

AARTI KATHURIA

CABINET OF CURIOSITIES:

WHAT TRANSFORMATIVE IMPACT DOES
INTEGRATING ART INTO THE SCHOOL
CURRICULUM HAVE ON HIGH SCHOOL
STUDENTS, AND HOW DOES IT SUPPORT
SOCIAL-EMOTIONAL LEARNING?

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Executive Summary

This white paper examines how integrating art into high school curricula and school design supports Social-Emotional Learning (SEL). Drawing on the research literature behind the STEM-to-STEAM movement, conversations with students and educators at two Rhode Island schools, and case studies from Brewster Thornton Group Architects' K-12 design practice, the paper argues that art functions as both a pedagogical and spatial tool for building self-efficacy, empathy, and resilience in students. It introduces a Micro / Meso / Macro framework for aligning school building design with arts integration, illustrated through three built examples, and closes with implications for architects, educators, and policymakers seeking to make SEL tangible in everyday school spaces. The paper argues that art is not an add-on but a core driver for cultivating self-efficacy, empathy, and resilience in students.

Abstract

What transformative impact does integrating art into the school curriculum have on high school students? How do robust art offerings empower students to discover and embrace their unique talents, shaping their paths forward while fostering positive behavior and intrinsic motivation? How does a creative environment and equal emphasis on art alongside the core curriculum allow students to develop an understanding of core academic subjects, collaborate with peers, accept differing perspectives, and cultivate empathy? This paper offers real examples illustrating how art integration nurtures social and emotional learning in high school students and why it is vital in preparing students to become compassionate, well-rounded adults ready to thrive in society and tackle future challenges.

WHY ART MATTERS

In today's world, work and life are constantly being redefined, requiring students to develop skills of adaptability and resilience, also known as Social-Emotional Learning. Several studies show that art plays a significant role in developing these skills, and that not only the curriculum but also the built environment can play a significant role in a student's Social-Emotional Learning.

Advocacy for a shift in education policy was underway at RISD when I was a student, and it sparked an interest that has stayed with me since. The questions being asked were: How integral are creativity and empathy to solving multi-level problems? Does art encourage cross-disciplinary thinking? Does art foster collaboration? Does art lead to new perspectives? These conversations were fueled by industry demand for creative solutions and a cross-disciplinary outlook. Several studies substantiated that the answer to these questions was yes: art does play an integral role in cross-disciplinary thinking, a collaborative approach, establishing new perspectives, and cultivating empathy.

In practice, arts-rich environments normalize critique, making, and iteration, which in turn support risk-taking, resilience, and entrepreneurial thinking – capacities closely aligned with modern workforce and civic demands.

STEM TO STEAM

After roughly eight years of sustained advocacy, “A for Arts” was added to “STEM,” reframing the education model to “STEAM” and positioning creativity and design as integral components rather than optional add-ons.

The concept was developed in collaboration with the US House of Representatives to introduce STEAM legislation and define a STEAM policy, which was officially incorporated into ESSA (Every Student Succeeds Act) in 2015.

RESEARCH FOUNDATIONS

A growing body of research substantiates the link between arts engagement and student outcomes. A study by Catterall, Dumais, and Hampden-Thompson (2012), published by the National Endowment for the Arts, and a companion report from the President's Committee on the Arts and the Humanities (PCAH, 2011) both found significant relationships between arts engagement and academic achievement.

Per another study, individuals who produce creative capital as adults are much more likely to be involved in a sustained manner with one or more crafts or arts, such as music composition, dance, or photography; findings suggest that long-term experience with the creative process in arts and crafts may enhance creative potential in science and technology (LaMore et al., 2013).

Several other studies show that a student's participation in the arts significantly increases creative problem-solving and collaboration skills, which in turn increases student engagement and innovation. Studies also show that arts-based learning increases the transferability of lessons to academic work, extracurricular activities, home, and life. In addition, studies observe that introducing the arts in education and work has contributed to equity by bridging gaps among diverse socioeconomic groups.

METHODOLOGY

This paper draws on three sources of evidence gathered in preparation for the "Cabinet of Curiosities" presentation at the Association for Learning Environments Northeast Regional Conference (May 2025):

- Semi-structured conversations with student volunteers at School One, an independent art school in Providence, Rhode Island, and with students in John Tedeschi's art class at Westerly High School.
- A short open-response survey asking students and teachers about their "wish list" for their school building.
- Reflections shared by conference attendees following the presentation, including a personal account from attendee Robin O'Hara.

