



Annual Impact Report

Academic Year 2022-23

September 10, 2023



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I. Executive Summary

Higher Order Thinking (HOT) Schools is a school-wide arts in education program of Arts for Learning Connecticut (AFLCT). HOT Schools was implemented at eight schools across the state during the 2022-2023 academic year, utilizing a variety of arts learning strategies to improve student engagement, enrich school culture, and expand teacher practice.

This report—which includes detailed data in the form of survey results and analysis as well as quotes from diverse stakeholders—represents a continuation of the partnership between PERG-Learning and AFLCT, focusing on program implementation and impact during the 2022-23 school year. It is the result of significant collaboration, and builds on the work of the 2021-2022 developmental evaluation.

The review of extensive formative and summative data confirms that the three main goals of HOT Schools—to improve student engagement, enrich school culture, and expand teacher practice—have been met in the 2023 academic year across the eight HOT Schools partner schools. Moreover, it is clear that the core programmatic elements have been implemented with fidelity and creative vigor, and that HOT Schools effectively supported Social and Emotional Learning and Culturally Responsive Teaching for the students, Teaching Artists, and educators who participated in the program. In addition, students discovered more joy in learning and enhanced well-being through the arts.

II. Introduction

Higher Order Thinking (HOT) Schools was created by and originally operated in Connecticut for more than two decades through the Connecticut Office of the Arts (COA) in the state's Department of Economic and Community Development. In 2020 the program transitioned to AFLCT with the support of a 3-year partnership grant from COA.

The HOT Schools program offered in each partner school consists of four arts in education components that make up what is considered a continuum of practice: providing arts access, arts connections, and arts integration.

- Arts Integrated Residencies (AIRs) - extended learning experiences co-taught by Teaching Artists and certified classroom teachers, integrating ideas and/or concepts between and among arts and curricular content disciplines
- Arts Workshops (AWs) - one-day in-class creative experiences that engage students in the creation of artistic work in the context of content area learning
- School-Wide Performances (SWiPs) - assembly-style performances, reaching all students and faculty
- Professional Development (PD) - for teachers and Teaching Artists in Culturally Responsive Teaching, Social Emotional Learning, Multiple Intelligences Theory, and other related pedagogies

In addition to the program elements outlined above, each school participates in overall planning with school leaders and a support team anchored by the HOT Schools Site Coordinator. Teachers and

administrators also attend the HOT Schools Summer Gathering, a full-day participatory event during which the accomplishments of the year are celebrated, stories are shared, and teachers and school leaders engage together in plenary Professional Development and Arts Workshops led by Teaching Artists.

The program has three main goals, each of which will be explored in detail, below: Improve Student Engagement, Enrich School Culture, and Expand Teacher Practice.

During school year 2022-23, there were 8 HOT Schools partner schools across the state, with varying histories in the program.

- Church Street School, Hamden, grades PK - 6, 256 students (*3rd year*)
- Ashford School, Ashford, grades PK - 8, 381 students (*3rd year*)
- Warren Harding High School, Bridgeport, grades 9 - 12, 1,124 students (*3rd year*)
- Roberto Clemente Leadership Academy for Global Awareness, New Haven, grades K - 8, 389 students (*2nd year*)
- F. J. Kingsbury School, Waterbury, grades K - 5, 458 students (*2nd year*)
- Roxbury Elementary School, Stamford, grades K - 5, 562 students (*1st year*)
- Concord Magnet School, Norwalk, grades K - 8, 301 students (*1st year*)
- Regional Multicultural Magnet School, New London, grades K - 5, 502 students (*1st year*)

III. Research Methods

PERG-Learning was contracted through Senior Research Partner Gene Diaz in Spring 2023 to collaborate with AFLCT staff in developing an annual impact report for the program. The R&E team consists of HOT Schools Director (Christopher Eaves), AFLCT Executive Director (John-Michael Parker), and HOT Schools Program Manager (Kim Thibodeau). The R&E team and their research partner worked collaboratively to collect, organize, manage and analyze data about all four components of the program to shape this summative report that documents the impact of the program in the HOT Schools partner schools during academic year 2022-23.

