL and that, as they are measured, serve as indicators of progress. These include:

- **Students' Academic Skills and Performance are Strengthened.** The anticipated outcomes associated with this impact area reflect the kinds of academic outcomes that are possible through increased exposure to and dynamic engagement with poetry. For example, exposure to poetry from artists from different generations who represent diverse communities will increase student *knowledge of poets and poetic styles*. Furthermore, their *analytical capacity* will likely grow as they wrestle with complex texts to uncover meaning, as would their *language arts proficiency* as they engage not only with meaning making of different texts but as they do so in different ways. The POL program's emphasis on the performative aspect of poetry engagement expands literacy practices beyond ink and paper, enabling students to grow in their oral language development and creative narrative expression. Finally, POL program partners hope that participation in this dynamic program will result in increased *engagement in learning* in general.
- **Students' Social and Emotional Health Improves.** Socio-emotional health is a complex and broad arena, within which a multitude of variables can influence outcomes. The anticipated outcomes associated with this impact area focus on factors that can *contribute* to students' socio-emotional health and well-being, such as student *confidence* which may come as a result of participation in the performative aspects of the program and/or through the success they may feel as they begin to uncover meaning within poems that initially may have felt obscure. Rising confidence or the empowerment students may feel through their learning may also have some influence over a *student's sense of self or identity*, as may a student's choice of poetry. Given the large volume of poems to choose from in the POL anthology, students have a multitude of options to wrestle with works that resonate with them for any number of reasons, including the ways in which poetry may speak to key aspects of their identity. Finally, POL partners hypothesize that the dynamic and performative aspects of the POL program, the competition structure, and the confidence that may grow through program participation may result in increased *engagement in the larger school community*.
- **Teacher Knowledge of and Confidence in Teaching Poetry Increases.** Part of the challenge of learning poetry may stem from the fact that *teaching* poetry may feel challenging to even the most seasoned English language arts instructors. Thus, this impact area includes outcomes that support the building of teacher confidence and is directly tied to the use of POL's curricular support. For example, by being introduced to the POL program and given access to POL's teaching supports, more teachers will be exposed to the kinds of *arts education programming* that is focused specifically on supporting them and their





work and strengthening their ability to *effectively teach poetry*. It is also assumed that by immersing themselves in the POL materials and having access to such a rich anthology of poems, teachers' *knowledge and appreciation of poetry* will increase, as well as their *enthusiasm for teaching poetry*.

- **Awareness and Appreciation of Poetry and Arts Programming Increases.** While youth are the primary target for Poetry Out Loud, POL partners hope that as program participation grows, so will the visibility of poetry and the POL program, resulting in a greater overall awareness and appreciation of poetry and of arts programming. Outcomes related to awareness are focused on exposure, with an assumption that awareness and familiarity with poetry in general, as well as familiarity with specific poems will increase as more students and their communities<sup>4</sup> are exposed to poetry, arts programming, and the agencies and organizations that make arts programming possible. Outcomes related to increased appreciation include the *expression* of appreciation by students and their communities as well as increased *participation* in arts programming.

The POL logic model provides a strong guiding framework to help stakeholders understand the relationship between the POL inputs and strategies and the program's desired outcomes and impacts. It also provides a strong foundation for the development of SPR's evaluation framework and plan, which will provide a detailed description of how the evaluation will track progress toward key outcome areas. In the next section, we present a preliminary evaluation matrix designed to guide the evaluation.

---

<sup>4</sup> For the purposes of this logic model, the definition of community includes students, their families and friends, their school communities (teachers, administrators, etc.) and the broader community in their locales that support the work of local schools.



## Exhibit 1. Logic Model

**Mission Statement:** A national recitation contest supported by the National Endowment for the Arts (NEA), Poetry Foundation, and State and Jurisdictional Arts Agencies (SAAs), **Poetry Out Loud** encourages the nation's youth to learn about great poetry through memorization and recitation, helping students master public speaking skills, build self-confidence, and learn about literary history.

Inputs	Strategies	Anticipated Outcomes	Impact
<p>POL leverages <b>strong partnerships</b> to ensure consistent, high quality programming:</p> <ul style="list-style-type: none"> <li>The <b>NEA</b> provides funding for SAAs to implement the program and to run the National Finals as well as support and resources for state and local-level partners, teachers, and students.</li> <li>The <b>Poetry Foundation</b> provides funding for the program's prizes, travel, permissions, website, materials, and distribution of materials in addition to support and resources for state and local level partners, teachers, and students.</li> <li><b>State Arts Agencies</b> publicize the program, recruit teachers and schools to participate, and develop and conduct the state-level finals program.<sup>1</sup></li> </ul>	<p>POL seeks to elevate poetry and harness its power to support student development by:</p> <ul style="list-style-type: none"> <li>Developing and providing easy access to a robust, diverse, and growing anthology of poetry</li> <li>Engaging students in thoughtful, complex curricula that encourages deep engagement with and analysis of poetry</li> <li>Providing educators with easy access to strong, tested poetry curriculum</li> <li>Providing a comprehensive package of teaching tools and resources to support effective instruction</li> <li>Nurturing and promoting the expressive and performative aspect of poetry</li> <li>Creating a highly visible, national performance venue to challenge students and celebrate their accomplishments</li> </ul>	<ul style="list-style-type: none"> <li>Students' capacity to analyze poetry grows</li> <li>Students' engagement in learning increases</li> <li>Students' knowledge of literary history increases</li> <li>Students' language arts proficiency grows</li> <li>Students' confidence increases</li> <li>Students' sense of self/identity grows</li> <li>Students' engagement in the larger school community grows</li> <li>More teachers exposed to arts education programming</li> <li>Teachers' knowledge and appreciation of poetry increases</li> <li>Teachers strengthen their ability to effectively teach poetry</li> <li>Teachers' enthusiasm for teaching poetry increases</li> <li>Students and community experience increased exposure to poetry</li> <li>Students and community express appreciation for arts programming and poetry</li> <li>Students and community are exposed to the work of State Arts Agencies, NEA, &amp; the Poetry Foundation</li> <li>Students and community members increase their participation in arts programming</li> </ul>	<p><b>Students' Academic Skills &amp; Performance are Strengthened</b></p> <p><b>Students' Social and Emotional Health Improves</b></p> <p><b>Teacher Knowledge of &amp; Confidence in Teaching Poetry Increases</b></p> <p><b>Awareness and Appreciation of Poetry and Arts Programming Increases</b></p>
<p><b>Contextual Factors</b></p> <p>There are a number of external factors that can affect POL implementation and outcomes, including (but not limited to):</p> <ul style="list-style-type: none"> <li>Prior experience with POL</li> <li>Years of teaching experience and efficacy in teaching poetry</li> <li>Socioeconomic factors that can impact learning (e.g. poverty rates)</li> <li>School social/cultural context</li> </ul>			

<sup>1</sup>Some SAAs supplement NEA funds with additional state funds and/or private donations, or establish organizational partnerships, that enable special trainings and workshops for participating students and teachers or add to the prize amounts.



## Introduction to the POL Evaluation

The purpose of the evaluation of the Poetry Out Loud program is to understand student-level outcomes associated with the implementation of POL under optimally implemented conditions. (As discussed, teacher and community outcomes are also of interest to the NEA, but are not the primary focus for the current evaluation.) In consultation with the NEA and project partners, SPR will select a sample of 10 POL-participating schools to conduct quantitative and qualitative data collection activities. The study is guided by a series of research questions focused on the assessment of the program's impact in three different domains: students' academic engagement and performance, poetry engagement and appreciation, and social-emotional development. This section introduces a preliminary evaluation matrix that maps the intended outcomes of the program (obtained from the logic model) to the research questions guiding the evaluation. It also includes constructs and indicators that help build specificity and operationalize the domains we intend to measure. Finally, it links the indicators to the intended modes of data collection.

We first describe the components proposed for inclusion in the matrix and then present specific examples of how the evaluation matrix might be completed for each of the three domains that are part of this study. We intend for these preliminary examples to help facilitate and frame subsequent discussions around each of the domains as we hone the constructs and indicators that will be ultimately included in the evaluation plan.

We introduce the evaluation matrix by outlining the *anticipated outcomes* of the program included in the program's logic model. Anticipated outcomes, in this case, refer to the expected outcomes that participants will experience as a result of the implementation of the program strategies. As the samples in later exhibits show, most of the anticipated outcomes included in the program logic model map to the specific *research questions* as found in the RFP (see Exhibits 4, 5, and 6). The preliminary model of the evaluation matrix we envision includes three additional fields, one identifying the **constructs** of interest that we intend to measure, another one identifying **indicators** that will help measure those constructs, and lastly a field indicating the intended **data sources**. Exhibit 2 shows these suggested components.

### Exhibit 2. Evaluation Matrix Components



We chose to add a field after the research questions identifying more precise **constructs**. Constructs are ways of re-framing research questions that point toward measurability. They are a logical step between research questions and the field we will discuss next, indicators.

**Indicators** are observable measures, and they occupy the position following constructs in the evaluation matrix. Indicators reflect definite quantitative or qualitative means to measure the



constructs of interest. It might take multiple indicators to measure a given construct. Deciding which indicators to include is an important exercise that needs to be guided by previous research and is typically done in consultation with multiple stakeholders. For this reason, we expect to refine these indicators as we continue with the literature review and engage with the technical review group. The objective for the evaluation plan is to select the indicators that will inform the development of the data collection instruments and that will provide metrics that reliably assess things like knowledge, attitudes, and behaviors of interest.

