

# **VTS:** *Visual Thinking Strategies*

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## **As Theory Becomes Practice**

*The Happy Tale of a School/Museum Partnership*

By Catherine Egenberger and Philip Yenawine

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Kate Johnson gets a smile on her face when she talks about the four-year collaboration between her institution, The Minneapolis Institute of Arts (MIA), and the public schools of Byron MN, a tiny community that sits amidst well-tended farm fields two hours south of the Twin Cities. “If we help one teacher learn the skills and confidence to teach about art to his/her students, we can touch the lives of many children,” says Kate, the Museum’s veteran Chair of Education. “In Byron, where all teachers K-8 are being trained and our visual images are being worked into the ongoing curriculum, we have begun to effect an entire community of children, hopefully for years to come.”

Bruce Johnson, a teacher from Byron who is as much at home hunting and fishing as in his fourth-grade classroom, also grins broadly as he reflects on the last few years. “Before, I thought art museums were intimidating. I felt out of place. I felt like I didn’t know anything, and everybody else had their noses in the air. But now I visit museums for my own pleasure,” he said, citing a trip to the museum in his home town which until this past summer he had never thought of visiting. “But I think the MIA’s changed drastically, too. Their attitude is way different. When we first came up there, we were kind of being watched. I don’t think they accepted the questioning technique we used with the kids. Now, in just a couple of years, it is entirely different.”

No one would have predicted this outcome a few short years ago. While it is the goal of many museums to train teachers to integrate art into their classes, and to have all the kids come to the museum prepared to enjoy it and feel its pertinence to their lives, the reality is often disappointing. Encounters with museum objects are infrequently woven into the fabric of people’s schooling and are tangential to their

personal lives. The experimental program in Byron was, therefore, facing formidable odds, intending as it was to create a change that affected both whole schools and the ways in which museums traditionally worked with such audiences. As schools and community, Byron's relationship to museums was typical. Byron is a quiet town of 2,400 people in the primarily agricultural region of southeastern Minnesota. Prior to the formation of this partnership, there was a strong arts specialist at the high school but none consistently in the primary and intermediate grades. The schools and their faculty of dedicated, intelligent teachers were, in fact, as distant from the cultural life of the city as you could get. Few teachers had any connection to art and admitted to rarely darkening the doors of museums. Most of the families--hardworking, supportive, and education-conscious--similarly lived comfortably outside the realms of art. Like most rural communities, Byron lacked the resources to design or implement a comprehensive K-8 arts program, although most residents and educators were very receptive to the partnership idea when approached.

For years, the MIA has had an extensive program for schools, exemplary in fact, and an extremely positive response to it as well; upwards of 75,000 kids a year visit in groups. The offerings run the gamut from exhibition and thematic tours, to tours with studio or writing components, and ones in conjunction with the neighboring theater and orchestra. In addition to a highly trained core of docents, they have a cadre of experienced volunteers which takes reproductions arranged by themes into schools. They have scores of videotapes, slide sets, and even objects that can be borrowed by teachers. There are certified teachers on the staff to consult with their school colleagues, and to a very real degree programs are tailored to the desires of particular situations. The museum offers popular teacher training workshops, and enjoys comfortable working relationships with the city and state arts education specialists.

In talking about the content of their programs, Kate Johnson continues, “Because ours is an encyclopedic collection spanning 20,000 years, our tours and materials address issues of cultural diversity and historical context. We want students to experience works of art from a number of perspectives and to learn about the variety of cultures that they represent.” The potential to introduce people to the cultural history of the world, and to focus student learning on the art of many peoples, gives an emphasis to the teaching: the staff has found many ways of sharing and leading people to search for information.

Catherine Egenberger had something additional in mind. She had recently moved to Byron after many years as first a teacher in Minnesota public schools and then a museum educator in upstate New York. Her last position, director of museum education at Bard College, allowed her to create an extensive program with local schools. To evaluate this, she turned to Abigail Housen, whose work in assessing aesthetic development intrigued Egenberger. The two became partners in program design as well as evaluation, acknowledging how inextricably connected the content of a program and its assessment are. Housen, whose research is further discussed below, had constructed a stage theory of aesthetic development, and it was Housen’s insights into the needs and interests of beginning viewers, and how they develop naturally over time, that became the structure on which Egenberger decided to build a full arts program in Byron.

