

Reimagining School Programs

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Art museums devote enormous resources to supporting K-12 school visit programs, even though there is little research to indicate that single field trips result in significant student learning. The Isabella Stewart Gardner Museum's education department has taken a different approach, focusing instead on a multiple-visit program that gives students and their teachers extended practice with art discussion using the Visual Thinking Strategies (VTS) approach and conducting a 3-year research project that has shown links between learning to look and critical thinking. This article describes a new model for museum-school collaboration, one that centers on helping students develop their own abilities to look at and interpret art.

Programs for the K-12 school community have always been central to museum education departments. Museums across the country have devoted enormous staff and volunteer resources to school programs. As a result, school programs—field trips in particular—have become one of the signature features of museum education.

For all the time and energy museums and schools expend on individual museum visits, relatively little effort has been devoted to studying the value of these efforts. While recent years have seen an increased focus on museum learning, studying how and what people of all ages learn in museums, the educational impact of the museum field trip remains relatively unexamined (e.g., Falk & Dierking, 2000; Hein, 1998). Stakeholders from both schools and museums seem to take for granted that museum visits are valuable. Whether the value extends beyond impressive attendance figures (for museums) or a shot of “arts exposure” (for schools) is questionable, though some long-term benefits have been suggested (Falk & Dierking, 1997).

In addition to the traditional field trip, some museums have also developed more substantial offerings for schools in the form of multiple-visit programs. Providing students and teachers with in-depth experiences, and often combining activities at the school as well as at the museum, these programs offer more opportunities to study student learning in museum programs. Even so, these programs have been little studied, a result perhaps of the understandable reluctance of educators to devote scarce resources to assessment instead of program implementation (Adams & Luke, 2000). But recent research projects, including a 3-year study at the Isabella Stewart Gardner Museum, have given us a wealth of new information about student learning in multiple-visit museum programs, showing just how important sustained experiences with art looking can be.¹ In this paper we will discuss what our research findings suggest about the role that art museums might play in K-12 education. We will use the Gardner's School Partnership Program (SPP) as a case study to illustrate two points: (1) what can happen when a museum decides to focus on multiple visits instead of the traditional one-shot field trip program, and (2) how research resulted in a change in teaching philosophy.

Focus on Museum-School Partnership

The Gardner's education department was founded relatively recently, in the early 1990s, and had the opportunity to start from scratch in determining priorities for the new department. Because the Gardner is located practically across the street from the Museum of Fine Arts, Boston's encyclopedic museum, there was no pressure to replicate their comprehensive services for

school groups—an approach in any event made impossible by the Gardner’s intimate scale. Instead, the staff decided to focus the new department’s energy on building partnerships with neighborhood public schools to create the Gardner’s signature School Partnership Program (SPP). Today over 800 K-8 students, 50 teachers, and 10 administrators and specialists in 4 Boston public schools participate annually. Dedicated to developing high-quality offerings for a small number of students and teachers, the Gardner program has four hallmarks:

1. Multiple visits for students. Students in grades 3 through 5 visit the museum three or four times a year, preceded by the same number of classroom lessons led by museum staff. (See Figure 1)

2. Long-term relationships with teachers and administrators at partnering schools. Ongoing professional development and communication allow museum and school staff to work together on shared goals for student outcomes.

3. Staff taught. The Gardner has made the commitment to have all School Part-

nership Programs taught by museum staff rather than by volunteer docents.

4. Focus on learning to look. Students learn how to make their own meaning from works of art, an essential skill for future museum-goers.

Putting Guided Inquiry to the Test

When the Gardner’s School Partnership Program first began, the curriculum was developed collaboratively between museum staff and partnering teachers. Museum educators worked creatively to use the Gardner’s collection and exhibitions to complement topics that students were studying in other subjects—usually English or social studies, but sometimes math and science as well. Lessons were structured to help students discover key concepts through discussing works of art, with the goal of teaching classroom content as well as teaching students how to look at art. At the time, the Gardner program was not unlike most traditional museum school programs in terms of content and teaching; the



Figure 1. TIFF image of 4th graders discussing *St. George and the Dragon* (1470), by Carlo Crivelli, in the Raphael Room of the Gardner Museum.

big difference was that because we saw students more than once they had quite a bit more practice in the process of looking.