FINDINGS

4.1 A Framework for Social-Emotional Learning

Before looking at how art supports SEL, it is worth grounding the term. As outlined by Hanover Research, Social-Emotional Learning comprises:

- Self-efficacy: belief in one's ability to achieve goals and controlling one's life outcomes.
- Growth mindset: the belief that academic and personal abilities can grow with effort.
- Social awareness: the ability to recognize emotions in others and empathize with people from diverse backgrounds and cultures.
- Self-control and self-management: the ability to regulate emotions, thoughts, and behaviors effectively in different situations.

4.2 Student Voice: What Art Means to High School Students

What does this look like in the life of a high school student? To explore this, I met with a small group of students at School One through a call for volunteers for this project. School One is an independent art school in Providence, and its former Head of School, Jennifer Borman, describes it as a school "where art is what athletics is to most schools."

Another group of students I met were students in John Tedeschi's art class at Westerly High School. Westerly High School offers robust art programs for its students, with John Tedeschi serving as the Fine Arts Department Chair.

Both sets of students were presented with some questions in a supportive environment. One question was, "How did art help you reframe negative emotions?" A student shared that when one of her friends was losing hope, she encouraged her to put tape on her arms and draw over it. This eventually helped her friend get over feelings of hopelessness and find inspiration and purpose through drawing. Another student expressed that after the passing of a grandparent they were close to, art gave them an outlet to process their feelings.

In response to another question, "How has art helped you in day-to-day life to make connections?" most students said art gave them a medium to express themselves and to be understood, which in turn helped them make connections. Another theme that emerged from these conversations was how art has helped them develop a rigor of practice, acceptance of failure, and patience—qualities often associated with athletics.

These conversations exemplified how social-emotional learning occurred through lived experiences that helped students develop the ability to handle negative emotions, which in the long run led to positive outcomes; these self-affirming experiences developed their self-worth.

4.3 What Students and Educators Want From Their Buildings

When asked, "What do you have on your wish list for your school building?" the top three student answers were: more autonomy over their space, a space to exhibit their artwork, and opportunities to make their mark during the four years of high school. When teachers were asked the same question, they echoed students' desire for more display opportunities and added that fluid, safe, and observable spaces would be their priority.

I brought these conversations back to reflect on the lived experiences of students and educators. Following the presentation, educators in the audience shared how arts integration is often where they see students most engaged, yet it remains vulnerable to schedule, staffing, and budget pressures.

One attendee, Robin O'Hara, shared a personal experience where her daughter's French teacher gave a project to recreate a famous painting by a French painter. Her older daughter dressed her younger daughter as Degas's little dancer. For both mother and daughters, it remains a cherished experience.



Degas's Little Dancer.
Photo by Tenley O'Hara, model Tessa O'Hara.

A DESIGN FRAMEWORK: MICRO, MESO, MACRO

In my work at Brewster Thornton Group Architects, our team has explored adaptive reuse concepts at three different scales – Micro, Meso, and Macro. We begin by looking for small moves that can make a big impact, treating the built environment as an active partner in arts integration and ensuring that every stair landing, corridor, and commons has the potential to become a cabinet of curiosities: a place where learning, making, and meaning intersect in ways that prepare students for the futures they imagine for themselves.

These interventions range from subtle upgrades to major reconfigurations, but all share a common goal: to make arts integration tangible, visible, and embedded in daily school life.

- Micro: small, targeted changes in corners, corridors, or single rooms.
- Meso: reconfiguration of key shared spaces or clusters of rooms.
- Macro: adaptive reuse or major renovations that redefine the school's identity.

The sections below translate the SEL findings above into three built examples – one at each scale.