To do this, she thought programming needed to be multi-faceted, beginning with professional development every fall, and including year-long, in-class instruction by classroom teachers involving art objects, museum visits for every student in Grades K-8, artists in residence, public/ community programs, and a culminating arts festival every spring. For the professional training and curriculum components, she enlisted Housen and her colleague Philip Yenawine who had begun

collaborating in 1988 and who by 1993 had a curriculum for beginning viewers underway, now called the Visual Thinking Strategies (VTS), as well as a method for training teachers (also new to looking at art) to use it. The VTS was a practical application of Housen's theories, and they wanted a site to test it, where they could assess teacher and student changes in looking and thinking patterns over time. They also wanted to study the knotty problem of the ways in which aesthetic growth transferred to other areas of school work.

The Byron school administrators decided they liked Egenberger's ideas, although it was not a simple process getting everyone on board and raising the money -mostly from outside sources to carry out her plan. The school had hired an art specialist for the primary and middle schools the year prior to the partnership, which was essential for the success of the partnership. The school also committed to covering substitute teacher costs for professional development time necessary for the Byron teachers to learn to use the VTS.

Since the partnership also involved a museum visit for all participating Byron students each year, the MIA was also approached, and in turn said "yes" to what was proposed as a five-year collaboration. Kate Johnson, who had also followed the work of Housen and Yenawine, wanted to be part of a long-term study of learning - such research is rare in museums. She felt that knowing first hand about the methods built into the VTS could usefully inform all parts of her program that focused on audiences at the beginning of their viewing lives.

The part of Housen's and Yenawine's methods that was most challenging, and perhaps most in need of verification, was the way it de-emphasized information as a means to teaching beginning viewers. Clearly reflecting on her substantial research base, Housen sums up her wish: "I want people to feel that they can respond to a

work of art in their own voice. I want them to feel excitement from asking their own questions and engaged as they discover their own answers. Being present in that way in front of a work of art is the beginning of forming a personal relation with a work of art, an intimacy which will enliven the viewer and can grow with the viewer, not ahead of the viewer.”

Kate Johnson’s years as an educator sensitized her to this point. One of the attractions of working with Housen in the meticulous study she and Egenberger proposed was the way it focused on the learner, asking them to reflect on what they already know as the entry point into finding meaning. “If we find something that works better than what we currently do, we must incorporate it,” she says with no hesitation. “Art is too important in people’s lives for us to risk not really reaching them. Housen’s research suggests that teaching people ways of approaching art, of thinking about it, is the way to start them off, not telling them the wonderful things it has taken us years to learn. If this is so, then I want to know about it.”

The VTS became the curricular feature of the “experimental treatment” being studied once all parties decided to proceed. The VTS consists of sets of lesson plans (roughly ten of them each year) taught by classroom teachers. Their final class is a visit to the museum. The VTS begins in kindergarten with children pointing out what they see and sharing their responses, and develops over the years to the point where older students are conducting mini research projects which explore their own questions about artists who particularly interest them.

All along, teachers are facilitators of a student-centered learning process, never authorities--particularly appropriate in this case since most of the teachers are beginning viewers themselves, at least when they begin. During the lessons, teachers ask students to examine works of art using open-ended questions, discuss what they

see, and provide evidence to support the conclusions they draw from their observations. They support students' answers, usually paraphrasing them, keeping their own views to themselves and accepting all student responses as valid as long as the student gives visual evidence to back up opinions. Teachers actively gesture to what students point out in the images, to keep students' eyes on the images, and they facilitate the exchange of ideas by linking them. They answer questions with questions: how do we find out the answer to that? The whole thing is, in other words, a process of discovery.