Last in the matrix, we include a field that outlines the *data sources* we intend to use to gather the indicators of interest. As mentioned earlier, SPR will use five sources of data for this study (three of which are covered in bullet #3 below):

- **Student Administrative Records.** SPR will coordinate the data extract and transfer process with school districts to obtain student-level data in the schools selected for the study. The main objective in this activity is to obtain student records for all students in each of the schools—those who participate in POL and those who do not. These data are the basis for the quasi-experimental component of the study and will include the following fields:
  - Unique identifiers for all students (with student proxy id generated by the school district);
  - Participation in POL identifier for current and prior academic years;
  - Student-level demographic information (e.g., gender, race/ethnicity, free and reduced lunch status, special education, etc.);
  - Standardized assessment data in ELA for current and prior academic year, and GPA and ELA end-of-course grades
  - Student-level records of attendance, suspensions, and expulsions.
- **Student Pre- and Post-Surveys.** SPR will design pre- and post-student survey instruments that measure changes in the academic engagement, poetry appreciation and engagement, a range of attitudes toward poetry and engagement in school, and social and emotional development domains. The pre-survey data will provide baseline measurements of students’ knowledge, attitudes, and behaviors in the domains of interest. The plan is to include the same measurements included in both the pre-survey and the post-survey, and to then quantify changes in students’ responses. To meet the conditions for analyses, pre-surveys need to be administered before a student has experienced direct POL programming and the posttest needs to be administered directly after the end of POL activities.
- **Teacher and Administrator Interviews, and Student Interviews and Focus Groups.** These data include on-site, in-person interviews with administrators and teachers, and interviews and focus groups with students to document the “story” of POL in the optimally implementing schools selected for the study, from the initiation of participation through the reception of the program by students. During day-long site visits, SPR will interview teachers, students, and administrators, visit classrooms participating in POL and, if possible, conduct focus groups with students. Interview protocols will be designed such that they yield data that inform the research questions in the domains of interest.



In the remainder of the document we present three examples, one for each of the three domains SPR will examine in the evaluation of POL: academic engagement and performance, poetry appreciation and engagement, and social and emotional engagement. Each of the examples (Exhibits 4, 5, and 6) map sample outcomes from the logic model to the research questions, suggest constructs and indicators, and align them with the data sources. SPR will add to and refine the evaluation matrix in preparation of the evaluation plan, in consultation with members of the NEA and the technical review group. We will use the literature review to further inform the constructs and indicators we select.

## Understanding the Matrices


Note that the three research domains that we have developed matrices for closely overlap with but do not exactly align with the four impact areas shown in the logic model. In part, this is due to the fact that the NEA requested a study that is more focused on *student outcomes* than teachers and communities, thus our research domains focus primarily on students. Outcomes related to teachers and communities are not a focus of this study, though we will lift up findings related to both in the likely event that they will emerge as a natural and related part of our inquiry process. Slight alignment shifts are also due to the fact that the logic model has been revised since the study was launched; assisting the NEA and program partners with the revision was part of SPR’s charge in conducting the study. The first two matrices are focused on student academic engagement and performance and student socio-emotional development, respectively. These represent domains that map almost exactly to their respective impact areas on the logic models. The third research domain—student poetry and appreciation—is overlapping with its impact area, but with an important difference in that it focuses on outcomes associated with students, whereas the logic model impact area encompasses community members as well. Exhibit 3 shows the relationship of research domains to logic model impact areas.

**Exhibit 3. Research Domains and Logic Model Impact Areas**

Research Domain	Logic Model Impact Area
Student Academic Engagement and Performance	Students’ Academic Skills and Performance are Strengthened
Student Social and Emotional Development	Students’ Social and Emotional Health Increases
Student Poetry Appreciation and Engagement	Awareness and Appreciation of Poetry and Arts Programming Increases <sup>33</sup>
	Teacher Knowledge of and Confidence in Teaching Poetry Increases

<sup>33</sup> Like the research domain, this impact area includes students; however, unlike the research domain, it also includes outcomes associated with community members.



What follows are the three matrices, each focused on a research domain. The first column of each matrix lists study research questions that fall within the research domain. To the right of the research questions column is a set of columns that list the anticipated outcomes associated with this impact area/research domain. Outcomes directly tied to the research question are marked with a “

### Exhibit 4. Academic Engagement and Performance

Research Questions	Outcomes				Constructs	Indicators	Data Source				
	↑ Learning Engage	↑ Analytical Cap	↑ Lit History	↑ ELA Proficiency			Student Records	Student Surveys	Student Interviews	Teacher Interviews	Admin Interviews
Does student participation in POL correlate with increased academic engagement in English classes and/or in school more generally?					- Academic engagement in English classes - Academic engagement in school	- # absences - # suspensions - Relevant results from interviews and surveys					
					- Academic achievement in English classes and in school	- Standardized ELA scale scores - Standardized ELA proficiency scores - Student GPA					
Does POL have a positive impact on students' reading comprehension and/or analytical skills (particularly regarding poetry)?					- Reading comprehension - Analytical skills reading poetry	- Scale scores in standardized test scores in reading comprehension - Standardized formative student assessments scores					
Are POL students more likely to be comfortable using metaphor, simile, or a wider vocabulary in writing or in speaking after the program?					- Comfort with different poetry forms and devices - Vocabulary development	- Relevant results from interviews and surveys - Vocabulary test score gains					



### Exhibit 5. Social and Emotional Development

Research Questions	Outcomes			Constructs	Indicators	Data Source				
	↑ Confidence	↑ Sense of Self	↑ Comm Engage			Student Records	Student Surveys	Student Interviews	Teacher Interviews	Admin Interviews
Do students experience increased self-confidence in their public speaking abilities, social skills, intellectual abilities, or in general after participating in POL?				- Self-confidence - Prosocial attitudes and behavior	- Scaled survey scores related to confidence in public speaking - Survey scores related to frequency of peer engagement - Relevant results from interviews					
Do students feel more secure, empowered, and/or articulate in expressing themselves after participating in POL?				- Self-confidence - Empowerment	- Scaled scores related to comfort with self-expression - Relevant results from interviews					
Are students more likely to engage in civic activities during or after participation in POL?				- Civic participation	- Survey scores related to volunteerism hours - Survey scores related to participation in community activities - Survey scores related to involvement in student leadership - Relevant results from interviews					
Are students more likely to engage in extracurricular activities during or after participation in POL?				- In- and out-of-school engagement	- Survey scores related to participation in extracurricular activities, school clubs, and/or after school programs - Relevant results from interviews					





### Exhibit 6. Poetry Appreciation and Engagement

Research Questions	Outcomes				Constructs	Indicators	Data Source				
	↑ Poetry exposure	↑ Arts appreciation	↑ Exposure to SAA/NEA/PF	↑ Art Prog			Student Records	Student Surveys	Student Interviews	Teacher Interviews	Admin Interviews
Does participating in POL correlate with students' increasing their likelihood of reading or writing poetry for pleasure?					<ul style="list-style-type: none"> <li>- Attitudes toward reading poetry</li> <li>- Attitudes toward writing poetry</li> </ul>	<ul style="list-style-type: none"> <li>- Frequency scale of poetry exchanges</li> <li>- Relevant results from interviews and surveys</li> </ul>					
Does POL promote the sharing of poems among students and if so, by what means? Do students talk about poetry or POL on social media networks after the participation versus before?					<ul style="list-style-type: none"> <li>- Sharing poetry with peers</li> <li>- Sharing poetry via social media (Facebook, Instagram)</li> </ul>	<ul style="list-style-type: none"> <li>- Frequency scale of poetry exchanges via social media type</li> <li>- Relevant results from interviews and surveys</li> </ul>					
Does a teacher or a school's participation in POL correlate with greater incorporation of poetry in classroom/school instruction?					<ul style="list-style-type: none"> <li>- Increased poetry content in curriculum</li> </ul>	<ul style="list-style-type: none"> <li>- Frequency scale of poetry inclusion in curriculum</li> <li>- Relevant results from interviews</li> </ul>					
Does POL participation correlate with any attitudinal changes toward poetry, academics, public speaking/performing, or post high school aspirations?					<ul style="list-style-type: none"> <li>- Attitudes toward poetry</li> <li>- Attitudes toward public speaking</li> <li>- Beliefs about post high school aspirations</li> </ul>	<ul style="list-style-type: none"> <li>- Scale of attitude toward poetry</li> <li>- Scale of comfort with public speaking</li> <li>- Attitude about finishing HS</li> <li>- % planning to go to college</li> <li>- Relevant results from interviews</li> </ul>					



## Next Steps

The next steps for the evaluation are to solicit feedback from the NEA and program partners on the Study Framing Document and revise it accordingly. Concurrently and following on our work on the Study Framing Document, we will begin developing the evaluation plan that will serve as the detailed blueprint for our evaluation design. The plan will include the following components: (1) research questions, (2) evaluation design description, (3) detailed description of methods and data collection instruments and sources, (4) analysis plan, (5) sampling strategy, (6) timeline, (7) human subjects protection approach (i.e., IRB approval and plan for adherence to privacy laws), (8) communications plan, and (9) reporting plan. The draft evaluation plan is scheduled for submission on April 28, 2017, with a final evaluation plan due on May 19, 2017. The research team will also begin preparing the OMB/PRA clearance package, including Federal Register Notice, OMB 83-I, supporting statements, and supplemental materials. The clearance package is contractually scheduled for submission on August 18, 2017, but, in order to increase our chances of receiving approval to collect data in the time frame we wish to collect it, we plan to submit the package by June 30, 2017.<sup>34</sup>

---

<sup>34</sup> Because of contract-related delays, the evaluation plan was submitted in December 2017 and the Paperwork Reduction Act clearance package was submitted in April 2018.



