

LEARNING THROUGH ART

at the Museum of Fine Arts, Houston

A Middle School Initiative

Learning Through Art at the Museum of Fine Arts, Houston, (LTA/MFAH) for middle school teachers explores how a work of art contributes to a student's understanding of both the sciences and the humanities. Using the Museum's permanent collection, the curriculum links principles from different disciplines. LTA asks: How can investigating works of art affect habits of mind, or metacognition? The focus is not on how art can illustrate the concepts of other disciplines, but rather on how a student learns.

Research Initiative

In 2011, the Museum received a grant from the Institute of Museum and Library Services to research, develop, and test interdisciplinary curriculum lesson plans for LTA. The research examines middle school educators' practices, attitudes, and perceptions of art and museums, and examines the use of art in the classroom. The project resulted in an online curriculum for middle school teachers and a series of professional development workshops. The Museum's Department of Learning and Interpretation (L&I) project team formed a group of teachers from across the Houston metro area, representing public, private, and parochial schools; ranging from grades 5–8; and including the disciplines of math, science, social studies, language arts, and studio art. These teacher fellows worked with the Museum's project team to help determine the framework of the curriculum and advise on the needs of classroom teachers and middle school students.

Additionally, Audience Focus Inc., a visitor engagement evaluation consulting firm, along with Museum L&I staff, designed and implemented a range of measures to assess key outcomes for teachers and also to evaluate the impact of the curriculum development process. The Audience Focus Inc. evaluator, teacher fellows, and select members of the L&I staff formed the collaborating research team.

This bold approach to middle school curriculum aligns works of art with language arts, math, science, social studies, and studio art, with an emphasis on revealing and strengthening habits of mind that lead to success in the classroom and beyond. This research team documented attitudes educators hold about how effective the Museum can be in assisting teachers in the classroom. The research model developed will be shared at a national level for use in both museums and schools.

Using this new research and building on previous experience of the Learning Through Art Elementary curriculum, several key factors came to light that must be addressed in the curriculum to ensure its longevity and acceptance as a reliable and relevant resource for educators:

- Recognizing that middle school teaching is compartmentalized (as opposed to elementary school, where students learn in a contained classroom), the lesson plans must teach both discrete subject matter and emphasize the interconnectedness of the discipline to other curriculum areas.
- The Museum must form true partnerships with schools, founded on the exchange of ideas and expertise that positions the Museum, and therefore art, as a partner in the education of teachers and students.
- The curriculum must feature high-quality and relevant materials that provide information and tools for teaching state-mandated objectives with art at the center of learning.
- The lesson plans must include real world examples that apply classroom learning. Because middle school subject matter is increasingly complex, teaching must address the students' ultimate question, "Why do I need to know this?"
- The featured lessons must offer an innovative teaching method that reaches the needs of a wide range of learners and increases student understanding and comprehension.



The research team shared the goal of developing authentic intellectual activity. This type of critical thinking relies on problem solving, making educated decisions, and knowing how to ask for support. With the increased reliance on standardized tests, it is important to teach students how to reach an answer versus choosing the right answer. Discussions through works of art encourage how to approach ambiguous, complex ideas, thoughts, and feelings—all habits of mind. The project team structured the curriculum and professional development around the use of habits of mind as the pedagogical framework.

Habits of mind, or thinking dispositions, are the connections between the classroom and the Museum. Through the research, the project team selected six distinctive groupings of similar habits as the key skills in becoming successful in the classroom and beyond. Works of art at the Museum take the central role in the process of developing these habits through carefully constructed investigations and conversations resulting in direct and tangible connections to the classroom curriculum.

Research Methodologies and Results

A variety of methodologies were employed to assess the wide range of experiences that this program offered to the teacher fellows, including focus group discussions at the beginning, middle, and end of the initiative; a technology online survey to inform decisions about the way the lessons would be digitally distributed; and a series of mini-case studies that focused on the degree to which outcomes had been accomplished.



Museum Attitudes

Teacher fellows dramatically shifted in their attitudes to the Museum as a professional and personal resource as a result of participating in LTA. Appreciation of the Museum as a resource increased along all measures, including the degree to which Museum staff have expertise in learning and teaching, in understanding the middle school culture, and the level of teacher comfort with cocreating lessons with Museum staff.

Habits of Mind

There were no significant differences in the way teacher fellows rated the habits of mind from the beginning to the end of the project. In addition, teachers frequently explained one habit of mind by referencing another habit of mind. This finding suggests that these habits of mind are not, by their nature, independent of each other. They are like grapes clustered around a common stem. Therefore, while asking teachers to rate and discuss habits of mind is extremely useful as a teaching strategy, the data from the ratings does not yield very clean or rigorous results.