Each lesson focuses on images from many different cultures, times, and mediums. The art has been chosen (much of it from Minnesota collections) and sequenced to support and nurture the developing skills of beginner viewers; it poses greater challenges as the capacities and interests of students expand. The questions which are the centerpiece of each lesson are presented in an order that guides the discussion so that it gradually becomes richer, more specific, and more probing.

As stated earlier, the VTS is based on a body of empirical findings about how people grow in their understandings of art, collected and interpreted by cognitive psychologist Abigail Housen over a twenty-year period. The data led to a description of stages that occur as people change, given exposure over time to works of art. These stages of aesthetic development are consistent and predictable. An understanding of these stages provides a map for structuring learning experiences that are nurturing to naturally-occurring operations, and provides indicators of the ways and times to insert appropriate challenges. Housen's research therefore provides not only the insights for creating student-centered strategies for learning, but also the method for assessing whether or not the strategies work.

In order to track both aesthetic change and the impact of the VTS on other aspects of student and teacher learning, many different assessment tools have been used: demographic questionnaires, biographies of museum / art-related experiences, open-ended content questions that relate to specific goals of the project, two different kinds of interviews (one reveals thinking patterns about art; the second investigates whether patterns or skills that can be attributed to the VTS are apparent when an individual studies a different sort of object--for example, a fossil), writing samples, teacher diaries and extensive debriefings, and observation of teacher and student behaviors, including some videotapes. There are pre- and post-tests, and most of the data collection is replicated in a control school in a nearby town.

An early version of the VTS, piloted at The Museum of Modern Art when Yenawine was director of education there, was first introduced to the Byron teachers during the school year 1993-1994. By 1996, it was possible to conclude that the sequential developmentally-based curriculum combined with its strong professional development component, originally designed and tested in urban settings, can succeed in a rural community. Housen's method and measurement techniques apply across socioeconomic and geographic settings. The aesthetic interview scores seem valid from a clinical and statistical point of view. The aesthetic stage scores are plausibly distributed for the ages and grades; they are similar to previous samples (Bard; MoMA; St. Petersburg, Russia). There is an overall, positive shift in aesthetic development stage growth in the students, stronger in Byron than in the control school. The patterns of stage change are predictable, with the highest percentage of changes at Stage I. There is replication of common findings from previous studies; for example, gender has no impact on aesthetic stage.

There are also some discoveries. Upon close examination of whose stage scores were changing and why, Housen found a pattern she calls the "floor effect." In

a short time period, the program first affected those at a relatively lower stage for age/grade and brought them up to parity. For this, she credits the dialoguing technique which exposes these students to the more advanced thoughts of peers, thus facilitating this shift. The patterns which appear support arguments of Russian psychologist Lev Vygotsky who describes how, through discussion, individuals "scaffold" on each other's understanding and grow through interaction.

In addition, critical thinking skills learned in the VTS curriculum are being observed in other classes. Veteran sixth-grade teacher Dorothy Janvrin reports, "The students' reasoning has come along very well this fall. They have been able to apply the scientific method more effectively than I can ever remember." Bruce Johnson's fourth graders approach their history text differently. "There is a whole chapter in our social studies text on the history of the United States, with photographs of scenes which compare the past with today," he mentions. "Before I used to have to work any comments out of the students and ask them all kinds of questions. Now, they go on and on and on without anything from me. This is definitely not a capacity that the kids had before we started teaching the curriculum."

Housen has documented many such observations, even from administrators and parents, which include: changes in students' written and verbal performance; the length of students' spoken sentences; the use of complete sentences; longer descriptions in written text; use of symbolism in both written and verbal presentations; and more overall involvement in writing projects. In classes, they are making more observations and clarifying and supporting their comments more frequently. Students are using more hypothetical thinking. During the museum visits, teachers have reported difficulty in ending writing sessions and have had to promise additional time back at school. They report this as a "most unusual" occurrence.