This page was intentionally left blank.

# Appendix B: Bibliography



This page was intentionally left blank.



- Athanases, Steven Z. "Performing the Drama of the Poem: Workshop, Rehearsal, and Reflection." *English Journal* 95, no. 1 (2005): 88-96.
- Beatty, Michael J. "Communication Apprehension as a Determinant of Avoidance, Withdrawal and Performance Anxiety." *Communication Quarterly* 35, no. 2 (1987): 202-217.
- Beatty, Michael J., and Matthew H. Friedland. "Public Speaking State Anxiety as a Function of Selected Situational and Predispositional Variables." *Communication Education* 39, no. 2 (1990): 142-147.
- Bonate, Peter L. *Analysis of Pretest-Posttest Designs*. CRC Press, 2000.
- Borsboom D, Mellenbergh GJ, van Heerden J. "The Theoretical Status of Latent Variables." *Psychological Review* 110, no. 2 (2003): 203-219.
- Bransford, John D., James S. Catterall, Richard J. Deasy, Paul D. Goren, Ann E. Harman, Doug Herbert, Felice J. Levine, and Steve Seidel. *The Arts and Education: New Opportunities for Research*. Washington, DC: Arts Education Partnership, 2004.
- Bresler, Liora, and Margaret Macintyre Latta. "A Unified Poet Alliance: The Personal and Social Outcomes of Youth Spoken Word Poetry Programming." *International Journal of Education and the Arts* 11, no. 2 (2010): 1-25.
- Carifio J and Perla R. "Resolving the 50-year Debate Around Using and Misusing Likert Scales." *Medical Education* 42, no. 12 (2008): 1150-1152.
- Catterall, James S. *Doing Well and Doing Good by Doing Art: A 12-year National Study of Education in the Visual and Performing Arts*. Los Angeles: I-Group Books, 2009.
- Catterall, James S., Susan A. Dumais and Gillian Hampden-Thompson. "The Arts and Achievement in At-Risk Youth: Findings from Four Longitudinal Studies. Research Report# 55." *National Endowment for the Arts*, 2012.
- Catterall, James, Richard Chapleau, and John Iwanaga. "Involvement in the Arts and Human Development: General Involvement and Intensive Involvement in Music and Theater Arts." *Champions of Change: The Impact of the Arts on Learning*, (1999): 1-18.
- Century, Jeanne, and Amy Cassata. "Implementation Research: Finding Common Ground on What, How, Why, Where, and Who." *Review of Research in Education* 40, no. 1 (2016): 169-215.
- Clark, Lee Anna, and David Watson. "Constructing Validity: Basic Issues in Objective Scale Development." *Psychological Assessment* 7, no. 3 (2007): 309-319.



- Crawford Barniskis, Shannon. "Graffiti, Poetry, Dance: How Public Library Art Programs Affect Teens Part 2: The Research Study and Its Practical Implications." *Journal of Research on Libraries and Young Adults* 2, no. 3 (2012).
- Crozer, Karen J. "American Poetry & A Paradigm of Play: Transforming Literature with Young Children." PhD diss., The Claremont Graduate University, Claremont, 2014.
- Darling-Hammond, Linda. "Teachers and Teaching: Testing Policy Hypotheses from a National Commission Report." *Educational Researcher* 27, no. 1 (1998): 5-15.
- Daykin, Norma, Judy Orme, David Evans, Debra Salmon, Malcolm McEachran, and Sarah Brain. "The Impact of Participation in Performing Arts on Adolescent Health and Behavior: A Systematic Review of the Literature." *Journal of health psychology* 13, no. 2 (2008): 251-264.
- DeVellis RF. *Scale Development Theory and Applications*. Thousand Oaks, CA: Sage; 2003.
- Durlak, Joseph A. *Handbook of Social and Emotional Learning: Research and Practice*. New York: Guilford Publications, 2015.
- Dwyer, M. Christine. "Reinvesting in Arts Education: Winning America's Future Through Creative Schools." *President's Committee on the Arts and the Humanities*, (2011).
- Eccles, Jacquelynne S., Bonnie L. Barber, Margaret Stone, and James Hunt. "Extracurricular Activities and Adolescent Development." *Journal of Social Issues* 59, no. 4 (2003): 865-889.
- Elpus, Kenneth. "Arts Education and Positive Youth Development: Cognitive, Behavioral, and Social Outcomes of Adolescents Who Study the Arts." *National Endowment for the Arts*, (2013).
- ESSA and Arts Education: 7 Basics to Know*. Washington D.C.: Americans for the Arts, 2015.
- Fisher, Douglas, and Nancy Frey. "Implementing a Schoolwide Literacy Framework: Improving Achievement in an Urban Elementary School." *The Reading Teacher* 61, no. 1 (2007): 32-43.
- Fisher, Maisha. "Open Mics and Open Minds: Spoken Word Poetry in African Diaspora Participatory Literacy Communities." *Harvard Educational Review* 73, no. 3 (2003): 362-389.
- Fisher, Maisha T. *Writing in Rhythm: Spoken Word Poetry in Urban Classrooms*. New York: Teachers College Press, 2007.
- Fisher, Maisha T. "From the Coffee House to the School House: The Promise and Potential of Spoken Word Poetry in School Contexts." *English Education* 37, no. 2 (2005): 115-131.



- Flanagan, Constance A., Amy K. Syvertsen, and Michael D. Stout. "Civic Measurement Models: Tapping Adolescents' Civic Engagement. CIRCLE Working Paper 55." *Center for Information and Research on Civic Learning and Engagement (CIRCLE)*, (2007).
- Fredricks, Jennifer, Wendy McColskey, Jane Meli, Joy Mordica, Bianca Montrosse, and Kathleen Mooney. "Measuring Student Engagement in Upper Elementary through High School: A Description of 21 Instruments. Issues & Answers. REL 2011-No. 098." *Regional Educational Laboratory Southeast* (2011).
- Goldstein, Thalia R. "Correlations Among Social-Cognitive Skills in Adolescents Involved in Acting or Arts Classes." *Mind, Brain, and Education* 5, no. 2 (2011): 97-103.
- Hamedani, M. G., and Linda Darling-Hammond. "Social Emotional Learning in High School: How Three Urban High Schools Engage, Educate, and Empower Youth." *Stanford Center for Opportunity Policy in Education*. March (2015).
- Hanson, Thomas L., and Jin-Ok Kim. "Measuring Resilience and Youth Development: The Psychometric Properties of the Healthy Kids Survey. Issues & Answers. REL 2007-No. 34." *Regional Educational Laboratory West* (2007).
- Harding, David J., and Kristin S. Seefeldt. "Mixed Methods and Causal Analysis." In *Handbook of Causal Analysis for Social Research*, pp. 91-110. New York: Springer, 2013.
- Harland, John, Kay Kinder, Pippa Lord, Alison Stott, Ian Schagen, Jo Haynes, Linda Cusworth, Richard White, and Riana Paola. *Arts Education in Secondary Schools: Effects and Effectiveness*. Massachusetts: National Foundation for Education Research, 2000.
- Holbrook, Sara, and Michael Salinger. *Outspoken!: How to Improve Writing and Speaking Skills Through Poetry Performance*. Portsmouth, NH: Heinemann Educational Books, 2006.
- Hughes, Janette. "New Media, New Literacies and the Adolescent Learner." *E-Learning and Digital Media* 6, no. 3 (2009): 259-271.
- Inoa, Rafael, Gustave Weltsek, and Carmine Tabone. "A Study on the Relationship Between Theater Arts and Student Literacy and Mathematics Achievement." *Journal for Learning Through the Arts* 10, no. 1 (2014).
- Ivey, Gay, and Karen Broadus. "Just Plain Reading: A Survey of What Makes Students Want to Read in Middle School Classrooms." *Reading Research Quarterly* 36, no. 4 (2001): 350-377.
- Jerald, Craig D. "Benchmarking for Success: Ensuring US Students Receive a World-Class Education." *National Governors Association*, (2008).
- Jocson, Korina M. *Youth Poets: Empowering Literacies in and out of Schools*. New York: Peter Lang, 2008.