Technology Study Findings

The majority of educators surveyed have strong, accessible Wi-Fi at their schools. Technologies most frequently used by both teachers and students at school are computers, the Internet, digital projectors, and wireless access. Interestingly, students are also using these same technologies as learning aids in the classroom, only less frequently than teachers. Tablets, smart phones, and smart boards were used less frequently by both teachers and students. Teachers tend to use the Internet for research in preparing lesson plans. Most of the sample were art teachers who frequently use LCD projectors to show images to students. Educators felt the key benefit to using these technologies in teaching and learning was in the ability to show students a variety of images and artists that they would otherwise not be exposed to without the search capacity of the Internet. This includes not just still images of art, but also videos of artists working and talking about their processes. Teachers mentioned that using technology helped keep the interest of middle school students by engaging them on a variety of levels. Despite the high usage of a variety of technologies, teachers report that the formal training on the integration of technologies in the classroom by the school district is both scarce and, when available, not very helpful.

Outcomes Study

In order to get a deeper analysis of the ways in which LTA accomplished the learning outcomes for participating teachers, the Audience Focus evaluator conducted a series of telephone interviews with select teacher fellows. Responses were divided by level of teaching experience to test the assumption that where educators were along their career paths influenced the ways in which the learning outcomes were manifested. When trends in the interview data were compared across the three career levels, a number of interesting themes emerged.

Early career teachers in LTA reported feeling overwhelmed learning how to juggle all the competing demands of a classroom teacher, which resulted in a lack of confidence in their teaching abilities. When a professional development experience as rich and complex as LTA is offered to early career educators, they can often feel daunted by having to master yet another skill.

Consequently, early career teachers might be better served by professional development programs that invite them to sample new techniques in their classrooms rather than launch immediately into a full implementation of lesson plans. As the small efforts get big results, these teachers are more encouraged to keep offering additional experiences using works of art in the classroom.

Many mid-career teachers experience a sort of professional angst, smarting under what feels like disrespect from their supervisors and the educational system in general. They begin to question why they got into teaching in the first place. A program such as LTA provides educators with the personal and professional validation they so need to continue to grow in their teaching abilities. Experiences that seem to work well with mid-career educators are those that create a safe environment in which to collaborate, create, and share experiences with other educators.

Late-career teachers exude more confidence in their teaching ability and have gotten over the hump of uncertainty about whether or not they should stay in the profession of teaching. They respond well to invitations to think in different ways, to deepen their understanding, and to expand outside of their usual boxes. Programs such as LTA help late-career teachers reconnect with the fun in teaching as they enjoy witnessing students' enthusiasm over the kinds of activities and discussions that the lesson plans suggest.

Not only did LTA accomplish the outcomes, but the process itself revealed a useful framework that will influence the ways the Museum structures teacher experiences by tailoring to the needs and interests of teachers at different stages in their careers.

Learning Through Art at the Museum of Fine Arts, Houston,

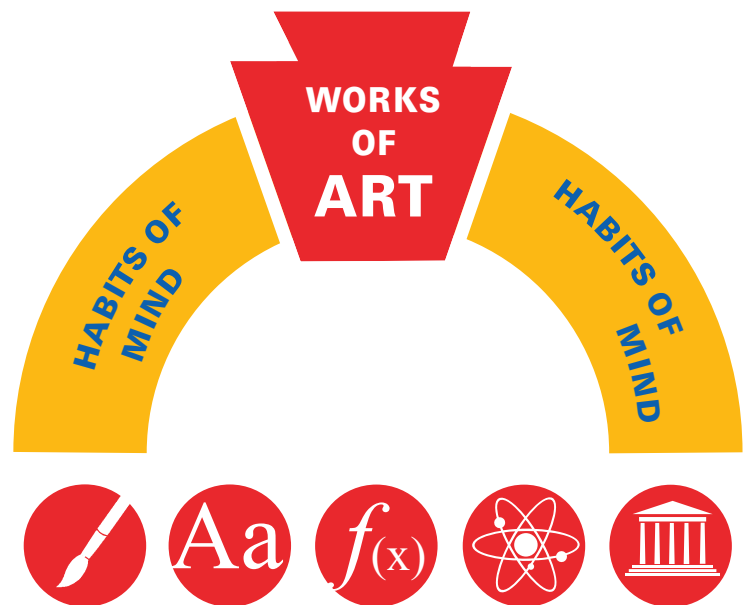
Middle School Is Based on the Following Principles:

- Art is the center to learning across disciplines by developing habits of mind. The ability of the Museum's collections to make transparent the interconnectedness of diverse curricula lies in specific practices that are central to responding to art. This includes exploring varied perspectives, understanding visual-spatial relationships, reasoning and evaluating, and taking informed risks.
- The development of habits of mind through works of art promotes a learning environment that prepares students for today's global society. Object-based learning encourages reflection, self-expression, and the willingness to experiment and learn from one's mistakes. Achieving success in today's information-based, entrepreneurial society demands certain skills that are not often assessed by standardized tests and, therefore, are not necessarily taught through regular curriculum.