The HOT Schools program engages in formative evaluation research throughout the year to maintain program quality and contribute to program improvement. In addition to the formative evaluation surveys, the program also includes end-of-year surveys of students, teachers and school leaders. These surveys, along with online focus group interviews (conducted, transcribed, and analyzed by Dr. Diaz), formed the basis for this comprehensive assessment of impact of the HOT Schools program.

IV. Data Analysis

Goal 1: Improve Student Engagement

What this looks like:

- Students actively participate in their learning

- Students develop and demonstrate Social and Emotional Learning skills of self-awareness, social awareness, and relationship skills
- Students express themselves creatively and in ways that are culturally relevant to them

The HOT Schools program components are designed to be interactive. That is, students and teachers in the Arts Workshops, the Arts Integrated Residencies, and the School-Wide Performances actively engage with the arts and with each other. Whether they play drums together, collaborate on a paper quilt, write and share their poems, or sit together as an audience, they actively participate—they engage with each other. The following survey results from students, teachers, and school leaders across the cohort of partner schools demonstrate student participation, Social Emotional Learning, and culturally-relevant creativity.

Students’ Aggregated Responses on 2023 End-of-Year Survey (n = 867)

During this school year, did you have the opportunity to express yourself creatively?	78%
Did you work collaboratively with your classmates?	90%
Do you feel that your participation mattered at school this year?	84%
Do you now better understand your classmates?	89%
Do you now feel more confident in your own creativity?	80%

Percent Agree/Strongly Agree or Well/Very Well

Teachers’ Aggregated Responses on 2023 End-of-Year Survey (n = 177)

Were your students actively engaged in their learning this year?	98%
How well was your students’ creative expression supported this year?	94%
How well was your students’ Social Emotional Learning (self-awareness, social awareness, and relationship skills) supported this year?	94%

Percent Agree/Strongly Agree or Well/Very Well

School Leaders’ Aggregated Responses on 2023 End-of-Year Survey (n = 15)

Were your students actively engaged in their learning this year?	100%
How well was your students’ creative expression supported this year?	100%
How well was your students’ Social Emotional Learning (self-awareness, social awareness, and relationship skills) supported this year?	100%

Percent Agree/Strongly Agree or Well/Very Well

Some students can initially be resistant to participating in arts activities, just as they resist other learning opportunities. As one teacher explained during a focus group interview, some of her students might refuse to write a poem, or even listen to one. She was apologizing to the Teaching Artist when she said, “*They don’t really like to write, so don’t... take it personally if they won’t do it for you.*” The Teaching Artist began with a rap that he had written, and to their surprise the students were immediately taken with it, transformed in a way. As she told it,

“And I just saw the boys in the back kind of sit up straight and they were like, that’s actually pretty good... Because they came in, sat in the back, and [acted like] ‘do we have to be over here?’ And then he [the Teaching Artist] started doing it and they kind of just like leaned in and just listened. And it was really cool to see. That is cool. That’s great transformation.” –Teacher Focus Group

Other students whose strengths might not be in the areas of academic subjects found that they could excel in art making. In this way, success in one area builds confidence in students who are not successful in others and supports respectful relationships among students. Interactive arts activities also require social skills—it's an enduring characteristic of the process. And because the arts create deep and meaningful learning, they necessitate emotional skills as well. Skills are abilities that improve with practice, and thus SEL skill building takes place as part of all HOT Schools interactive arts activities in some form or another.