When the two authors arrived at the Gardner (in 2000 and 2005), we inherited this highly successful partnership program, with its strong relationships with teachers and administrators. It seemed to provide the perfect opportunity to study student learning in museums; the program had been extensively evaluated in terms of its success as collaboration, but not in terms of what students actually learned. We believed students were learning how to look for themselves, but how could we test that hypothesis? Moreover, we were intrigued by the results of a study conducted by Abigail Housen showing that learning to look also helped students develop critical thinking skills (Housen, 2002). This study tracked the results of a classroom-based art discussion program called Visual Thinking Strategies, or VTS, in helping students learn how to look (aesthetic growth) and in transferring the thinking strategies developed through looking at art to another context (growth in critical thinking). We wondered if we might find the same connection between learning to look and critical thinking in the Gardner program.

In 2003, the Gardner Museum received a 3-year grant from the U.S. Department of Education's Arts Education Model Development and Dissemination (AEMDD) grant program. This program supports projects and research that demonstrate how arts programs can improve the academic achievement of students at risk of academic failure. Along with two other museum-school programs (at the Wolfsonian Museum in Miami and the Solomon R. Guggenheim Museum in New York), the Gardner's study looked at the effect of art museum multiple-visit programs on student learning. For the Gardner, the AEMDD grant offered the rare opportunity to take a hard look at what students learn.

From Guided Inquiry to VTS

The Gardner conducted its study, *Thinking Through Art (TTA)*, from 2003 to 2006 in order to understand how the museum's multiple-visit program helps Boston elementary students develop critical thinking skills. Working with researchers from the Institute for Learning Innovation, we spent the first year of the research study, 2003-2004, (1) beginning to develop a rubric to use in identifying critical thinking skills in the context of art discussion, and (2) testing our methods of gathering data from treatment and control students. During this initial year, the school partnership program still focused on connecting the Gardner collection to classroom curriculum: Portraits of Hercules were compared and discussed as 5th graders learned mythology; 3rd graders learned about the museum's founder and life in Boston in the 19th century while studying the history of Boston in social studies; and 8th graders looked closely at portraits in the galleries during character analysis lessons in English class.

At the end of the school year, students in grades 3, 4, and 5 were interviewed in galleries where they had spent time during one of their four visits to the museum. When asked to talk about works of art, students spoke for 1 to 2 minutes; even with prompting by museum educators, the students rarely spoke more than another minute or so. In addition, students could not recall any specific information that had been shared about the objects or galleries. Museum educators were surprised by this finding, as the program was supposed to help students learn to look on their own. At that point the Gardner teaching method (like much museum teaching) involved asking open-ended questions, and then imparting pieces of information that ideally would reinforce curriculum concepts and/or help students understand or relate to the artwork more than they would have on their own. Clearly this pedagogical approach was not having the desired results, even for 5th grade students who were visiting the museum for the third year in a row. After reviewing these pre-

liminary findings with teachers (and much soul-searching), Gardner staff restructured the partnership program to provide more opportunities for students to look at artwork and make meaning on their own terms. To encourage careful looking, we adopted the Visual Thinking Strategies approach for the final 2 years of the TTA study.

In the revised program, students participated in 8 hour-long VTS sessions, looking at and talking about a range of art works. Half of the sessions took place in schools, led by museum educators, and half took place in the museum. A different sequence of 24 objects (3 objects per lesson) was created for each of the three grade levels with the help of Philip Yenawine, co-author with Abigail Housen of the VTS curriculum (Housen & Yenawine, 2000). Like the VTS curriculum proper, the Gardner curriculum was designed to respond to the developmental needs of novice viewers as defined by Housen's theory of aesthetic development (Housen, 1983). For instance, images with more obvious narratives were used for beginning viewers, regardless of grade level, so that students could start with recognizable situations or relationships. Then the images increased in complexity. Artworks with more challenging uses of space, individual portraits, and furniture were featured in curricula for more experienced students to encourage them to apply skills already learned to different situations.

Rather than emphasizing the museum's "greatest hits" or works that directly illustrate classroom curricula, museum educators identified other artworks that met students' interests and expanded of the variety of media, time periods, styles, and cultures represented. To achieve this broader range we began to use images of non-Gardner works for classroom lessons.