- Students are motivated by experiential learning activities and learn best by actively engaging in inquiry, object-based learning. This allows for the application of knowledge in a real world setting. Research confirms that this approach results in a deeper understanding of content and the ability to make sense of complex ideas.
- The Museum and schools must form a true partnership, founded on the exchange of ideas and of expertise that positions the Museum and, therefore, art as a partner in the education of teachers and students. To do so, Museum educators must be knowledgeable about the school curriculum and the needs of students, and classroom teachers must develop their object-based teaching skills and learn about the Museum's collection.

Habits of Mind as the Pedagogical Framework

Habits of mind are thinking dispositions that encompass skills, attitudes, and past experiences that develop reflective, intellectual pursuits. This type of critical thinking relies on developing close observation skills, strengthening problem solving, and making informed interpretations. To be successful in today's global society, students must become flexible problem solvers with the propensity to fail intelligently. Discussions through works of art encourage ways to approach ambiguous and complex ideas, thoughts, and feelings. The Museum offers a democratic space where students and teachers can develop, practice, and articulate these habits of mind.



Works of Art Are the Keystone to Developing Habits of Mind



How Can the Principles and Outcomes of LTA Transfer to Teacher Programs at the Museum and Other Institutions?

• Take time

What was most significant about the LTA process was that it spanned several years, allowing the teachers and Museum educators to create trust and establish effective working relationships. During the work sessions on weekends and in the summers, Museum educators carefully organized the schedule so everyone could relax and not feel rushed. Teachers appreciated having time in the galleries to look, reflect, and talk with other educators. The schedule provided ample time for reflection, communicating that reflection is an important part of the learning process.

• Build trust

Although art museums are making progress toward true collaboration and away from taking an authoritative hard line, there is still much “letting go” that a museum’s staff needs to practice. Sufficient time enables museum educators to build an intellectually safe environment so teachers begin to trust themselves and their abilities to interpret the arts in their own unique ways.

• Focus on teachers as lifelong learners

An important lesson learned in this project is that the more inspired teachers are as lifelong learners, the more likely they are to try to bring their personal experiences with art into their classrooms. The focus should not be placed on teachers as conduits of content but rather on teachers as adult lifelong learners.

• Focus on the experience; content will take care of itself

Historically, museums focus almost primarily on content when working with teachers. However, the research from this project taught Museum educators to concentrate on creating a learning environment that provides pathways of deep learning. This shift places the teachers at the center of their own learning, which differs from a traditional lecture-style workshop. Instead

of telling teachers how the works of art fit in their classrooms, LTA is an opportunity for educators to practice how to become facilitators of learning through using works of art.

Impact

The results from this collaborative research demonstrate that these habits of mind are critical for student success. Furthermore, art museums can play a central role in the development of resources for educators. When teachers become comfortable and confident in discussing works of art outside of their roles as teachers, they advance their skills and become more willing to bring these same investigations to their classrooms. Working together, the art museum and teachers can shape opportunities where complex ideas and problem solving transcend disciplines to result in increased student intelligence.

This curriculum makes art the keystone of developing habits of mind for middle school teachers and students. It places works of art at the center of learning. Through the use of this curriculum teachers will:

- Meaningfully teach state-mandated curriculum objectives for art, language arts, math, science, and social studies.
- Guide students in honing their critical thinking skills and cognitive abilities: observing, connecting, comparing, creative problem solving, interpreting, and evaluating.
- Communicate the interconnectedness of diverse curricula and the ways discrete subject areas relate to each other.
- Provide students with tools for demonstrating real-world applications of knowledge and how classroom knowledge relates to the world throughout place and time.

The next steps for the L&I staff will be to assess and evaluate current programs for teachers to determine how to implement key findings and recommendations from this research project. Museum educators anticipate changes related to workshop format, content delivery, and alignment with K–12 student experiences. This will include a critical examination of teacher resources while also focusing on building a community of collaboration with educators and the Museum.



For more information about the methods, tools of assessment, full teacher fellow case studies and other information, please email resource@mfaah.org. To learn more about the LTA curriculum website visit lta.mfaah.org/.

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