



HIGHER ORDER THINKING SCHOOLS™

# Annual Impact Report

## Academic Year 2023-24

August 22, 2024



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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 ten schools across the state during the 2023-2024 academic year, utilizing a variety of arts learning strategies to improve student engagement, enrich school culture, and expand teacher practice.

This report represents a continuation of the partnership between PERG-Learning and AFLCT, begun in 2021-22 with a developmental evaluation (available at [www.afclt.org/hots](http://www.afclt.org/hots)). It includes detailed data in the form of survey results and analysis as well as quotes from diverse stakeholders, and focuses on program implementation and impact during the 2023-24 school year.

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 2024 academic year across the ten 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.

## II. Introduction

Higher Order Thinking (HOT) Schools was established in 1994 by 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 multi-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) - learning opportunities for teachers and Teaching Artists in Culturally Responsive Teaching, Social Emotional Learning, Multiple Intelligences Theory, and other pertinent 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 convene for a Keynote Address, and Professional Development 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 2023-24, there were 10 HOT Schools partner schools across the state, with varying histories in the program.

- Church Street School, Hamden, grades PK - 6, 277 students (*4th year*)
- Ashford School, Ashford, grades PK - 8, 367 students (*4th year*)
- Warren Harding High School, Bridgeport, grades 9 - 12, 1,109 students (*4th year*)
- Roberto Clemente Leadership Academy for Global Awareness, New Haven, grades K - 8, 399 students (*3rd year*)
- F. J. Kingsbury School, Waterbury, grades K - 5, 439 students (*3rd year*)
- Roxbury Elementary School, Stamford, grades K - 5, 562 students (*2nd year*)
- Concord Magnet School, Norwalk, grades K - 8, 320 students (*2nd year*)
- Regional Multicultural Magnet School, New London, grades K - 5, 501 students (*2nd year*)
- ACES Wintergreen Interdistrict Magnet School, Hamden, grades K-8, 467 students (*1st year*)
- Wolfpit Integrated Arts School, Norwalk, grades PK-6, 361 students (*1st year*)

### III. Research Methods

PERG-Learning was contracted through Director & Senior Researcher Elizabeth Osche in Spring 2024 to collaborate with AFLCT staff in creating the 2023-24 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 2023-24.

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 Elizabeth), 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, School-Wide Performances and Professional Development actively engage with the arts and with each other. Whether they play drums together, explore puppetry, write and share their poems, or sit together as an audience, they actively participate—they engage with each other. This engagement provides multiple opportunities and avenues for students to actively participate in their learning, develop and strengthen relationships with peers and adults, and express themselves in culturally and self-affirming ways.

Survey responses around student engagement and participation in learning showed that the majority of students, teachers, and school leaders observed and experienced active and enjoyable student engagement.

#### End-of-Year Aggregated Survey Responses - Participation

How often did you participate at school this year? (Students, n=943)	89%
Do you feel that your participation mattered at school this year? (Students, n=943)	87%
Were your students actively engaged in their learning this year? (Teachers, n=188)	91%
Were your students actively engaged in their learning this year? (School Leaders, n=16)	100%

*"[W]hen we do projects, the thing that they look forward to the most is the artistic end of it, whether it's drawing or performing. They enjoy that immensely. And of course, it's been proven that when you combine arts and information, it helps them retain it.*

–Teacher, Focus Group

HOT Schools programming emphasizes the critical role of student voice, incorporates multiple identities and learning styles, and links to relevant real-life topics. All of these practices enhance joy in learning and deepen student engagement in the classroom. HOT Schools' Teaching Artists (TAs) intentionally take time to get familiar with the classroom into which they are entering, including learning about particular student needs and interests that align with the content they are exploring.

*"Both artists work so well with our special needs population and I even have a student that's pretty nonverbal and has a lot of special needs, and they were both so accommodating to what he could do and how to fit that in. I really appreciated that."*

–Teacher, Focus Group

*"One of the things we did is we were studying the history of Connecticut and inventions created in Connecticut. So, [students] came up with a song called Made in Connecticut. About a week after we finished our AIR Governor Lamont launched a new advertising campaign called Making It in Connecticut that we showed to the students. I love the connection with that."*

–Teacher, Focus Group

The student-centered, authentic and responsive approach to learning that takes place in HOT School's programming encourages student participation and gives students a variety of opportunities to practice social emotional skills. Many activities require students to work in pairs, small groups, or as a class to achieve a goal. Others include self-reflection on identity and the sharing of different student identities through various mediums. Students may not have been exposed to music, dance, theatre, or visual arts prior to HOT Schools programming, but when their class is tasked with creating a dance around a topic, they collaborate together, listen to one another's ideas, and come out with an enjoyable and more memorable experience.