The VTS approach maintains that beginning viewers—and most students fall into this category—have specific needs. Novice viewers are first and foremost interested in storytelling, so VTS teaching encourages viewers to find narrative by beginning with the question, "What's going on in this picture?" The teacher who facilitates the

discussion helps students become more thoughtful observers by asking a follow-up question, "What do you see that makes you say that?" As the discussion progresses, the teacher consistently asks, "What more can we find?" to encourage students to look harder and longer. These three questions form the core of the VTS pedagogy.² By encouraging inexperienced viewers to discuss artwork with their classmates, the VTS approach helps students build confidence in their own ideas, become better listeners, and understand that works of art can hold many different meanings. Artists' names and art historical information do not figure in VTS discussions until students have built up enough experience in making their own meaning; only after several years' experience do students develop an interest in other kinds of information researched and generated by scholars.

At the end of the 2nd and 3rd year of the Gardner study, students were again asked to "think out loud" in one of the museum galleries. Instead of stopping after a few minutes as they had the first year, students talked about works of art for the full amount of time (15 minutes) that researchers allotted for this exercise. Clearly using the VTS technique had significantly increased student's ability to look and think independently.

Thinking Through Art Findings

With the new teaching method and curriculum in place, the research team refined the critical thinking skills rubric, collected interviews from school partnership students, and carefully matched control students in grades 3 through 5 for the next 2 years. Control schools were selected for their similarity to treatment schools in terms of student demographics, economic status, and standardized test scores, among other factors. We identified seven critical thinking skills for our rubric, based on feedback from teachers, listening to student responses, and researching school-based definitions of thinking skills or habits of mind. These included:

1. Observing: noticing specific features

of a work of art. (“It looks kind of dark. The clouds are red so it looks like sunset is coming.”)

2. Interpreting: developing a narrative about who the people in a work of art are, what kinds of emotions they show, and what activities they are engaged in. (“I think that he looks like evil, because when people smile they smile like happy, but he’s smiling like he did something bad.”)

3. Evaluating: expressing personal opinions about a work of art. (“If I painted it, I’d probably be amazed with myself—like whoa, I have this much art inside of me! Whoever made this painting probably got paid a lot.”)

4. Associating: using personal experience or prior knowledge as a basis for understanding a work of art. (“I can tell that there’s a servant because he has a thing on his hair like lunch ladies wear, the hair net.”)

5. Problem-Finding: looking for information or generating questions based on puzzling or interesting aspects of art objects. (“Do you think he came in from a window? Or there might be a door behind him?”)

6. Comparing: noticing similarities and differences between works of art. (“They kind of look alike, but you can tell that they’re different because one has long hair and the one has short hair. And the other one has different armor and the other one has another sort of armor, so maybe they’re different kinds of people or like a tribe or something like that.”)

7. Flexible thinking: remaining open to multiple possibilities. (“She might be a maid because of the way her hair’s tied up, but she might also not be a maid because of the way she dresses.”)

In the rubric, skills are loosely ordered by frequency of occurrence; the elementary students we studied (both treatment and control) were much more likely to use the first two skills (observing details and presenting interpretations of art objects) than the other five. However, all seven categories were found in the student transcripts and indicate the range of thinking behaviors

students used while trying to make sense of unfamiliar artworks.

In addition to the seven critical thinking skills, the rubric includes an evidence scale. Most educators agree that providing clear and compelling evidence for ideas is an essential part of critical thinking. Treatment students participating in the Gardner school partnership program provided evidence nearly twice as often as their control group peers. Rather than making it a separate category, we found that it made more sense to show evidence as an underlying habit of mind, since it can be exercised in any of the categories. Here are some examples of how students used evidence to support their ideas:

I think he’s probably telling the girl to do something and she doesn’t want to do

it ‘cause she looks really, really mad. Her face is turning red.

And it also looks like some of the fruits are kind of like rotten a little because there are black spots on them.

The people that live there in that palace are probably very wealthy ‘cause there’s a lot of gold things around. (Adams, Foutz, Luke, & Stein, 2007)

What does the Gardner study, along with the two other museum AEMDD research projects (Curva & Associates, 2005; Korn & Associates, 2007), tell us? First and foremost is that investment in time on task for students (in the case of museums, time spent discussing works of art) resulted in increased critical thinking skills for students. This should be obvious, but given the claims that museums still make about the value of the one-shot field trip, the lesson of time is worth pondering. Secondly, all three museum programs used an interactive teaching approach, and two (the Gardner and the Wolfsonian) used the VTS approach. This illustrates the strong impact that constructivist philosophy has had on the field of museum education, and emphasizes the importance of a teaching strategy that supports students in making their own meaning from works of art.