Teachers who participated in Arts Integrated Residencies (AIRs) noticed that they developed new knowledge about their students. When asked, "What do you know now about your students that you didn't know before?", responses included:

- *I learned that many of my students are passionate about seeing change in the world. My students know more than they think and are able to think compassionately.*
- *I never knew how creative and how brave they are.*
- *That many of them are capable of more than they allow you to believe.*

Relational skills can also be learned and enhanced by observation of others engaging in effective communication and collaboration. Teaching Artists collaborate with each other, as do teachers with Teaching Artists. These interactions contribute to students' SEL skill-building as well. Students in HOT Schools partner schools experience the arts as a process through which they can creatively express themselves. Through arts integration activities in their classrooms, they experience learning through activities that engage their various senses as well as their cognitive abilities. Learning through the arts can be deeply meaningful for students, especially those who have had little interaction with the arts previously. In a very real way, access to the arts is about equity in learning for all students.

Arts integration builds relationships between learning in the arts and learning in other subjects. The arts are where the physical senses of our bodies become engaged in learning, in discovering the world. Aesthetic experiences refer to those that engage our senses. Connecting the senses with cognitive learning allows students to experience deeper and more meaningful learning that endures longer. One school leader, a strong advocate for the arts and for HOT Schools, suggests that arts integration prompts deeper thinking and allows students to make connections across disciplines—skills they will need for success both in and beyond school.

"I always tell people, if you really care about how kids learn, if you believe that kids should have fun and yet be informed to the fullest, then this is the only way to do it...The kids here... speak about it and they just appreciate the integration...they love seeing connections amongst the various subjects...and kids just think deeper and differently [with arts integration]." –School Leader Focus Group

Goal 2: Enrich School Culture

What this looks like:

- A strong community that joins together for common experiences and encourages creative self-expression
- A shared sense of identity that fosters belonging for all members of the school

- community—including students, faculty, and families
- Activities that encourage student voice, choice, participation, and responsibility

A change in school culture can be difficult to assess since each member of the school community has a different perspective on the whole of the school. One characteristic of a strong culture can be seen through the different members of the school community recognizing from their perspectives that they feel included in the community, that they have a sense of belonging in the school, and that their participation is valued by others. In addition, meaningful relationships between members of the school community demonstrate respect for and honor the contributions of each member. HOT Schools partner schools provide activities that contribute to these aspects of school culture, and at the same time recognize that students in each grade level need activities that allow them to engage and relate according to their developmental capacities and abilities.

We learned from the end-of-year survey that **93% of school leaders (n = 15)** responded **agree or strongly agree** to the statement that “there was an increase in a sense of connection and/or belonging among your school community this year.” And **81% of teachers (n = 177)** responded similarly to the same statement. These assessments from teachers’ and school leaders’ perspectives were supported by comments from them as well as Teaching Artists during the focus group interviews.

A large majority of the **students (78%) (n = 867)** who responded to the end-of-year survey said that they had the opportunity to express themselves creatively. As we saw in the previous section, students don’t always feel safe enough to take the risk of creative expression, and sometimes resist the impulse to do so. However, even students who had not participated in an arts workshop or an arts integrated residency responded that they had the opportunity to do so. **Students also agreed (89%)** that they now better understand their classmates. We attribute this improvement to the many ways that the arts allow students to express and communicate who they are through new ways that are poetic, musical, or corporeal (dance and movement, and visual, or any combination of all of these).

School leaders were asked to share something they learned about themselves or their school communities at the end of the year. Their responses included:

- *That we do awesome things when we collaborate.*
- *I learned that taking students out of the classroom to experience new things positively enhances the culture of the classroom.*
- *I learned that we are becoming a Higher Order Thinking School at a much deeper level, thanks to the many benefits of being a member of the HOT Schools cohort.*
- *My resolve is continuously strengthened because this is THE ONLY WAY TO TEACH AND LEARN. I am very vocal about HOT Schools, and we’ve written it into our school improvement plan.*

School leaders were also asked, “In what area(s) of the have you most noted the impact of the HOT Schools programming?” Two of the responses relate directly to changing school culture: “Students encouraging one another and promoting a growth mindset,” and “I have noticed a marked improvement in the school culture. Students look forward to the HOTS programming and talk about the programs positively.”