- Jolliffe, Darrick, and David P. Farrington. "Development and Validation of the Basic Empathy Scale." *Journal of Adolescence* 29, no. 4 (2006): 589-611.
- Joronen, Katja, Anne Konu, H. Sally Rankin, and Päivi Åstedt-Kurki. "An Evaluation of a Drama Program to Enhance Social Relationships and Anti-Bullying at Elementary School: A Controlled Study." *Health Promotion International* 27, no. 1 (2012): 5-14.
- Kim, Ah-Jeong, and David Boyns. "Joining the Spectrum: An Interdisciplinary Inquiry into Theatre as an Intervention for Autism Diagnosed Teens." (working paper, 2015).
- Kleinman, Sherryl, Martha A. Copp, and Karla A. Henderson. "Qualitatively Different: Teaching Fieldwork to Graduate Students." *Journal of Contemporary Ethnography* 25, no. 4 (1997): 469-499.
- Koukis, Susan L. "At the Intersection of Poetry and a High School English Class: 9th Graders' Participation in Poetry Reading Writing Workshop and The Relation to Social and Academic Identities' Development." PhD diss., Ohio State University, Ohio, 2010.
- Lazzari, Marceline M., Kathryn A. Amundson, and Robert L. Jackson. "We Are More Than Jailbirds: An Arts Program for Incarcerated Young Women." *Affilia- Journal of Women and Social Work* 20, no. 2 (2005): 169-185.
- Martin, Andrew J., Marianne Mansour, Michael Anderson, Robyn Gibson, Gregory AD Liem, and David Sudmalis. "The Role of Arts Participation in Students' Academic and Nonacademic Outcomes: A Longitudinal Study of School, Home, And Community Factors." *Journal of Educational Psychology* 105, no. 3 (2013): 709.
- McArdle, John J., Emilio Ferrer-Caja, Fumiaki Hamagami, and Richard W. Woodcock. "Comparative Longitudinal Structural Analyses of the Growth and Decline of Multiple Intellectual Abilities Over the Life Span." *Developmental Psychology* 38, no. 1 (2002): 115.
- McCroskey, James C., and Michael J. Beatty. "Communication Apprehension and Accumulated Communication State Anxiety Experiences: A Research Note." (1984): 79-84.
- Morgan, Stephen L., and Christopher Winship. *Counterfactuals and Causal Analysis: Methods and Principles for Social Research*. Cambridge: Cambridge University Press, (2007).
- National Council of Teachers of English. *Standards for the English Language Arts*. Delaware: International Reading Association, 1996.
- National Research Council. *Scientific Research in Education*, Edited by. Richard Shavelson and Lisa Towne. Washington, D.C.: National Academies Press, 2002.
- Parsad, Basmat, and Maura Spiegelman. "Arts Education in Public Elementary and Secondary Schools: 1999-2000 and 2009-10. NCES 2012-014." *National Center for Education Statistics*, 2012.



- Podlozny, Ann. "Strengthening Verbal Skills Through the Use of Classroom Drama: A Clear Link." *Journal of Aesthetic Education* 34, no. 3/4 (2000): 239-275.
- Rivkin, S.G., Hanusheck, E.A., and Kain, JF. "Teachers, Schools, and Academic Achievement." *Econometrika* 73, no.2 (2005), 417-458.
- Rosenbaum, Paul R., and Donald B. Rubin. "The Central Role of the Propensity Score in Observational Studies for Causal Effects." *Biometrika* 70, no. 1 (1983): 41-55.
- Schwartz, Lisa K., Lisbeth Goble, Ned English, and Robert F. Bailey. "Poetry in America: Review of the Findings." University of Chicago: Submitted to The Poetry Foundation (2006).
- Thomas, M. Kathleen. "Music Education and Its Causal Impact on Student Engagement and Success." (working paper, 2016).
- Walsh-Bowers, Richard, and Robert Basso. "Improving Early Adolescents' Peer Relations Through Classroom Creative Drama: An Integrated Approach." *Children & Schools* 21, no. 1 (1999): 23-32.
- Vaughn, Kathryn, and Ellen Winner. "SAT Scores of Students Who Study the Arts: What We Can and Cannot Conclude About the Association." *Journal of Aesthetic Education* 34, no. 3/4 (2000): 77-89.
- Winner, Ellen, and Lois Hetland. "Beyond the Soundbite: Arts Education and Academic Outcomes." In Conference proceedings. J. Paul Getty Trust, publishers. 2001.
- Winner, Ellen, and Monica Cooper. "Mute Those Claims: No Evidence (Yet) For a Causal Link Between Arts Study and Academic Achievement." *Journal of Aesthetic Education* 34, no. 3/4 (2000): 11-75.
- Winner, Ellen. "The Arts and Academic Improvement: What the Evidence Shows: Executive Summary of the Harvard Project Zero Reviewing Education and the Arts Project (REAP)." (2000).
- Wiseman, Angela M. "Now I Believe if I Write I Can Do Anything": Using Poetry to Create Opportunities for Engagement and Learning in the Language Arts Classroom." *Journal of Language and Literacy Education* 6, no. 2 (2010): 22-33.
- Wiseman, Angela. "Powerful students, powerful words: Writing and Learning in a Poetry Workshop." *Literacy* 45, no. 2 (2011): 70-77.
- Weiss, Jen, and Scott Herndon. *Brave New Voices: The Youth Speaks Guide to Teaching Spoken Word Poetry*. Portsmouth, NH: Heinemann, 2001.



This page was intentionally left blank.



## Appendix C: Power Analysis



This page was intentionally left blank.



## Power Analyses

After a comprehensive review of empirical studies measuring the impact of programs on a broader range of student outcomes, we propose a sample size of the evaluation 360 POL participants at selected schools. Various studies show that the effects of programs or interventions that are similar to POL in terms of duration, intensity, or content tend to have small effects (about one fifth of a standard deviation) on a variety of student outcomes. For example, Durlak, Weissberg, & Pachan's (2010) meta-analysis studying the effects of 41 after-school programs on student outcomes—student self-perceptions, bonding to school, positive social behaviors, or other aspects of school performances such as achievement test scores, grades, and school attendance—reveals effect sizes between 0.14 and 0.37. Conventionally, differences of 0.2, 0.5, and 0.8 standard deviations are considered 'small', 'medium', and 'large' effect sizes respectively (Lipsey & Wilson, 2001).

More specifically, for this work we examined more closely two studies that shared important similarities with the current evaluation. One study consisted on infusing theater based learning into the curriculum on verbal test scores and the other one examined changes in some aspects of socio-emotional development and attitude changes towards a specific subject after a participating in a short duration program. In the first study, Inoa, Weltsek, & Tabone's (2014) found that students who participated in theater based learning had higher reading scores between those who participated and those who did not. Because achievement is only one of the student outcomes we also considered additional outcomes. For example, the second study, Crombie, Walsh, & Trinneer (2003) examined changes on students' confidence, importance, and intentions regarding a specific discipline (science and technology) after participating in a program over the summer. One of the similarities of this study with our evaluation is that it examines changes in students' perceptions utilizing a pre and a post surveys. Overall their results showed there were small differences in students' outcomes after participation in the program.

Both of these studies provided the statistical information to conduct our power analyses and offered the data to make the necessary assumptions to calculate the minimum detectable effects for our current evaluation. As shown in the Exhibit 1, the results of the analyses taking into account these assumptions and considering different sample sizes taking into account response rates

Exhibit 1 estimates the minimum detectable effects (MDEs), which are the minimum value of the difference between treatment and comparison groups that would pass the statistical significance test given expected sample sizes, power level, and statistical confidence level. Since impact analyses may be conducted for the entire group and subgroups, Exhibit 1 shows the MDEs for three hypothetical scenarios, using the standard level of power usually desired for impact analyses (80%), and estimates MDEs at the 90% confidence level. All the estimations assume that the size of the comparison group will be equal to that of each treatment group and use two-tailed tests of independence of means.



**Exhibit 1:**  
**Minimum Detectable Effects (MDE's) Observable Under Two Sample Sizes**

	All Participants	Assuming 50% response rate	Assuming 80% response rate
<b>Sample Sizes</b>			
Program Group (n=360) (10 schools)	3,600	1,800	2,880
Comparison group (n=360) (10 schools)	3,600	1,800	2,880
<b>MDEs</b>			
Average confidence scores ( $M=3.86$ $SD = .88$ )			
<i>Maximum MDE with sample size</i>	-	.08	.06
Average reading scores ( $M=193.16$ $SD = 22.74$ )			
<i>Maximum MDE with sample size</i>	1.37		

Based on these assumptions, it appears that a study conducted with POL participants and a comparison group (assuming a 80% response rate in the survey) will be able to detect a difference of .06 points or more in confidence scores ( $M=3.86$ ,  $SD= .88$ ) of the participant and the comparison group at 80% power (i.e., if the evaluator conducted the analysis 100 times, the difference would be statistically significant 80 percent of the time). Because MDEs are sensitive to sample size, MDEs will change if response rates are lower (see Exhibit 1). Thus, we acknowledge that it is critical to implement strategies to boost survey response rates to ensure the success of the study. In terms of reading scores (assuming we obtain data for all students in the school) will be able to detect a difference of 1.37 points or more in reading scores ( $M=3.86$ ,  $SD= .88$ ). It is important to note, that states follow different testing regimes for these reason we may need to standardize academic scores before analyses.

Note that MDEs are not guarantee of program impacts. Rather, they show the minimum size of the impact we expect to detect based on given sample sizes and our estimation of how much the impacts will vary within each group (program vs. comparison). We make no assumptions about the size of the impact (i.e., the average difference between the program and comparison group outcomes). The impact may well be zero, in which case our tests of impact will likely not be able to reject the null hypothesis of no difference between groups. However, if the impacts are greater than zero, we will be able to detect them only if they are larger than MDEs (and only 80% of the time). In short, the statistical power of the study is not directly related to whether impacts exist. Because we expect to find some differences in program implementation across schools, we also assume we will need to control for such differences by adding fixed effects in all statistical models.