In order to track the transference that the teachers describe, Housen has conducted formative research, the main tools for which are the interview in which students discuss objects (fossils, foreign coins, calipers) and their writing samples. Analysis of the interview, a method of study which is still being developed and tested, appears to corroborate the teachers' reports that the Byron students are transferring learning gained through the VTS into other domains. Thus, as the research expands knowledge of the unfolding of aesthetic thought, it also broadens and deepens understanding of how aesthetic development influences other competencies sought by schools, museums and communities.

It is the changes in thinking that seem to stand out in the minds of most--a new, open thoughtfulness, respect for others, and advancement in willingness to draw conclusions based on observations. There are even advances noted by kindergarten teacher, Mapuana Evjen, who says, "I've enjoyed the VTS because in our classroom it gets the children into a habit of accepting different viewpoints. Many young children have always been the center of attention at home. This is the first time they've had to think about how someone else sees something differently than they do. "Dorothy Janvrin, again talking about sixth graders, reports, "We've always had to promote active listening and active learning. But this gives students a license that means we don't have to push. The VTS lets them express themselves, share things that go beyond what we teach them, and even to be wrong - which to me is okay because they are thinking, and that is what is important."

This kind of activity has been seen in the museum as well, and Kate Johnson and her staff have been impressed at the level of excitement and the seriousness of the discussions. Yenawine has been brought in to work with docents and other staff members, explaining more about Housen's theories and the teaching strategies that can be used by museum teachers to initiate movement toward self-sufficient viewing

on the part of beginners. As Kate explains, this is “the most statistical, most comprehensively researched project in Minnesota,” and it is creating new priorities for teaching in museum. “It has been wonderful to see teachers who are pros in their classrooms seem wholly at ease in the museums, and it is because they are helping kids genuinely think about works of art. I feel very differently about the role of information in museum teaching than I did, and I want to see more and more looking and thinking result from the encounters we facilitate as museum educators.”

Understandings of partnerships has increased too. Both parties agree that without sensitive coordination, problems could occur. The principal of the elementary school, Karen Roos, reasons that “The Byron schools have learned that although we are both in the business of education, sometimes the museum’s and the school’s goals are not entirely in agreement. We have learned to give and take, and to learn from each other. We are better prepared for any future partnerships, and definitely convinced that they expand our educational boundaries.” Kate Johnson agrees: “It is not so much that we have learned new principles, more that we have reinforced some, perhaps with added emphasis. Chief among these are the importance of on-going communication and flexibility.”

Steve Nichol, PTA president for the entire duration of the partnership and father of three children in the Byron school, reports, “There is a lot of interest and enthusiasm in the community about this program - almost a sense of urgency now. Once people realize and understand what we have here, they realize how important this is and they don’t want the children or community to lose it. On a personal level, I had thought of art as separate from my life. Through the program, I have begun to understand that art is really part of all our lives.”

## **Key Traits of Housen's Stages of Aesthetic Development**

### Stage I The accountive, or storytelling stage

The viewer responds to obvious features of works of art based on personal experience, and finds stories in them which may or may not be intended by the artist.

### Stage II The constructive stage

The viewer evaluates the realism of the object and how well it is made. Over time, this viewer learns to construct less subjective, more systematic and analytical frameworks for understanding works of art.

### Stage III The classifying stage

The viewer accumulates information and uses it to analyze and classify art; interested in historical, biographical, theoretical, and technical facts about art.

### Stage IV The interpretive stage

The viewer uses Stage II frameworks and Stage III knowledge in the service of their personal, intuitive relationship to art, often interpreting the symbolic and metaphorical possibilities in it.

### Stage V The re-creative stage

The mature, philosophically-minded viewer incorporates all modes of thinking and relating to works of art contained in earlier stages; sees universal as well as elemental implications, is both objective and subjective at the same time.

*To date, Housen and her associates have studied approximately 2,000 individuals who range in age from seven-year-olds to adults in their eighties; these people run the spectrum in terms of experience with art, as well as gender, race, ethnicity, education, profession, and economic status. Studies found that most viewers are in the range of Stages I to II (or II/III which is a transition between two stages, II and III) and are what we call "beginner viewers."*