HOT Schools Teaching Artists incorporate very intentional activities into their performances, workshops and residencies that support the full inclusion of all members of the school community.

They come to the schools ready to listen respectfully and work collaboratively with teachers and students. They offer students choices and honor their voices. As one Teaching Artist noted:

“I am there to facilitate and guide an engaging arts integration experience, but I am also there to hear the voices, ideas, needs and desires of the teachers and students. Sometimes compromise is helpful (at all stages of an AIR), and respect and thoughtful inclusion of all participants are really important. “
–Teaching Artist Focus Group Interview

AFLCT staff members act intentionally in selecting Teaching Artists who represent each school community. Teaching Artists who are ethnically, racially, or gender diverse offer students and teachers who have similar characteristics opportunities to see themselves as creative, as artists, and as part of a larger community. One school leader noted that the Teaching Artists who come from different backgrounds also foster culturally sensitive environments in which arts learning has a stronger impact on students.

“...developing and fostering culturally sensitive environments ... seeing people from your background ...creating art is going to have an impact on kids. Seeing someone that looks like them, sounds like them....having someone pronounce your name correctly...are important things. And, I think also feeling good about yourself...and I just feel that this work that HOTS does is important. It is important. I can't say it enough how important it is.” –School Leader Focus Group

Another HOT Schools partner school leader mentioned during a focus group interview that their school included activities that represent another shift in the school culture as directed through an additional program component: they include an activity they call ECHOs (Enhanced Curricular HOTS Opportunities) during which students across the school attend different creative learning activities for a block of time. During one ECHO the teachers collaborated in groups to decide which activity to facilitate for the hour, and students chose the activity in which they wanted to participate. Activities included dance, art, visual arts, music acting, building things, problem solving, school newspaper. This same school leader noted other ways that the HOT Schools program has changed the school:

“...in addition to continuing with the town meetings and the ECHOs and making them is to really look at our day-to-day practice in all the little ways that we can add more movement and creativity into our teaching.” –School Leader Focus Group

Students who feel included in the classroom and school community feel a sense of ownership within the school. Those who feel that their work is valued by others enhance and strengthen this sense of community. In one classroom a teacher began displaying students' artwork on classroom bulletin boards after watching a Teaching Artist do just that. She noticed that students felt proud of their work when she did this, *“I noticed that after we did that and I told them, oh, we're going to hang it up in the room. They really just felt like what they did was so important.”*

Goal 3: Expand Teacher Practice

What this looks like:

- Teachers gain new skills and strategies to better engage and teach their students, with a specific focus on Culturally Responsive Teaching, Multiple Intelligences Theory, and Social

and Emotional Learning

- Teachers develop leadership through which they encourage and support the growth of their peers
- Teachers understand and practice the alignment, connection, and intersection of arts and non-arts standards

In the HOT Schools program, teachers and students learn together. Across the various components of the program, teachers gain pedagogical skills, build knowledge about their students, and find that they, too, are creative. When a Teaching Artist and a teacher communicate clearly and collaborate in the classroom, students see the integration process happening in front of them.

Survey	Question	Percentage
AIR • Teacher (n=42)	Have you learned new strategies, skills, and/or ideas that you will use in your teaching in the future?	95%
AW • Teacher (n=80)	Have you learned new strategies, skills, and/or ideas that you will use in your teaching in the future?	85%
EOY • School Leader (n=15)	Have your teachers developed new strategies, skills, and/or ideas this year that they've used in their teaching?	100%
EOY • Teacher (n=177)	Have you learned new strategies, skills, and/or ideas this year that you've used in your teaching?	88%
PD • Teacher (n=691)	Have you learned new strategies, skills, and/or ideas that you will use in your teaching in the future?	93%

Percentage who responded, “I learned some....” or “I learned many...”