Finally, learning to look is at the center of all these programs. This is an acknowledgment that learning to look is a skill that requires time to develop, and (in the case of the two programs that used the VTS approach) that there is a direct connection between learning to develop personal interpretations of works of art and learning critical skills. This new focus on the power of art discussion to help develop the minds of elementary students can help schools see the educational benefits of art museums in a new way.

We would argue that independent looking skills are either taken for granted (“Kids today are already visually literate!”) or undervalued, even by the art and museum educators who should be the most invested in helping students make their own connections to art. Since a casual kind of looking seems to come naturally to many students, why not assume that this skill will continue to develop on its own, aided perhaps by healthy doses of information about art and artists? However, considered together, the results of the three recent museum studies make a strong case for learning to look as an important basic skill that can be cultivated effectively over time, and that deserves a prominent place in both school and museum curricula.

Research as Change Agent

At the Gardner, the effect of the *Thinking Through Art* study has been profound. The opportunity to examine our program to determine what students were actually learning was both anxiety provoking and exhilarating. An invaluable part of the process was working closely with project researchers to articulate student outcomes and then to develop the rubric which was used to gauge our achievement of program outcomes. This intellectually rigorous process helped clarify current goals for staff and for our partner schools, and has helped enormously to plan for future school partnership initiatives in a more considered way. As we watched the results of switching to the VTS approach with elementary students, we began to won-

der how we might use this approach with 8th grade students and their teachers. Would the VTS approach provide these older students with opportunities to grow not only in terms of basic thinking skills, but also more complex skills of comparing, problem solving, and thinking flexibly?

In the fall of 2006, the Gardner started an in-depth curriculum and professional development program with partner teachers at the Boston Latin School (BLS). The teachers were invigorated by the positive results of our DOE study, and were curious to see how VTS could affect their students’ critical thinking skill development. Participating teachers and classes are part of a clustered 8th grade program called Connections involving teachers in multiple subject areas (English, U.S. History, Math, Latin, Foreign Languages, Art, and Drama).

Initially, the teachers were introduced to the research and rationale behind VTS, including Housen’s aesthetic stage theory and its relationship to critical thinking skills. The teachers quickly adopted some of the teaching strategies such as pointing at an image during the discussion and linking related comments. However, it was not until the teachers facilitated lessons that they noted some distinct differences between VTS and the teaching approaches they usually used in the classroom. They found it was challenging to paraphrase comments that had more than two ideas—it was difficult to listen carefully while also trying to quickly come up with new ways to rephrase student comments. Teachers also struggled with remaining neutral, particularly with responses that they found exciting, and found it hard not to add their own interpretations to the conversation.

Following the training, museum educators met with teachers to review the year’s curriculum. Gardner staff then created four lessons for each subject area. Featuring a pair of images linked to one of the five themes explored in the Connections program, the lessons were structured to encourage students to mine the artworks for meaning in ways that paralleled thinking approaches in each subject.

In selecting images for our middle school audience, Gardner staff followed a process similar to the one used to create the elementary curriculum. Images (from the Gardner collection and elsewhere) of potential interest to this age group were gathered, discussed with teachers, and tested with students to create a curriculum sequence that introduced artworks of increasing complexity. What differed were the kinds of images selected—adolescents tend to gravitate to imagery that features conflict or complex situations, perspectives, and characters—and the questions asked during discussions. Because older students have a wider range of experiences and higher level thinking skills, they are more likely to make comparisons or to try to place an object in its cultural context, and so additional questions were used to encourage this in group discussions. For instance, teachers might ask, “What more can we say about where [or when] the event in this picture is taking place?”

In one case, an English teacher used Edouard Manet’s painting *The Execution of the Emperor Maximilian of Mexico* (1867-1868) while her classes were reading Victor Hugo’s novel *Les Misérables* (1862). Although these works were created around the same time, the painting depicts an event unrelated to the novel’s plot. To begin, the teacher asked students to create a T-chart: on one side, writing down what they thought was happening in the image; on the other side, giving evidence for their thoughts. After writing independently, the class had a VTS discussion about the image for 25 minutes. Students were then asked to jot down one way in which the image relates to the novel, and later discussed their connections. So over the course of one 45-minute period, students made observations and interpretations; respectfully listened, responded to, and debated ideas expressed by their peers; revised their thoughts; compared the image to text; and found links between the image and their own experiences and prior knowledge. That night’s homework assignment built on this lively class session: Students read an art historical interpretation

of the painting and then reflected on and revised their initial written responses by incorporating additional ideas that emerged from the discussion and reading.