CASE STUDIES IN PRACTICE

6.1 Micro – School One Ceramics Wall

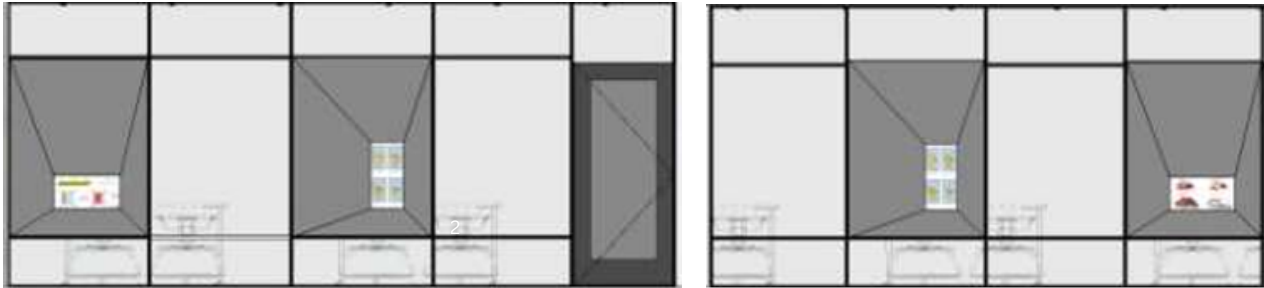
In School One, students in the ceramics class found a neglected corner of a wall in a stairwell to display their classwork. The tiles they designed in class, once installed in the chosen spot, transformed a blank incidental space into one that invited connection and radiated color and warmth. The display also serves as an “emotional anchor” – a place where students feel seen, born from an activity where risk-taking was normalized and where relationships formed across grade levels.



Before and after: the neglected stairwell corner at School One, transformed by student-designed ceramic tiles.

6.2 Meso – Design Concept Study, BTGA

To give students more autonomy in displaying their work, this faceted, two-sided wall gives students access to display while maintaining corridor fire rating. The shelves are glazed with rated glass on the corridor side and are openable from inside the classroom, allowing students to display and change artwork as often as they like.



Design concept study, BTGA – a faceted, two-sided display wall reconfigures a shared corridor into exhibit space.

6.3 Macro – SECCM East Wing, RWU

At RWU, block walls were removed and replaced with interior glazed partitions that facilitated visual exchange between spaces and allowed students to exhibit their work through kinetic lifters. Operable partitions between spaces enabled greater exchange and visibility.



SECCM East Wing, RWU, BTGA – glazed, operable partitions turn a former block-wall corridor into a flexible, visually connected learning space.

DISCUSSION

These examples of adaptive reuse in existing educational buildings demonstrate how even small spatial changes can translate theory into lived, daily experiences of arts integration that, in turn, make SEL more tangible and actionable.

As schools continue to navigate evolving academic expectations, mental health needs, and student expectations, integrating art into both curriculum and the built environment offers a solution. By aligning micro, meso, and macro interventions with student voice, Social-Emotional Learning frameworks, and STEAM policy, existing school buildings can be transformed into places where creativity, empathy, and resilience are not just encouraged but made visible in everyday spaces. In this work, architects, educators, and students become collaborators in shaping environments that honor curiosity, celebrate diverse ways of knowing, and prepare young people to thrive in a complex, rapidly changing world.

CONCLUSION

Returning to the questions posed at the outset: integrating art into the high school curriculum appears to give students a structured, low-stakes way to discover and express their own talents, supporting the self-efficacy and growth mindset central to Social-Emotional Learning. The students interviewed for this paper describe art as a medium for processing difficult emotions, building patience and rigor of practice, and forming relationships across grade levels – outcomes that align closely with Hanover Research's definition of SEL. A creative environment, paired with equal emphasis on art alongside the core curriculum, appears to help students develop academic understanding, collaborate with peers, and cultivate empathy by giving them shared, visible spaces to make and exhibit work.

The Micro, Meso, and Macro framework presented here suggests these outcomes are not limited to the art classroom: they can be supported architecturally, from a repurposed stairwell corner to a fully reimagined wing of a building. As schools continue to navigate evolving academic expectations and student mental health needs, this paper suggests that treating the built environment as an active partner in arts integration – rather than a passive backdrop – is one practical lever available to architects, educators, and school leaders working toward a shared goal: preparing compassionate, well-rounded students ready to thrive in a complex world.

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ABOUT THE AUTHOR



Aarti Kathuria is a registered architect specializing in adaptive reuse in Rhode Island. With over 16 years of experience, she is dedicated to improving educational environments by transforming existing buildings to give them new life and by incorporating solutions that support 21st-century learning. As the K-12 Studio Leader at Brewster Thornton Group Architects (BTGA), Aarti directs the research and design of K-12 educational spaces, ensuring they inspire and empower the next generation of learners.