## References

- Crombie, G., Walsh, J.P., Trinneer A. (2003). Positive Effects of Science and Technology Summer Camps on Confidence, Values, and Future Intentions. *Canadian Journal of Counseling* 37, no. 4. 257-269.
- Durlak, J. A., Weissberg, R. P., & Pachan, M. (2010). A meta-analysis of after-school programs that seek to promote personal and social skills in children and adolescents. *American Journal of Community Psychology*, 45, 294-309.
- Inoa, R., Weltsek, G., and Tabone, C. (2014). A Study on the Relationship Between Theater Arts and Student Literacy and Mathematics Achievement. *Journal for Learning Through the Arts* 10, no. 1. 1-21.
- Lipsey M.W., Wilson, D. B. (2001). *Practical meta-analysis*. London: SAGE.



## Appendix D: Customizable Email for School Recruitment



This page was intentionally left blank.



[Contact - Prefix] [Contact - First Name] [Contact – Last Name]  
[Contact - Title]  
[District Name]  
[District Address 1]  
[District Address 2]  
[City], [State] [ZIP]

Dear [Contact - Prefix] [Contact– Last Name]:

My name is \_\_\_\_\_ and I am contacting you from the State Arts Agency that serves schools in your region and on behalf of the National Endowment of the Arts (NEA). I wanted to alert you that we have recommended [insert school name] to participate in a research study about how Poetry Out Loud (POL) is implemented in your school. We have high hopes for this study since it is an opportunity to examine how POL programming benefits youth, how it enriches the English Language Arts curriculum, and affords opportunities for teachers to expand their knowledge base in teaching poetry. Moreover, the results will yield important information about how POL is implemented across schools providing opportunities to learn more about effective POL programmatic practices.

This study, commissioned by the NEA, is primarily focused on understanding the effect of POL on student engagement, academic achievement, and social-emotional outcomes and examine the variety of factors involved in the successful implementation of the program. A total of 10 schools across the U.S. will be selected to take part of the study, and we hope yours is one of them.

To conduct the data collection and research activities for the study, the NEA has contracted with Social Policy Research. The study will be comprised of three main research activities: (1) pre and post online student surveys of POL participants and non-POL participant; (2) site visits to conduct interviews and focus groups with students, teachers, and administrators; and (3) the provision of de-identified student level data. For additional details about the study please see the enclosed one-page summary.

To continue this selection process, a research team member from SPR will be contacting you in the coming weeks. We expect research activities will begin in the Fall of 2018 and take place throughout the 2018-2019 school year. We sincerely hope that you will consider the possibility of [insert school name]'s participation in this study. If you have any questions about the study, please contact Melissa Mack at (510) 788-2478] or [melissa\_mack@spra.com].

Sincerely,

[insert name]



This page was intentionally left blank.

## Appendix E: Consent and Assent Forms



This page was intentionally left blank.



## PARENT/GUARDIAN PASSIVE CONSENT TO PARTICIPATE IN RESEARCH

Dear Parent:

[Name of School] will be participating in an evaluation of the Poetry Out Loud program that the school offers to students [specify grade level, if appropriate]. Poetry Out Loud is a national arts program that encourages high school-aged youth to learn about poetry through memorization and recitation. The purpose of the study is to understand how reading and performing poetry affects student engagement, learning, and grades.

All students in the school will be given the opportunity to fill out two short surveys in the Fall and Spring of this academic year about their experiences with poetry. The survey is anonymous and voluntary. Your child's grade does not depend on answering the questions. Your child does not have to fill out any part of the questionnaire that makes him or her feel uncomfortable or that you think your child should not answer.

Students who are participating in Poetry Out Loud may be invited to participate in an interview or focus group with a researcher.

If for any reason you do not wish your son or daughter to participate in the survey, please sign this form and return it by [date].

---

Student's Name (please print)

---

Parent signature

Date: \_\_\_\_\_

The study is funded by the National Endowment for the Arts and is being conducted by Social Policy Research Associates. If you have any questions about the study or problems related to the study you can talk to your principal; the project director at the NEA, [insert appropriate NEA contact], who can be reached at [phone] or [email]; or the director of the study, Melissa Mack. You can call or email her at (510) 788-2478 or [Melissa\\_Mack@spra.com](mailto:Melissa_Mack@spra.com). If you have questions about the study but want to talk to someone else who is not a part of the study, you can call the Solutions Independent Review Board at (855) 226-446.



## STUDENT ASSENT TO PARTICIPATE IN INTERVIEWS AND FOCUS GROUPS

(This form will be distributed to students who are asked to participate in interviews and focus groups.)

### 1. What will happen to me in this study?

*Description of the study:* This study looks at student experiences with poetry to understand how the Poetry Out Loud program is working in classrooms like yours across different schools. This study seeks to understand how reading and performing poetry affects student engagement, learning and grades. As a participant in this study you may be asked to participate in an interview or focus group. Interviews and focus groups will last between 30 minutes and one hour. During the interview/focus group, you will be asked questions about your experiences at your high school and in your classes. With your permission, the interview will be audio taped and we will selectively transcribe the tapes.

### 2. Can anything bad happen to me?

*Risks or Discomforts of Participating in the Study:* There is very minimal risk for participating in the study. If you feel uncomfortable with any of the questions you are asked you do not have to answer the question or continue participating in the interview.

### 3. Can anything good happen to me?

*Benefits of Participating in the Study:* We cannot guarantee any benefits of this study but it might be enjoyable to talk about your experiences at your high school and what we learn about your experiences in your school might help other schools and classrooms be better places for students.

### 4. Will anyone know who I am in the study?

*Confidentiality:* Your name will not be used in the study; we will identify you by your grade level.

### 5. Who can I talk to about the study?

*Contact Information:* If you have any questions about the study or problems related to the study you can talk to your teacher, who can put you in touch with the study directors.

### 6. What if I do not want to do this?

*Voluntary Participation:* You can choose not to participate in the study or you can change your mind and stop being in the study at any time and you do not have to answer any of the questions asked of you without getting in trouble and without it affecting your grades in school.





## STUDENT ASSENT FORM TO PARTICIPATE IN SURVEYS

(A version of this form will appear on the front page of the electronic survey. Students will indicate their assent to participate by clicking the “I Agree” button or something similar.)

### 1. What will happen to me in this study?

*Description of the study:* This survey is a part of a study that looks at student experiences with poetry to understand how the Poetry Out Loud program is working in classrooms like yours across different schools. This study seeks to understand how reading and performing poetry affects student engagement, learning and grades. As a participant in this study you will be asked to participate in this survey, which will take approximately 20-30 minutes to complete. The survey will ask you questions about your experience in your community, your school and your classes.

### 2. Can anything bad happen to me?

*Risks or Discomforts of Participating in the Study:* There is minimal risk to participating in this survey. If you feel uncomfortable with any of the questions you are asked you do not have to answer the question or continue participating in the survey.

### 3. Can anything good happen to me?

*Benefits of Participating in the Study:* We cannot guarantee any benefits of this study but what we learn about your experiences in your school might help other schools and classrooms be better places for students.

### 4. Will anyone know who I am in the study?

*Confidentiality:* Your name will not be used in the study; we will identify you by your grade level.

### 5. Who can I talk to about the study?

*Contact Information:* If you have any questions about the study or problems related to the study you can talk to your teachers, who can put you in touch with the study directors.

### 6. What if I do not want to do this?

*Voluntary Participation:* You can choose not to participate in the study or you can change your mind and stop being in the study at any time and you do not have to answer any of the questions asked of you without getting in trouble and without it affecting your grades in school.



This page was intentionally left blank.

## Appendix F: Interview and Focus Group Protocols



This page was intentionally left blank.



## POL Student Interview Protocol

My name is \_\_\_\_\_, and I am with Social Policy Research Associates, the organization that is conducting a study about the Poetry Out Loud program. Thank you for taking the time to talk to us. Our goal today is to learn about your experiences in Poetry Out Loud program.

Public reporting burden for this collection of information is estimated to average 45 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. This agency may not conduct or sponsor, and a person is not required to respond to, a collection information unless that collection displays a valid OMB control number XXXX-XXXX, expiring [date]. Our discussion here should last about 45 minutes.

Your participation in this interview is voluntary, and there is no right or wrong answer – we just want to understand your experiences. There are no program consequences (i.e., loss of benefits) for deciding not to participate in the interview, or for deciding not to answer any particular question. Also please note that your name will not be associated with any information you provide. We will keep your responses private to the extent permitted by law.

[if you will be recording] We will be taking notes so we can later recall your perspectives more accurately. In addition, so we can stay focused on the conversation, we would like to record today's discussion. If at any point you would like me to pause or turn off the recorder, please let me know. I want to let you know that Social Policy Research Associates will not use your name in any reports.

### Background

1. Tell me a little bit about how you feel about school. Do you like it? Dislike it? Do you have favorite subjects and least favorite subjects?
2. What's something you like to do outside of school?