Survey questions around Social Emotional Learning indicated that the vast majority of teachers and school leaders observed strong support for SEL, while students had opportunities to work collaboratively with classmates, leading to a greater understanding of their peers.

#### End-of-Year Aggregated Survey Responses - SEL

Do you now better understand your classmates? (Students, n=943)	91%
Did you work collaboratively with your classmates? (Students, n=943)	91%
How well was your students' Social Emotional Learning (self-awareness, social awareness, and relationship skills) supported this year? (Teachers, n=188)	88%
How well was your students' Social Emotional Learning (self-awareness, social awareness, and relationship skills) supported this year? (School Leaders, n=16)	94%

Percent Agree/Strongly Agree or Well/Very Well

*“For the dance choreography that I do with them, they have to partner and sometimes the students don’t want the partner they have. But they have to collaborate and work together or the dance won’t work. At the end they do the choreography and they are happy because they are doing something together and that’s why I like to see.”*

–Teaching Artist, Focus Group

*“Whatever activity we are doing with them, whether it’s a piece of writing or art, it is taking their experience and putting that into whatever activity. Taking that and putting it into the work is a simple but direct way to take their lived experience and own it a little more.”*

–Teaching Artist, Focus Group

*“It’s just so essential to offer the children ways of communicating besides just everyday writing, where they’re able to communicate through the arts, whether it’s drawing, visual arts, performing arts. I have a student who is in a difficult situation, and he’s able to express himself through poetry, writing songs, and he also likes to draw. So, he keeps me on my toes in utilizing those aspects to assist him with dealing with his emotions.”*

–Teacher, Focus Group

Opportunities for creativity are abundant during HOT Schools programming. Surveys showed that most students felt that they had the opportunity to express themselves creatively, and thus felt more confident in their creativity. The large majority also reported developing new interests this year during HOT Schools’ activities. Teachers and school leaders reported strong support around student creative expression.

**End-of-Year Aggregated Survey Responses - Creativity**

Do you now feel more confident in your own creativity? (Students, n=943)	85%
During this school year, did you have the opportunity to express yourself creatively? (Students, n=943)	82%
Did you develop new interests this year? (Students, n=943)	81%
How well was your students’ creative expression supported this year? (Teachers, n=188)	97%
How well was your students’ creative expression supported this year? (School leaders, n=16)	100%

Percent Agree/Strongly Agree or Well/Very Well

The work of the HOT Schools’ staff to create a brave, safe, and student-centered space allows creative risks to take place, which results in students having more opportunities to express their own cultures and identities creatively, as well as to engage with the academic content in unique ways. When students feel comfortable in the environment and are allowed to take creative risks, their creativity blossoms.

*“I learned that vocabulary and science concepts can be retained at a better rate when using your whole body and many ways of creation and expression.”*

–Teacher, Focus Group

*“I now know that some of my students are amazing storytellers! I also saw a different side of their creativity during the puppet making that I don’t get to see when they are in the art room.”*

## 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

HOT Schools’ programming activates student participation and creativity, as described earlier in this report. This takes place in individual classrooms for a day or for weeks at a time, or in school-wide assemblies and meetings. HOT Schools also provides professional development for teachers, providing tools and strategies for classroom teachers to integrate the arts into the everyday classroom. These repeated engagements over time come to enrich the culture of a school.

While this looks slightly different in every school and for every individual, the evidence of a culture shift includes school communities that celebrate self-expression of all identities, cultivate trusting environments in which students can take risks, and forge respectful and collaborative relationships among all members of the community. Individuals in these communities have a sense of pride, ownership, and belonging at their school; they enjoy being there and have trusting relationships with others.

### End-of-Year Aggregated Survey Responses - Connection

Was there an increase in a sense of connection and/or belonging among your school community this year? (Teachers, n=188)	81%
Was there an increase in a sense of connection and/or belonging among your school community this year? (School leaders, n=16)	94%

*Percent Agree/Strongly Agree or Well/Very Well*

Starting at the first engagement, HOT Schools’ TAs take time to cultivate a feeling of community and trust within the classroom. This work sets the stage for an environment where students can engage freely and without judgment, among a trusted community.

*“Our artists did a great job about doing a warmup activity. I think that helped build a sense of community and it built trust and helped them get to know the students and really get them working together...I think that helped everyone build the trust in the [classroom] community.”*

–Teacher, Focus Group

*“I play a game called brave spaces versus safe spaces, and we have a community agreement. We explain how safe spaces aren’t safe for marginalized people, because safe means anything can be said and done without pushback, whereas in brave spaces we can respectfully push back and make things teachable as opposed to conflict.”*

–Teaching Artist, Focus Group

Celebrating the cultures of students and teachers within the school community leads to a greater

sense of belonging for all, as well as a better understanding of other cultures. This sense of belonging increases students' desire to engage, as their own cultures become reflected in the school culture.

