

## School Partnership Program

### 2010-14 Elementary Longitudinal Case Study

#### Executive Summary

The Isabella Stewart Gardner Museum has used Visual Thinking Strategies (VTS) as its main pedagogy in our School Partnership Program with local Boston schools for ten years. VTS invites students to make observations and provide evidence for their ideas about works of art through carefully facilitated, open-ended group discussions. VTS helps students explore works of art while connecting with their previous experiences and knowledge, develops visual literacy and flexible, rigorous critical thinking, as well as strengthens language and listening skills. In addition, VTS nurtures problem-solving abilities and builds confidence and willingness to participate in group thinking and discussion processes.

#### School Partnership

The Gardner Museum's School Partnership with the Tobin K-8 School is a multiple year, multiple visit collaboration that emphasizes regular VTS discussions at both sites. Responding to findings of our 2003-07 U.S. Department of Education grant, [Thinking Through Art](#), the program evolved beyond lessons led by our staff into significant changes in school culture at the Tobin K-8 School—including intensive professional development for classroom teachers, which led to more art discussions and writing opportunities for students. In addition, the relationships between the Gardner Museum and the partner schools changed dramatically: instead of focusing on multiple-visits for students in one or two grades, we now work with many students over their entire K-8 academic careers as well as their classroom teachers year after year. While our past formalized research focused on the effect of 1 year of VTS on participating students, we started to wonder about the partnership's effects over time.

#### Research Methods

We measured the long-term impact of the Partnership on a cohort of 11 students over 4 years: from the start of Grade 2 in 2010 until the end of Grade 5 in 2014 using open-ended interviews and written responses to reproductions of works of art. All interviews and writing samples were transcribed and analyzed by Gardner Museum educators. Both data sets were coded for specific types of critical thinking: supported observations, speculations, revisions, questions, elaborations, and multiple possibilities. The interviews were also measured for how the students make meaning with works of art using cognitive psychologist Abigail Housen's Aesthetic Development Scoring Manual.

#### Key Findings

1. **Over time, students in the School Partnership Program increase their range of ways of thinking, both in terms of aesthetic development and critical thinking skills.** Specific types of critical thinking skills develop and transfer more quickly than others, particularly elaborations (continuing the same thread or idea) and supported observations (backing up ideas with evidence).
2. **Levels of critical thinking skills are correlated with Aesthetic Development Stages, rather than grade level**—which makes sense, because students grow at different, individualized rates.

3. **Urban elementary students undergo many cognitive, social and developmental transitions, so learning does not always happen linearly.** Educators at both the Gardner Museum and Tobin School are interested in developing skills that students may transfer to other contexts and content, but this development takes time--in the case at Tobin, a few years--for students to assimilate those skills into how they respond to work of art in writing.

### **Implications of Findings**

The Gardner Museum's School Partnership Program now has a coding process for both Aesthetic Development and critical thinking skills, including coding manuals for each elementary grade level. We also have strong inter-rater reliability between Gardner Museum educators, and we have begun training other staff and classroom teachers to use our Critical Thinking Skills rubric.

During the 2014-15 academic year, Tobin 3<sup>rd</sup> grade teachers collaborated with SPP staff to integrate VTS to their Expeditionary Learning (Reading) curriculum to cultivate a habit of revision and editing in writing while encouraging students to use evidentiary reasoning. Students wrote about a preselected picture from their reading curriculum, answering "What's going on in this image?" After spending a week studying the book using Close Reading, the class had a VTS discussion about the same picture, and then students completed a second writing sample about the same picture. Teachers coded the writing samples using the Gardner's critical thinking skills rubric. Over the course of these five lessons, **the 3<sup>rd</sup> grade students' critical thinking skills counts rose from 92 in lesson 1 to 232 in lesson 5**—including an increase of questions and of supported observations, fulfilling the teachers' initial goals. The students also became more excited to write, felt ownership over the books and images, and began to incorporate academic vocabulary.

### **VTS has become a part of Tobin School's culture**

Tobin elementary teachers lead regular VTS lessons with art throughout the year, so every Tobin student talks about 20-30 images annually and grades 3-7 visit the Gardner twice annually. Since many teachers apply the VTS questions and facilitation methods throughout their curriculum, and they have also noted many connections between VTS and the Common Core State Standards, such as students' ability to ground their ideas with evidence from the images and texts during Reading, problem-solving and acknowledging different points of view in Math, and overall excitement about learning with visual art. As this case study demonstrates a strong connection between aesthetic development and critical thinking skills, regular discussions with works of art through careful VTS facilitation by Gardner Museum educators and classroom teachers will continue to support student growth.

### **Next Steps**

In the future, we will deepen our understanding of the effects of VTS on our partner schools by comparing and contrasting this data set with others, including longitudinal data with high school students and teachers. We look forward to sustaining our partnership with Tobin School and will continue to explore various refinements to the School Partnership model, including how to best study and share our findings with stakeholders, including Tobin families, students and staff.