### Poetry Out Loud

3. Tell me about the poetry you've studied in school this year. (e.g., did it happen all in one week, or does your teacher weave it in with other types of writing? do you read and discuss particular poems as a class? get assignments to write your own poem?)
  - a. Are you participating in the Poetry Out Loud competition?
  - b. Have you picked your poems and started memorizing them yet?
  - c. Why did you pick the poems you did?
  - d. How have you prepared to perform your poems – e.g. imagining being the person speaking trying on different roles and points of view?
4. Had you ever memorized a poem before Poetry Out Loud? If yes, when/what for? If no, tell me about what that was like?

### Poetry Appreciation & Engagement



5. What are some of the things you like about poetry? What are some of the things you dislike about poetry?
6. Do you have different feelings about different kinds of poetry that you've read? If so, what are they?
7. How is poetry different from other kinds of writing? What makes it special?
8. What do you think poetry is good for, if anything?
9. Do you write poetry?
10. How does poetry *work*? (if poetry were a machine, how would it function? what makes it GO?)
11. Has your feeling about poetry changed over time? If yes, what changed? When did the change happen?
12. Do you read poetry outside of school (not as homework)? If yes, what do you read? How often?
13. Do you write poetry on your own (that is, not as part of a school assignment)?
14. If you have access to social media, do you post poems on social media? If yes, what platforms?
15. If yes, your own poems or those of other people? If no, why not?

### Academic Engagement and Achievement

16. Do you think that studying poetry has helped you improve in your work in English class? In what way? [Probe to help them articulate specifics—has it improved their writing? Their reading comprehension? Their vocabulary?]
17. What are you learning through your study of poetry that is most meaningful or interesting to you? [For probes, consider: creative expression, different modes of expression, different perspectives/world views, etc.]
18. Has studying poetry changed the way you feel about studying English language and literature? If yes, in what way?
19. How about your other subjects or school in general? Has your experience with poetry studies changed the way you approach or think about other subjects? Or your interest in learning in general?

### Social & Emotional Development

20. Has studying poetry for POL helped you in any way? If so, how? (e.g., self-confidence, self-expression, increased sense of belonging, etc.)
  - a. Has reading and thinking about the poetry helped you? How?
    - i. Has it changed the way you see yourself?
    - ii. Has it changed your relationships with your friends? With school?
    - iii. Has it affected your participation in other activities – extracurricular or outside of school altogether?
    - iv.



- b. Has memorizing and reciting poems for others helped you? [*note: how students are able to respond to this question will depend on whether the student has started memorizing and practicing or even already performed the POL poem*]
  - i. Has it changed the way you see yourself?
  - ii. Has it changed your relationships with your friends? With school?
  - iii. Has it affected your participation in other activities – extracurricular or outside of school altogether?

## Wrap Up

- 21. I think you've answered all my questions. Do you have any questions for me? Is there anything else you would like to share about your relationship with poetry and participating in POL?



## POL Teacher Interview Protocol

My name is \_\_\_\_\_, and I am with Social Policy Research Associates, the organization that is conducting a study about the Poetry Out Loud program. Thank you for taking the time to talk to us. Our goal today is to learn about your experiences in Poetry Out Loud program.

Public reporting burden for this collection of information is estimated to average 45 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. This agency may not conduct or sponsor, and a person is not required to respond to, a collection information unless that collection displays a valid OMB control number XXXX-XXXX, expiring [date]. Our discussion here should last about 45 minutes.

Your participation in this interview is voluntary, and there is no right or wrong answer – we just want to understand your experiences. There are no program consequences (i.e., loss of benefits) for deciding not to participate in the interview, or for deciding not to answer any particular question. Also please note that your name will not be associated with any information you provide. We will keep your responses private to the extent permitted by law.

[if you will be recording] We will be taking notes so we can later recall your perspectives more accurately. In addition, so we can stay focused on the conversation, we would like to record today's discussion. If at any point you would like me to pause or turn off the recorder, please let me know. I want to let you know that Social Policy Research Associates will not use your name in any reports.

### Teacher Background

1. I'd like to learn a little bit more about you—how long have you been a teacher? How long have you been teaching at this school?
2. What do you love most about teaching English Language Arts? What do you find most challenging?
3. How comfortable do you feel teaching poetry? What do you enjoy about it? What do you find challenging?

### Experience with POL Curriculum

4. How long have you been teaching the POL curriculum? [If not new teachers] How did you get started with it?
5. Tell me a bit about your experience with the curriculum. Describe for me how it gets implemented in your classroom. (e.g., How are poems chosen? How does the process of choice, memorization, analysis, and performance work? How many total hours of class time? How many days of lesson plans? Portion of POL compared to the rest of the ELA curriculum?)
6. How has the POL program been helpful to you in your teaching? Are there ways that it could be improved?

### Perceptions of Student Outcomes-Academic





7. What kinds of poetry are your students most drawn to? Why? Do you have a sense of what they find most interesting about poetry? What do they find most challenging?
8. Are there any connections between your students' participation in POL and their performance in your English class? Probe around ELA-specific outcomes such as:
  - a. engagement in learning
  - b. reading comprehension
  - c. vocabulary development
  - d. analytical skills
  - e. writing
9. Have you noticed any changes in your students' attitudes about reading or writing poetry after participation in POL? How about their appreciation for poetry?

### Perceptions of Student Outcomes—Socio-emotional Development

10. A unique aspect of the POL program is the performance component. What are the benefits of this component part (i.e., what do students gain through the experience of performing poetry?) Can you share some specific examples? [Probe/listen for themes around empowerment/self-confidence]
11. Can you tell whether your students' participation has had any impact on their *engagement* in school in general? Can you describe? [Consider social interactions, leadership opportunities, etc.]
12. Can you tell whether your students' participation in POL has had any impact on the way they engage socially? On their engagement with other students? How about their engagement in learning overall? Describe.
13. To what extent does participation in POL affect students' understanding of the world? Of different cultures and perspectives?
14. To what extent does student participation influence students' understanding of themselves?

### Wrap Up

15. Have your feelings about poetry and about teaching poetry changed since you started participating in POL? If so, how?
  - a. Has this influenced your teaching practices?
  - b. Has it changed the extent to which you incorporate poetry into your curriculum?
16. Is there anything else you would like to share with me about the effects of POL participation on your students or yourself?



## State Arts Agency Administrator Interview Protocol

My name is \_\_\_\_\_, and I am with Social Policy Research Associates, the organization that is conducting a study about the Poetry Out Loud program. Thank you for taking the time to talk to us. Our goal today is to learn about your experiences in Poetry Out Loud program.

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. This agency may not conduct or sponsor, and a person is not required to respond to, a collection information unless that collection displays a valid OMB control number XXXX-XXXX, expiring [date]. Our discussion here should last about 30 minutes.

Your participation in this interview is voluntary, and there is no right or wrong answer – we just want to understand your experiences. There are no program consequences (i.e., loss of benefits) for deciding not to participate in the interview, or for deciding not to answer any particular question. Also please note that your name will not be associated with any information you provide. We will keep your responses private to the extent permitted by law.

[if you will be recording] We will be taking notes so we can later recall your perspectives more accurately. In addition, so we can stay focused on the conversation, we would like to record today's discussion. If at any point you would like me to pause or turn off the recorder, please let me know. I want to let you know that Social Policy Research Associates will not use your name in any reports.

### Administrator Background

1. I'd like to learn a little bit more about you—how long have you been with the State Arts Agency? What is your role there? (possible probes: do you have a background in teaching? the arts?)
2. Did you play a key role in bringing POL to your state?
  - a. If so, please give a brief account of how that came to be. (e.g., did someone from the NEA contact you? Did you hear about the program on your own and reach out to them?)
  - b. If not, can you share what you know about how your state came to participate in POL?

### Relationship Between SAA and POL

3. Tell me a little bit about how the SAA supports POL.
  - a. Does it have a mission to actively expand the schools participating in it?
  - b. Does it host the state-level finals?
  - c. Provide publicity?
  - d. Connect teaching artists (poets) to schools?
4. Does the SAA supplement the funding for POL that it receives from the NEA? If so, what are additional sources of funds and how much compared to the allocation from the NEA?



5. Compared to the other arts programming that the SAA supports, what is special about POL?
6. Why does the SAA continue to support POL? What does it see as the value of POL?

### Implementation and Outcomes

7. Has the agency done any of its own research or evaluation on POL?
8. What is your perspective on the elements that contribute to successful implementation of POL in a school?
9. Do you see differences in how successful the implementation of POL is at different participating schools?
10. Do you think POL increases community exposure to the work of the SAA? If so, how?
11. Do you think POL increases community participation in public arts programming? If so, how?

### Wrap Up

12. Is there anything else you would like to share with me about the effects of POL participation on schools, teachers, students, their families, the broader community?



## POL Student Focus Group Protocol

My name is \_\_\_\_\_, and I am with Social Policy Research Associates, the organization that is conducting a study about the Poetry Out Loud program. Thank you for taking the time to talk to us. Our goal today is to learn about your experiences in Poetry Out Loud program.

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. This agency may not conduct or sponsor, and a person is not required to respond to, a collection information unless that collection displays a valid OMB control number XXXX-XXXX, expiring [date]. Our discussion here should last about 60 minutes.

Your participation in this interview is voluntary, and there is no right or wrong answer – we just want to understand your experiences. There are no program consequences (i.e., loss of benefits) for deciding not to participate in the interview, or for deciding not to answer any particular question. Also please note that your name will not be associated with any information you provide. We will keep your responses private to the extent permitted by law.