After each lesson teachers reflected on both their teaching practice and the students’ behavior. This feedback has been invaluable to refining the curriculum over the past 2 years. Each teacher now has his or her own subject-specific pool of images, and museum educators meet individually with teachers to create 3 to 0 lessons each year. After teaching a few VTS lessons, the teachers became more aware of the thinking processes that students were using, and were more likely to use conditional language while paraphrasing and linking comments: “Whitney is also making the association...” or “Keenan is suggesting that slaves are working...” This open-ended language not only creates a neutral environment for discussion, but also sets the tone that the conversation is open for multiple interpretations.

The teachers made other facilitation adjustments in response to their students’ behaviors. A U.S. History teacher noted that, while her 8th graders freely offered their ideas and opinions about the images, 10th graders were a bit more reticent to share in a group. So she asked the older students first to write about the image for a few minutes, and then started the discussion by asking a few students to volunteer their ideas. This opened up the dialogue in a more gradual manner, and afterwards the students added to their writing based on new ideas shared through discussion.

Other lesson refinements occurred as teachers tailored their lessons to fit the needs of their subject areas. To build vocabulary, the Spanish teacher paraphrased student comments in both English and Spanish. A Math teacher paralleled small group work that is often used with algebra equations by leading a discussion with one image, and then dividing the class into small groups to discuss the second image. Afterwards, each group shared their interpretations with the entire class. Through a lesson like this, students are learning that

they can apply the same critical thinking skills to interpreting a work of art as to mining a mathematical equation.

Piloting a new way to integrate art discussion into the Connections curriculum has provided an important creative outlet for Boston Latin School teachers. The sense of pride and accomplishment that comes with this kind of “action research” is one of the major benefits of an in-depth museum-school partnership. In addition, the VTS approach liberates generalist teachers from their fear of using works of art as a resource by not requiring extensive art historical knowledge. Without pressure to lead a conversation to some predetermined conclusion, teachers are freer to encourage students to share their own ideas and to work together to problem solve. VTS group discussions give teachers the ability to see how their students’ minds are working; as each discussion unfolds the teacher can gauge the level of students’ critical thinking and communication skills and modify the lesson accordingly to best meet their needs. Will Connections students use these skills on their own in museum and other contexts, long after their participation in this program? We hope someone will undertake a longitudinal study of this at some point in the not too distant future.

As the pilot year drew to a close, some of the 8th graders asked to lead VTS discussions for their peers. Watching these student-led discussions, Gardner educators noticed that students had internalized both the three main questions and the basic discussion structures, such as neutral paraphrasing and linking related comments. Reflecting on the program, most students said they enjoyed the change of pace provided by peer-led discussions. Several students noted surprise at their collective ability to discuss a work of art in depth, and also recognized that VTS can be applied to many facets of their lives (not just art), including song lyrics, poems, magazines, television and movies, and everyday situations.

When students were asked at the end of the year in what other situations they could use VTS, one said, “I think the whole

concept of this VTS-ing thing is listening to others and working together to solve problems and you can apply *that* to anything” (emphasis by student). Another student saw VTS as a communication tool to solve arguments, such as “What is your opinion? Why do you say that? How else could you frame your thoughts?” And another student noted how his behavior was affected by the group dynamic. “In these discussions, I was surprised because I heard many great and rational ideas that were sometimes complete opposites. It was challenging to agree with either side of the discussion.”

When reflecting on how VTS adds to their curriculum, several teachers noted that discussing imagery not only develops critical thinking skills but it helps students learn how to support their views by providing evidence that derives from the source material—a skill which many students struggle to develop. A Math teacher reflected that “[VTS] allows students to believe that they do know a great deal of the subject area—there is always *something* they know about what is being taught and this helps them realize that” (emphasis by teacher). An English teacher listed many similarities between analyzing works of art and texts, including “using context clues to decipher vocabulary, analyzing poetry, making inferences, deciphering authorial intention and thematic connections.”