*“Sharing cultural music and dances with my students have made them have a sense of belonging and connection. They are able to connect with a teacher who shares some of their cultural similarities.”*

–Teacher, Focus Group

The repeated engagements that students in HOT Schools partner schools experience over the course of multiple years provides shared experiences between students themselves, as well as between teachers and students.

*“I think sometimes the kids will remember things that they did in years past... So, things will happen. They'll say, oh, right. Like we did last year when we made the tree houses. Or they'll remember things and bring it up, you know, and, and they'll come to me and remember things that they did in first and second grade with artists and talk about it.”*

–Teacher, Focus Group

### **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.

Throughout the year, surveys asked teachers: Have you learned new strategies, skills, and/or ideas that you will use in your teaching in the future? Most teachers reported learning “some” or “many” new strategies and skills that they can use in their teaching in the future, particularly those who participated in the PD and AIRs.

**Various Surveys, Teachers and School Leaders**

Post - Arts Integrated Residency (AIR) Survey (Teachers, n=48)	91%
Post - Arts Workshop (AW) Survey (Teachers, n=109)	85%
Post - Professional Development (PD) Survey (Teachers, n=670)	91%
End-of-year Survey (Teachers, n=188)	85%

End-of-year Survey (School Leaders, n=16)	100%
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*Percentage who responded, "I learned some...." or "I learned many..."*

Teachers described these new approaches and strategies gained through HOTS School's programming. Some outlined specific strategies that they engaged with TAs throughout the year, making them realize those activities were not out of reach to do on their own.

*"More movement! Movement is a great strategy to use to reset students if they are feeling stagnant and need a restart. I also really enjoyed how students used recycled materials to create a variety of art pieces. I'd like to use more hands-on crafting to give a deeper understanding of certain topics."*

–Teacher, Post-AIR Survey

*"The reminder to make time for planned activities that are fun and engaging. Also, to not be afraid to try something new in the classroom. I realized that my students were very willing to try out tableau! Also, I remember the simple activities that we all did together by "acting out" a scene- we laughed, we had fun, and we did it!"*

–Teacher, EOY Survey

*"Well, we did papier mâché, and I wouldn't have touched that with a 10-foot pole prior to this. And our artists really showed us that it's not rocket science that we can do it. And you don't need a ton of materials, and just roll with it and it works. So, it really opened up that idea to the fact that we can do papier mâché in the classroom."*

–Teacher, Focus Group

*"So obviously in kindergarten you have students use watercolors, but the proper technique of how to put watercolor paint on the brush and how to put the paint from the brush onto the paper, how to mix the pigments. There's a lot that went into watercolor that you don't necessarily explicitly teach every year. And it was nice to be able to take from the art workshop explicitly teaching that. So, we can carry that on into future years."*

–Teacher, Focus Group

Other teachers described a renewed commitment to teaching students with joy and engaging their creativity, as well as fostering student identity and connection.

*"It's been a while since I considered Multiple Intelligences theory and am excited to use it as a way to understand my students and get them to know themselves as learners."*

–Teacher, Post-PD Survey

*"Allowing students to guide their learning. Developing a sense of self within a lesson and allowing opportunities for expression and connection."*

–Teacher, Post-AW Survey

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:

### Various Surveys, Teachers

AIR • Teacher	How well do you now understand arts integration (the alignment, connection, and intersection of arts and non-arts standards)?	100%
PD • Teacher	To what extent did this PD encourage creativity in teaching and learning?	97%

*Percentage who responded, "Well / Very Well" or "It encouraged... / it strongly increase..."*

Teachers and school leaders also described plans to encourage more creative expression in the classroom

*"I plan on incorporating more projects that require creativity, and innovation, allowing students to express themselves and develop their unique abilities. The students really valued the opportunity to express themselves in an artistic way."*

–Teacher, Post-AIR Survey

*"Our teachers definitely had accessible takeaways from all of the HOT Schools programming that was brought to the table this year. Upon following up during team meetings, we reflected on specific strategies that could be implemented into their lessons and how the true design of Arts Integration is a seamless connection between the lesson content/standards and the art form content/standards. Those conversations proved to be very beneficial since I think some teachers struggle with the concept of Arts Integration versus Arts Enhancement."*

–School Leader, EOY Survey

As with students, engaging teachers over more than AW, AIR, or PD experience allows time for reflection and change to take place. Some teachers are more resistant to new approaches to teaching, and some need to practice or observe these methods repeatedly before trying them out themselves. Schools who have been engaged with HOT Schools over multiple years start to see the impact more consistently extend beyond the artists' visits.