[if you will be recording] We will be taking notes so we can later recall your perspectives more accurately. In addition, so we can stay focused on the conversation, we would like to record today's discussion. If at any point you would like me to pause or turn off the recorder, please let me know. I want to let you know that Social Policy Research Associates will not use your name in any reports.

### Poetry Exposure/Appreciation

1. How many of you studied poetry before this year? [Count # of affirmative responses]
  - a. For those who respond in the affirmative, get some information about that— when did they study it? What did that kind of study entail?
2. How many of you *enjoy* poetry?
  - a. What is it that you like about it?
  - b. Do you have favorite poets? Who are they? Why do you like their poetry?
3. How many of you dislike poetry or find it (or parts of it) difficult?
  - a. What is it about poetry that you find challenging? Is there something that you think might help make it less challenging/more enjoyable?
4. Tell me a bit about how what poetry studies in your English class is like.
  - a. What kinds of poems do you study?
  - b. Do you get to choose? If so, how do you make your choice? What are you drawn to?
  - c. What does studying poetry involve? [Depending on where they are in the curriculum, it should include memorization, analysis, and recitation. Feel free to probe so you know what they are doing. You are asking this question so that you know how to tailor some of the other questions, depending on where they are in the program and what they have done to this point.]
  - d. Do you study by yourself? In pairs or on group work?



## Poetry and Academic Outcomes

5. Do you think that studying poetry has helped you improve in your work in English class? In what way? [Probe to help them articulate specifics—has it improved their writing? Their reading comprehension? Their vocabulary?]
6. Tell me about the process of analyzing poetry. How would you describe it? What’s challenging about it? Is there something rewarding about it?
7. What are you learning through your study of poetry that is most meaningful or interesting to you? [For probes, consider: creative expression, different modes of expression, different perspectives/world views, etc.]
8. Has studying poetry changed the way you feel about studying English language arts? If yes, in what way?
9. How about your other subjects or school in general? Has your experience with poetry studies changed the way you approach or think about other subjects? Or your interest in learning in general?

## Poetry and Socio-emotional Development

10. Have your poetry studies introduced you to different ways of looking at the world and at other people? Can you talk about that a little bit? [This is a more targeted question around exposure to different cultures, perspectives, and world views.]
11. Has studying poetry had an effect on how you see yourself? If so, how?
12. How many of you have had experience speaking in front of audiences before? How many of you are *comfortable* speaking in front of an audience?
  - a. For those of you who are uncomfortable with it, tell me a little bit about that. What is it that makes you uncomfortable?
13. How many of you have had an opportunity to recite poetry in front of your classmates? [Count # of affirmative responses]
  - a. [For those who responded affirmatively], what was that like?
  - b. Did that change at all your level of comfort speaking in front of people? Can you describe how for me?
14. In studying poetry, you probably have seen lots of different ways that poets use language to express themselves. Has this influenced the way you express yourself, or encouraged you to think about different ways of expressing yourself? [If yes], tell me a bit about that.
  - a. For example, are you more comfortable using metaphor? Simile? A wider range of words than you used to use? Other changes?
  - b. Do you find that these changes affect your writing? Your speaking? Both?

## Wrap Up

15. Have your feelings about poetry changed since you started studying it in class?
16. Do you ever share poetry with your friends? Your family? If yes, how do you share it? (e.g., social media?) What have been their responses?
17. Before studying poetry in this class, how many of you have tried writing your own poetry? [If largely non-affirmative response] Are any of you writing it now? What do you write about? How do you feel when you write your own poetry?



- a. For those who had been engaged in writing poetry before taking this class, has the class had any influence on your writing process?
18. I think you've answered all my questions. Do you have any questions for me? Is there anything else you would like to share about your participation in POL that we might not have covered yet?



## Appendix G: Survey Instrument



This page was intentionally left blank.





## I. Academic Engagement and Outcomes

### Constructs

- Academic engagement in school
- Academic engagement in English classes
- School climate
- Engagement in extracurricular activities
- Other skills related to POL participation (engagement in group discussion, public speaking)
- Academic achievement in school
- Academic achievement in English classes
- Academic aspirations

[Academic Engagement, Motivation]

[Source: Student Engagement in School Questionnaire (SESQ)]

Q1. When thinking about school and ALL your classes in general, please tell us what do you think about the following statements...

	Never	Rarely	Sometimes	Often	Always
I am very interested in learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think what I am learning in school is interesting.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like what I am learning in school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy learning new things in class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think learning is boring.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I try hard to do well in school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In class, I work as hard as I can.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I'm in class, I participate in class activities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I pay attention in class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I'm in class, I just act like I'm working.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In school, I do just enough to get by.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I'm in class, my mind wanders.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I have trouble understanding a problem, I go over it again until I understand it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I run into a difficult homework assignment, I keep working at it until I think I've solved it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



[Academic Engagement in English Class]  
 [Source: CPS 5 essentials; scale to 5 points, \*added]

Q2. When thinking about your ENGLISH class last year, how strongly do you disagree or agree with the following statements?

	Strongly Disagree	Disagree	Neither Disagree Nor Agree	Agree	Strongly Agree
I usually look forward to this class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I work hard to do my best in this class.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sometimes I get so interested in my work I don't want to stop.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The topics I am studying are interesting and challenging.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like my English class more than any of my other classes.*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I normally do well in my English class*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[School Climate]  
 [Source: CHKS, High School Questionnaire Core Module]

Q3. How strongly do you disagree or agree with the following statements?

	Strongly Disagree	Disagree	Neither Disagree Nor Agree	Agree	Strongly Agree
I feel close to people at this school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am happy to be at this school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel like I am part of this school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The teachers at this school treat students fairly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The teachers at this school encourage self-expression	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel safe in my school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



[Extracurricular Activities Engagement]  
 [Source: Chicago Public Schools: 5Essentials, modified\*]

Q4. Overall, how do you feel about school?

Q5. Now we have specific questions about after school activities. In a typical 5-day week, how often:

	Never	Once a week	Twice a week	Three days per week	Four days per week	Five or more days per week
Do you participate in academic activities (e.g., getting writing coaching, tutoring, homework help, etc.) after school?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you participate in music, activities or classes after school?*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you participate in visual arts such as drawing, painting, photography, or ceramics activities or classes after school?*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you participate in literature clubs after school? This could include reading and discussing poetry or novels or do creative writing*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you participate in theater or drama clubs after school?*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you participate in debate clubs after school?*	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you participate in any other enrichment activities such as chess club or sports/fitness activities after school?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you participate in computer classes after school? This classes may include computer programming, robotics, or game design.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



[Attitudes towards public speaking and self confidence in public speaking]

[Source: Personal Report of Communication Apprehension (PRCA-24)]

**Q6. How strongly do you disagree or agree with the following statements?**

	Strongly Disagree	Disagree	Neither Disagree Nor Agree	Agree	Strongly Agree
I dislike participating in group discussions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Generally, I am comfortable while participating in group discussions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like to get involved in group discussions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engaging in a group discussion with new people makes me tense and nervous.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have no fear of giving a speech.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel relaxed while giving a speech.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My thoughts become confused and jumbled when I am giving a speech.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I face the prospect of giving a speech with confidence.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Q6a. How strongly do you disagree or agree with the following statements?**

	Strongly Disagree	Disagree	Neither Disagree Nor Agree	Agree	Strongly Agree
I dislike performing in public (e.g. dance, theater, music).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Generally, I am comfortable while performing in public (e.g. dance, theater, music).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like to get involved in public performance.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engaging in public performance projects with new people makes me tense and nervous.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have no fear of performing in public.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel relaxed while performing (e.g. dance, theater, music) in front of others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My thoughts become confused and jumbled when I am performing in public.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I face the prospect of performing publicly (e.g. dance, theater, music) with confidence.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



[Academic Achievement and Aspirations]

[Source: CPS 5 Essentials; CHSK]

**Q7. What grades did you earn in school last year?**

1. Mostly below D's
2. Mostly D's
3. About half C's and half D's
4. Mostly C's
5. About half B's and half C's
6. Mostly B's
7. About half B's and half A's
8. Mostly A's

**Q8. What grades did you earn in your ENGLISH/READING/LITERATURE class last year?**

1. Mostly below D's
2. Mostly D's
3. About half C's and half D's
4. Mostly C's
5. About half B's and half C's
6. Mostly B's
7. About half B's and half A's
8. Mostly A's

**Q9. What is the highest level of education you plan to complete?**

1. Not planning to complete high school
2. High school
3. Career/technical school
4. 2-year community college or junior college
5. 4-year college or university
6. Graduate or professional school
7. Undecided



## II. Social & Emotional Outcomes

### Constructs

- Self-confidence in general
- Self-confidence in intellectual abilities
- Self-confidence in social skills
- Empowerment; self-expression
- Civic participation

[Self-confidence (in general, in intellectual abilities, in social skills, in academic expectations)]  
 [Source: California Healthy Kids Survey: Youth Reliance and Development Module]

**Q10. How TRUE are the following about you right now?**

	Not at all true	A little true	Somewhat true	Mostly true	Completely true
I have high goals and expectations for myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am looking forward to a successful career.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I try to work out problems by talking or writing about them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can work out my problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I don't expect very much of myself in the future.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can do most things if I try.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can work with someone who has different opinions than mine.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There are many things that I do well.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I listen to other students' ideas.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel bad when people get their feelings hurt.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I try to understand what other people go through.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I need help, I find someone to talk with.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy working together with other students on class activities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I work in school groups, I do my fair share.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I stand up for myself without putting others down.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I try to understand how other people feel and think.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