Lessons learned through the Boston Latin School pilot encouraged Gardner educators to use VTS with middle school students and teachers at another partner school. In the fall of 2007, three middle school classroom educators and the art teacher participated in a schoolwide VTS teacher training at the Mission Hill School, with the goal for the classroom teachers to lead the VTS lessons during English, Humanities, and Math classes. Despite recognizing connections between the questioning strategy and their literacy program, few lessons were taught in the middle school classes during the 2007-2008 school year. The teachers felt pressured to meet the goals for improving students’ achievement on standardized tests, as well as properly address several content

themes throughout the year. They simply regarded VTS as “one more thing” that they had to do throughout the year.

To help the teachers understand how VTS could be used to not only develop but strengthen students’ critical thinking skills, Gardner educators met with the middle school art and classroom teachers, a student teacher, and—since VTS lessons are designed first and foremost to address the interests of students—an 8th grade student to review images and lesson plans. The classroom teachers insisted that the images tie in with specific curriculum concepts until they began to listen to their student talking about which images she liked the best and why. The results were illuminating to all the educators. The student was drawn to imagery that was realistic in nature, executed well by the artist, represented a wide range of cultures and media, and typically included a familiar or recognizable object, person, or activity. She was particularly intrigued by imagery that featured odd or puzzling perspectives and some type of conflict (such as an adult and teenager in a tense conversation), and by photography, prints, and drawings. When the student was asked if she wanted to know anything about the artworks, she indicated an interest in how a few of the works were made, but overall she just liked looking at them—and thought her classmates would, too.

This brief meeting gave the art and classroom teachers insight into the thinking of one of their older students, and helped them to realize that their students were comfortable looking at and discussing a wide range of imagery. They also realized that students’ visual vocabulary could be enhanced with relevant imagery: images that addressed the students’ interests, but also pushed them to widen their definitions and understanding of different techniques, cultures, and time periods. After this meeting Gardner educators selected a large pool of images and met individually with teachers to plan VTS lessons tailored to their subject areas for the following academic year.

At the Tobin School, another partner school, the administration and participating

elementary teachers shared their experiences with VTS so frequently at all-staff meetings that Gardner educators were asked to present the approach to the entire teaching staff at a mid-year professional development program. The middle school staff immediately saw connections between VTS and problem-solving skills used in English, math, music, and social studies. So in the fall of 2008, Gardner educators will train all of the middle school teachers in VTS. Following this, VTS will become a regular curriculum component for all students, pre-kindergarten through 8th grade at the Tobin School.

New Possibilities for School Programs

The Gardner’s story is unique in some ways. A supportive director has allowed us to experiment and take risks. We have also had a long-standing relationship with teachers that has allowed us to radically change our School Partnership Program and switch to the VTS teaching approach. But the questions we have asked are important for museum/school programs in general. What are the goals of school programs, and what can realistically be accomplished during an hour-long field trip? What should be taught, and by whom? How can museum visits be effectively integrated into the classroom curriculum?

We were fortunate in securing the AE-MDD grant that allowed us to research and test our own answers to these questions, and to share them with the field. Over the 3 years of the study, we refocused our program goals to concentrate on teaching students how to look independently. Partnering teachers have marveled at the ways in which the VTS approach helps students develop speaking and listening skills, encourages them to discuss, debate, and respect divergent points of view, and stretches their capacity to investigate and understand unfamiliar objects. These skills are important across the curriculum and, of course, throughout an individual’s lifetime. We can now say with confidence that the VTS art-discussion curriculum not only

teaches students how to look at art but also supports the development of critical thinking skills. The research project has sparked other program initiatives as teachers, having seen the results of the VTS approach, have been eager to try it themselves. In addition to teaching students how to look, we also want to empower teachers to effectively lead their own discussions about art.

We find ourselves at a perfect moment to rethink the role of art museums in K-12 education. Recent research has shown the power of discussing art as a means to boost critical thinking skills and student achievement in social studies and literacy (Adams et al., 2007; Curva & Associates, 2005; Korn & Associates, 2007). But these advances can only be accomplished through ongoing contact with students and teachers, not through single museum visits or teacher workshops. Multiple-visit programs offer new ways to help struggling urban schools produce students with 21st century skills, and at the same time, open the world of art and museums to new audiences.

Endnotes

¹We want to emphasize the difference between evaluation, something which museums do on a regular basis to solicit visitor feedback about specific programs, and research, which tests a theoretical hypothesis. Evaluation is extremely common in art museums, while research is not.

²For more information on the VTS curriculum, go to www.vue.org.

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