*"Teacher practice took off this year. The teachers were more conscientious about applying artistic practices with their Instruction. Additionally, they used HOT Schools AIRs as a launching pad for culminating celebrations ie. 6th grade African Culture Show."*

–School Leader, EOY Survey

## V. Discussion

Evidence demonstrates that HOT Schools has achieved its impact goals during the 2023-2024 school year. Integral to this success is the role of the Teaching Artists and HOT Schools' staff, who conscientiously and creatively approach each school, residency, workshop, and professional development in order to maximize the impact on students and teachers alike. This is achieved through a commitment to:

- fostering a safe environment of collaboration, connection and trust
- encouraging student voices (and thus their cultures and identities) to direct the learning

- integrating the arts into the classroom in ways that promote creativity and meaningful learning
- engaging with students and teachers as both responsive and flexible
- inspiring students (and teachers) to bring their whole and multiple identities to the classroom
- providing immersive, authentic, hands-on creative experiences for all
- promoting a love and enjoyment of learning.

As one TA described their role: *“Our job is to go in there and give all students an ability to participate equally, to have their voices heard, to have their creativity developed in a way that brings equity and equal opportunity of selfhood right to the classroom.”* (TA, Focus Group).

The above practices that are utilized by HOT Schools align with findings from a literature review published in the International Journal of Education & the Arts; “Arts integration builds greater understanding across disciplines, supporting authentic experiences that engage and motivate learners. This practice provides multiple modes of learning and understanding, while also fostering imagination, creativity and personal interpretation of ideas and topics.”<sup>1</sup>

Over time, as students and teachers engage in HOT Schools inspired activities, the culture of the classroom and the school shifts. Teachers begin to see the positive impacts of creative expression on students’ understanding of content, and integrate more arts strategies into their teaching. Students participate in community-wide activities that create bonds over a shared experience. Other students reminisce with teachers about projects that made a lasting impact during prior years. The school culture becomes one of truly shared values: respect, joy, belonging, and creativity in learning.

*“The students are becoming more connected to the school and teachers. They are wanting to participate and create more opportunities to be a part of something. For my school, that is HUGE progress.”*

–School Leader, EOY Survey

This progression towards this type of culture facilitates students’ ability to maximize their learning, as described by a Kennedy Center article:

“Students are most available for learning when they are affirmed, valued, and feel a sense of belonging—it is key to cultivating deep connections. The arts can significantly enhance students’ learning experience, whether they are enjoying others’ art or creating art forms of their own. Using the arts to cultivate a culture of connection in support of student success is a win-win.”<sup>2</sup>

All of this is not without challenges. Scheduling weeks-long residencies into an already loaded school calendar is a complicated task, sometimes resulting in shorter than ideal timelines for planning. Teaching Artists and teachers must meet multiple times to collaboratively plan the residency, and given short timelines and busy schedules this is often done virtually. While the availability of the virtual option for planning is useful, many TAs feel as if it is not as effective for true collaboration.

Individual teachers vary in how much they fully buy-in to the HOT Schools approach. For various

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<sup>1</sup> Zana-Sternfeld G., Israeli, R., & Lapidot-Lefer, N. (2024)

<sup>2</sup> Ashley Bell, “Fostering a culture of connection through the arts” from the Kennedy Center Educational Resources

reasons, some teachers are more resistant to new approaches to teaching, or do not (yet) have the capacity to take the risks needed to fully engage in the work. This sometimes caused frustration for Teaching Artists, who worked to engage teachers along with students, both to impact teacher practice and to more deeply engage students alongside them.

Regardless, the HOT Schools staff works tirelessly to design and modify programming to meet the needs of each individual school and classroom. They also continue to educate current Teaching Artists and recruit and train new ones, so that they have a large roster of experienced and knowledgeable TAs available. This, in combination with the effective strategies to engage students and teachers, as described above, makes the HOT Schools program particularly successful in creating a lasting impression on students, teachers, and schools.

## References

1. Zana-Sternfeld G., Israeli, R., & Lapidot-Lefer, N. (2024). Creative education or educational creativity: Integrating arts, social emotional aspects and creative learning environments. *International Journal of Education & the Arts*, 25(3). <http://doi.org/10.26209/ijea25n3>
2. Ashley Bell, "Fostering a culture of connection through the arts" from the Kennedy Center Educational Resources, <https://www.kennedy-center.org/education/resources-for-educators/classroom-resources/articles-and-how-tos/articles/educators/professional-development/fostering-a-culture-of-connection-through-the-arts2/>