	Not at all true	A little true	Somewhat true	Mostly true	Completely true
I trust my ability to solve difficult problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understand my moods and feelings.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understand why I do what I do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**[Leadership/Empowerment]**

[Source: Common Measure: Leadership Development, High School]

**Q11. If you found out about a problem in your community that you wanted to do something about (for example, illegal drugs were being sold near a school, or high levels of lead were discovered in the local drinking water), how well do you think you would be able to do each of the following?**

	I definitely can't	I probably can't	Maybe	I probably can	I definitely can
Create a plan to address the problem.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Get other people to care about the problem.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Organize and run a meeting.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Express your views in front of a group of people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Identify individuals or groups who could help you with the problem.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Write an opinion letter to a local newspaper.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Call someone on the phone that you had never met before to get their help with the problem.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Contact an elected official about the problem.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Organize a petition.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



### III. Poetry Appreciation & Engagement

#### Constructs

- General attitudes toward poetry
- Attitudes toward reading poetry
- Attitudes toward writing poetry
- Attitudes toward memorizing poetry
- Attitudes toward reciting poetry
- Sharing poetry with peers
- Sharing poetry via social media
- Indicator of POL participation

[Attitudes Toward Reading and Writing Poetry]

[Source: POL Student Survey AND Koukis 2010; adapted]

Q12. The following questions are related to your experiences with poetry. For the following please choose if you strongly disagree, disagree, neither disagree nor agree, agree, or strongly agree.

	Strongly Disagree	Disagree	Neither Disagree Nor Agree	Agree	Strongly Agree
I am familiar with poetry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Poetry is important to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy learning how to interpret poetry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy figuring out poems and thinking about what they mean.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My English teacher helps me understand poetry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I read poetry with my family.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I <b>read</b> poetry in my spare time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is easy for me to read poetry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I <b>write</b> my own poetry in my spare time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is easy for me to write poetry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy memorizing poems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is easy for me to memorize poems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy reciting poetry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I appreciate poetry more when it is read aloud.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy reciting poems in front of my peers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My English teacher encourages me to write my own poetry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am comfortable sharing poems I wrote with my peers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel comfortable reciting poetry in front of my peers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>





**Q13. How do you feel about poetry in general? (e.g. What aspects of poetry do you like? Are there things about poetry that you don't like? If so, what are they?)**

Poetry Out Loud encourages students to learn about great poetry through memorization and recitation. This program helps students master public speaking skills, build self-confidence, and learn about literary history and contemporary life.

**Q14. Have you ever participated in *Poetry Out Loud*?**

1. Yes (Go to Q15)
2. No (SKIP TO Q17.)
3. Not sure (SKIP TO Q17.)

**Q15. How many years have you participated in *Poetry Out Loud*?**

1. One years
2. Two years
3. Three years
4. Four years

**Q16. When did you participate in *Poetry Out Loud* most recently?**

1. Last year
2. Two years ago
3. Other [SPECIFY]

**Q17. Did you learn about poetry in your English/language arts class during the last year?**

1. Yes
2. No (SKIP TO Q20)
3. Not sure (SKIP TO Q20)

**Q18. Have you competed in *Poetry Out Loud*?, Please choose at what level (mark all that apply):**

1. Classroom
2. School contest
3. Regional contest
4. State contest
5. National contest
6. Did not compete at any of the above

**Q19. Have any of your peers or family members participated or competed in *Poetry Out Loud*?**

1. Yes
2. No
3. Not sure

**[Use of Social Media]**

**[Source: CPS 5 essentials (adapted)]**



**Q20. People sometimes use social media platforms, such as Facebook, Instagram, Snapchat, Twitter to create or share information or perspectives related to poetry. How often have you done the following:**

	Never	Less than once a month	Once or twice a month	Once a week	Several times a week
How often do you share someone else’s poems on social media?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How often do you share someone else’s poems through email?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How often do you share your own poems on social media?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How often do you share your own poems through email?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How often do you comment or tweet about poetry since school started?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

#### IV. Demographic Information

**Q21. Are you:**

1. Male
2. Female
3. Gender non-conforming
4. Prefer not to say

**Q22. Are you of Hispanic or Latino origin?**

1. No
2. Yes

**Q23. What is your race? (mark all that apply)**

1. American Indian or Alaskan Native *(A person having origins in any of the original peoples of North America, and who maintains cultural identification through tribal affiliation or community recognition.)*
2. Asian *(A person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. This area includes, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.)*
3. Native Hawaiian or Other Pacific Islander *(A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands)*
4. Black or African-American *(A person having origins in any of the black racial groups of Africa.)*
5. White *(A person having origins in any of the original peoples of Europe, North Africa, or the Middle East)*

**Q24. Is English your first language?**



1. Yes [SKIP to Q26a]
2. No
3. Don't know

**Q25a. [IF NO OR DON'T KNOW] → How well do you understand, speak, read, and write English?**

	Very Well	Well	Not Well	Not at All
Understand spoken English	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Speak English	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Read English	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Write English	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Q25b. What languages do you speak at home or with friends?**

1. Spanish
2. Mandarin
3. Cantonese
4. Taiwanese
5. Tagalog
6. Vietnamese
7. Korean
8. French
9. Russian
10. German
11. Other (write-in)

**Q26a. What is the highest level of education reached by your mother or female guardian?**

1. Did not finish high school
2. Finished high school
3. Attended but did not finish college
4. Finished two-year college
5. Finished four-year college
6. Finished graduate degree (e.g., MA, MD, PhD)
7. Don't know/Not applicable

**Q26b. What is the highest level of education reached by your father or male guardian?**

1. Did not finish high school
2. Finished high school
3. Attended but did not finish college
4. Finished two-year college
5. Finished four-year college
6. Finished graduate degree (e.g., MA, MD, PhD)
7. Don't know/Not applicable

**Q27. What grade are you in?**

1. 9th grade
2. 10th grade
3. 11th grade



4. 12th grade

**Q28. What month were you born?**

1. January
2. February
3. March
4. April
5. May
6. June
7. July
8. August
9. September
10. October
11. November
12. December

**Q29. What are the first two letters of your first name?**

**Q30. What are the first two letters of your last name?**



## Appendix H: Survey Instrument Technical Details: Scale Validity and Reliability



This page was intentionally left blank.



### Student Engagement in School Questionnaire (SESQ)

- **Description:** Measures high school students' engagement and investment in school. Engagement and investment are measured via student's self-reports of time spent on homework assignments, attendance, concentration, and attention in class.
- **Developer/source:** Dornbusch S. and Steinberg L.
- **Reliability:** Cronbach alpha= .74–.86
- **Validity:** Criterion-related validity for this scale, including positive correlations with grades and evidence had been established (Taylor et al. 1994). Construct validity of the measure including correlations with student ratings of academic ability and perceptions of importance of school has also been reported (Taylor et al. 1994).

### CPS 5 essentials

- **Description:** The CPS 5 Essentials Survey measures both school engagement as well as students' engagement in specific courses and subject engagement.
- **Developer/source:** Developed by University of Chicago Consortium on School Research
- **Reliability:** Rasch= 0.78
- **Validity:** Developers established content validity via literature review, expert review and extensive multi-year testing of items. Construct validity was established via Rasch analyses and relating the five central constructs to student performance indicators.

### CHKS - Resilience & Youth Development Module:

- **Description:** The California Healthy Kids Survey, Reliance and Youth Development module measures factors associate with positive youth development. These include both internal and external factors that contribute to positive developmental outcomes. Subscales used included: School Connectedness, Self-Efficacy, Empathy, Problem solving, and Self-Awareness.
- **Developer/source:** California Department of Education (CDE) and WestEd and Duerr Evaluation Resources
- **Reliability:** Cronbach alpha = .73 to .88
- **Validity:** Moderate construct validity has been established by examining the relationship of subscales to related constructs (Hanson & Kim, 2007).

### Personal Report of Communication Apprehension (PRCA-24)

- **Description:** The PRCA-24 measures communication apprehension, including context specific subscales that assess apprehension in different contexts including public speaking, dyadic interaction, small groups, and larger groups.
- **Developer/source:** McCroskey J.
- **Reliability:** Cronbach alpha = > .90
- **Validity:** Criterion and construct validity have been established in a body of published studies (McCrosky & Beatty, 1994; Beatty, 1987; Beatty & Friedland 1990)



### Common Measure: Leadership Development, High School

- **Description:** This scale asks students to rate their competence in skills related to civic action and provides an assessment of students' civic action efficacy.
- **Developer/source:** Flanagan, C. A., Syversten, A. K., and Stout, M. D.
- **Reliability:** Cronbach alpha=0.9
- **Validity:** Structural equation modeling suggests evidence from suggests an adequate and evidence for construct validity.

### Poetry Appreciation and Engagement Scale

- **Description:** This measure was modified from the POL Student Survey and the Koukis (2010) poetry reading assessment. This scale was designed to measure high school students level of engagement with poetry and appreciation of poetry.
- **Developer/source:** Social Policy Research Associates, modified from POL Student Survey and Koukis (2010)
- **Reliability:** Not available
- **Validity:** Not available