Two HOT Schools programmatic components, the Arts Integrated Residencies (AIRs) and the Professional Development (PD) , were especially effective in promoting teachers’ understanding of the alignment between the arts and academic standards as demonstrated in each of those post-event surveys:

Survey	Question	Percentage
AIR • Teacher (n=42)	How well do you now understand arts integration (the alignment, connection, and intersection of arts and non-arts standards)?	98%
PD • Teacher (n=691)	To what extent did this PD encourage creativity in teaching and learning?	97%

Percentage who responded, “I understand well....” or “I sort of understand...”, and “It strongly encouraged...” or “It somewhat encouraged...”

Teachers apply their new knowledge, skills and strategies in their classrooms, and, in some instances, the school adopts strategies for practice school-wide, as noted previously. Each teacher finds ways unique to their grade level or content area to bring these arts integration strategies into their teaching. For example, one upper-level teacher used what they learned in an Arts Workshop to integrate a

hands-on creative arts strategy into teaching social studies:

“And then with our workshop, we made little ornaments... I also teach social studies, so I like doing the artifacts. So, a lot of times when we're doing a unit [I say] let's create our own artifact that might represent whatever it is the unit that we're studying.” –Teacher Focus Group

Teaching Artists intentionally design arts learning pedagogical strategies and introduce new skills for teachers to adopt into their current practice. And they notice when this happens, such as with this Teaching Artist:

“One of the things I love to see when returning to schools after a program is the way the teachers will take a poetry exercise or classroom sharing strategy or warm-up activity that we've done together and make it their own.” –Teaching Artist Focus Group

As they integrate new skills and arts learning strategies into their practice, teachers expand their understanding of the arts and arts integration at the same time. Veteran teachers, or those who have worked in a HOTS Schools partner school for several years, note how their newer colleagues are able to find applications for many of the strategies introduced by the Teaching Artists. One specific example of a teaching strategy was noted by a teacher who observed a theatre artist using dramatic arts skills in storytelling:

I really appreciated our theatre artist. He did a lot of movements and acting out and that was just something that I've never thought to do in the classroom ...Instead of having them sit and write it, having them act it out...helps them remember the story and be able to tell what happened in the correct order and sequence it... all of the other tools that they gave because a lot of this stuff was new to me. It was great to see the integration. –Teacher Focus Group

This year students in one HOTS Schools partner school were able to collaborate with students in a school in Uganda through an Arts Integrated Residency. Because the residency took place over 5 weeks, the collaboration allowed the sixth graders, who were studying a unit on Africa, to learn about the daily lives of the Ugandan students while they created art together. According to the school's leader, one impact of this international collaboration inspired other teachers in the school to express a desire to do a similar collaboration with their students: *“So, it's not just that they're developing HOTS Schools teaching skills, they're also developing a new approach to how they want to connect to our community, to communities globally.”*

In addition to learning new arts learning pedagogical strategies by working with Teaching Artists, all teachers in HOTS Schools partner schools take part in Professional Development focused on Culturally Responsive Teaching, Social and Emotional Learning, and Multiple Intelligences Theory. One school leader explained how these workshops had an impact on teachers, making them more conscientious in their practice: *“In their lesson plans the teachers...take the time and the effort....to integrate the arts into the curriculum.... Yes, Multiple Intelligences...the teachers made a commitment....with their lessons [to determine] what kind of intelligence that they were going to focus on, depending on the lesson. And so, our teachers are more conscientious with their practice.”*

Many Teaching Artists noted that the collaborative arts learning activities they bring to classroom

workshops and residencies allow students to build and enhance their SEL skills. Engaging in artistic expression with others creates new connections and builds stronger relationships between students and between students and their teachers. These activities, in which the teachers collaborate with the TAs, expand teacher practice and support the professional development workshop in SEL skills.

V. Discussion

As the evidence demonstrates, the three HOT Schools goals have been met, even while the program continues to expand and deepen its impact in partner schools and their communities. In addition to the goals, the benefits from including the arts in learning for students, teachers, and the larger school community continue to accrue in the schools and their surrounding communities. Innovative programming—like a connection with a town’s poet laureate and broader community sharing or the collaboration with students in Uganda—indicate a wider scope of impact beyond the stated goals.

While the impact of the program reached into a few towns and communities around the HOT Schools partner schools, in other schools the impact was experienced as an expansion of the scope of HOT Schools programmatic components. These new On Campus Components (OCCs) were introduced to schools during Professional Development and the HOT Schools Summer Institute and focus on giving students greater voice, choice and participation in arts learning programming. OCCs include Enhanced Curricular HOT Opportunities that allow schools to generate their own HOT Schools practices that address their unique school culture and meet their specific needs. Guided by a qualified consultant with deep experience in HOT Schools, the program has encouraged and supported more school-generated elements based in HOT Schools practices and pedagogies. As mentioned in the 2022 evaluation report, HOT Schools has created what Halverson (2021) calls a “learning ecology.” In this ecology, teachers have expanded their teaching practice to include pedagogical strategies learned from Teaching Artists and from experts in Professional Development, and the school has created additional arts learning elements unique to their school culture.

Within this expanded learning ecology of a HOT Schools partner school, students, teachers, Teaching Artists, and school leaders noted in focus group interviews another impact of the program that they describe simply as joy. Students—and sometimes teachers—exhibit this joy when they make discoveries about themselves, or others, through arts activities. These might be a new ability, a new self-understanding, a new sense of self-confidence in expressing who they are through the language of the arts. It could also just be the simple joy of learning. Joy is a positive emotion that contributes to a sense of well-being and improved health outcomes. New research about the brain offers evidence of this outcome based in the arts. Magsamen and Ross (2023) write that the arts “trigger the release of neurochemicals, hormones and endorphins that offers you an emotional release.” (407, Kindle). They also note that when you read poetry or fiction, see a film, or listen to music or dance you are biologically changed. A neurochemical exchange can lead to a release of emotion that “leaves you more connected to yourself and others afterward”. This outcome could address the SEL skills enhancement noted in Goal 1, although a biological change can also suggest a contribution to well-being and health, as these authors suggest. The arts in learning bring multiple benefits, some of which we are still discovering.

Strengths

- **Committed and qualified staff and Teaching Artists:** HOT Schools staff and Teaching Artists bring years of experience in arts education, arts integration, and teaching artistry.
- **Program alignment with schools:** The HOT Schools program contains specific components which are individually designed and modified where needed to meet specific school needs.
- **Expansion of Teaching Artist roster, roles and responsibilities:** Through a process of careful selection of Teaching Artists and their continual professional development, HOT Schools provides excellence in Teaching Artistry, contributing to PD for teachers.
- **HOT Schools joy:** School leaders in particular notice a sense of joy when students are engaged with the arts. One school leader noted that it's difficult to quantify, but seeing kids smiling while they are working was a powerful indicator of their joy in learning.

Challenges

- **School-wide awareness:** School leaders recognize the impact that each individual workshop or residency can have on students in their classrooms. Knowing this they want to share with the whole school what is happening in these HOT Schools activities, so they make efforts to highlight student work from the Arts Workshops and Arts Integrated Residencies. However, they note that making the work visible for all is frequently a challenge.
- **Scheduling for teachers and Teaching Artists:** For Arts Workshops and Arts Integrated Residencies to be successful the teachers and Teaching Artists meet to plan and align their efforts. For many teachers who have little time to commit to a planning session without a substitute for their class, this effort can be a challenge.

Summary

In addition to the benefits of the program for HOT Schools partner schools noted in the 2022 program evaluation and noted above in the 2022-23 data analysis, the HOT Schools program has added additional opportunities for schools to more fully integrate arts learning and specifically arts integration into students' learning. On Campus Components—including Enhanced Curricular HOT Opportunities— support schools as they create uniquely school-based and school-focused arts learning offerings for their students. The impact of HOT Schools arts programming creates joy in students as they discover new and meaningful knowledge and skills. And the improvement and expansion of the program continues to be grounded in data-based research led by a capable and committed staff.

References

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