



Visual Understanding in Education
119 West 23rd Street, Suite 905
New York, NY 10011
212-253-9007, (f) 212-253-9139, www.vue.org

**Report to the Museum of Fine Arts, Boston,
on the Teacher Interview Case Study
of the *Thinking through Art Program*, Spring 2000**

by Karin DeSantis and Abigail Housen

Prepared by Visual Understanding in Education

Project Background

The Boston Museum of Fine Arts (BMFA) and the Boston Public Schools (BPS) have had a significant partnership since the mid-1960s. Their collaboration focuses on a program making it possible for all fifth-grade BPS students to visit the museum. In 1996, the BMFA and the BPS began to investigate the possibility of using a developmentally based art-viewing curriculum, the Visual Thinking Strategies (VTS), as the basis for a new collaboration. The VTS was created by Visual Understanding in Education (VUE), and is based on research conducted by Abigail Housen into the patterns of thinking people employ as they look at art. Using this research data, she and her colleague Philip Yenawine developed the VTS. The VTS is designed to support the development of visual literacy – the capacity to find meaning in a wide range of visual material – as well as thinking and communication skills. The VTS exemplifies VUE’s mission to make a developmentally based, student-centered teaching method and curriculum more widely accessible.

The 1996-97 Thinking through Art Pilot Program Research Study

The BMFA/BPS called their new program Thinking through Art (TTA), and in 1996, they implemented it with professional development sessions for groups of self-selected fifth grade teachers and museum Gallery Instructors (GIs) which enabled them to use the VTS Starter Lessons.

Pre and post program **student** art viewing assessments (aesthetic development interviews)¹ collected and analyzed by VUE (Fall-Winter 1996-97) documented a trend toward positive changes in students’ thinking about, and understanding of, art. In addition, VUE researchers, following up on reports from teachers that skills fostered by the VTS were transferred by students to assignments in other subject areas, conducted material object interviews (MOIs)² with students using unfamiliar objects from material culture. The MOIs showed a trend toward development of critical thinking or critical and creative thinking skills, such as increased observations, providing evidence for observations, and speculations. Interestingly, these data corroborated evidence and reports in other studies being conducted by VUE at the time.³

¹ VUE’s main research instrument is a non-directive interview--the Aesthetic Development Interview (ADI)--that involves showing subjects a reproduction of a work of art and asking them to talk about it as though thinking out loud. A sampling of thought units is coded using a manual covering thirteen different domains of thinking that was derived over a fifteen-year period using the same interview protocol. Each interview is further studied in context to understand how each thought unit fits into an over-all pattern of thinking.

² Originated from the ADI, the Material Object Interview (MOI) utilizes a material object such as a coin, a fossil, or a map in place of a work of art to elicit thoughts. As with the ADI, this non-directive interview follows the same procedures of collecting, coding, and analysis.

³ Methods for Museum Education Study in Byron, Minnesota; Visual Thinking Strategies Program Studies in St. Petersburg, Russia and Almaty, Kazakhstan.

The 1997-98 Thinking through Art Program Portfolio Case Study

Intrigued by teacher reports of skills transferring across disciplines, the BMFA asked VUE to conduct a study to see if teachers could document their observations and learn to assess objectively student gains in thought and communication. The case study asked two questions: could teachers find concrete evidence of transfer that they observed? And further, was there a way they could they demonstrate, within a reasonable time frame, their ability to assess what they documented? Six BPS teachers who had participated in the initial year's pilot were asked to collect students' writing samples during the second year; they also videotaped classroom discussions of images. The analysis of the data showed that a diverse group of experienced teachers could, with support of the researchers, document and assess specific skills and demonstrate their transfer from one learning situation to another.⁴

The 1999-2000 Thinking through Art Program Teacher Interview Case Study

The BMFA asked VUE to design a study to further illuminate how the TTA program contributes to effective teaching and sustained learning. The 1999-2000 case study focussed on student evaluation and teaching style, exploring the effects of the TTA program on student performance and teaching style as observed by the teachers. During in-depth interviews teachers were asked to comment on notes they had taken on the classroom participation of three of their TTA students – students who were chosen to represent a range of learning skills and behaviors. In particular, they were to reflect on how the TTA program affected their students' thinking and communication skills. Teachers were also asked to reflect on their own teaching practice during the course of the study, noting any changes in teaching style. Analysis of the data showed that the participating teachers were able to record and reflect on the changes in the thinking of individual students and of the larger group, as well as gain a better understanding of the effect of the VTS program on their own teaching practice.

⁴ More information on the 1997-98 program is available in the [Report to the Education Department of the Museum of Fine Arts, Boston on the Pilot of the Assessment Method and Training in the Thinking Through Art / Visual Thinking Strategies Program 1997-98](#), February 1999

Teacher Interview Study: Project Design and Implementation

The five teachers in this case study participated in in-depth pre and post program interviews conducted by interviewers trained by VUE. These interviews included a broad range of questions exploring the teachers' schooling, as well as their teaching experience and their pedagogical philosophy (Appendix A). In addition, a demographic and art and museum background questionnaire (Appendix B) was collected. Finally, pre and post aesthetic development interviews were conducted. Each teacher was provided with an observation form designed by VUE (Appendix C) and instructed to select three students to observe, based on students' class placement--one each from the high, middle and low range of abilities represented in their classrooms. Additionally, each teacher was observed once by a BMFA program coordinator.

The participating teachers taught at the Channing, Lyndon, Hurley, and Mason schools. They represented a broad range of teaching specialization. The length of their teaching experience ranged from one to twenty-five years.

Table of teacher profiles

Teacher Number	Years of teaching	Specialization	Current Arts & Crafts	Art History Background	Art Background
1	1	2-way bilingual	quilting	classes in college	
2	3	elementary	calligraphy	classes in high school and college	
3	3	elementary special needs visual arts	design, painting, drawing	classes in college	BFA in printmaking, 15 years as graphic designer
4	9	elementary	drawing	classes in college	art history major
5	25	early childhood	NA	classes in college	

In addition to the small size of the sample, this group of teachers should not be considered representative for several reasons. Their level of interest in the arts was unusually high. Several had formal training in the arts, and all but one are actively involved in arts and crafts. The group's range of frequency of museum visits was also higher than average. Their art backgrounds, and active involvement in the

arts, help to explain why the group's aesthetic stage range was higher than the average stage range for adults (including teachers).⁵

Excerpts from the Teacher Interviews

The central goal of the Teacher Interview Study was to for participating teachers to observe, document and reflect upon the changes that occurred in their students and in themselves during participation in the TTA program in Spring 2000. The following section uses extensive excerpts from the in-depth teacher interviews to illustrate how the teachers perceived the ways in which the VTS contributes to effective teaching and sustained learning.

Changes in teacher practice

The teachers initially responded to the question about whether their teaching style was affected by the TTA program by saying that, in a broader sense, participation in the TTA program did not change their practice as much as it allowed them to teach the way they want to but do not. Upon further reflection, however, they recognized that TTA had affected their practice in significant ways. (The numbers in brackets after the excerpts refer to the teacher numbers in the above teacher profiles chart.)

It actually fit beautifully into my own philosophy, and it was a refreshing break from always, supposing that I you know, I'm supposed to know all the answers and there weren't any answers, so it was really great...I think I'm empowered more to be more of a facilitator than a director so to speak. I think that's something I've always known I wanted to do and be as a teacher, and I think it's a very, it's ultimately what teachers are there for. So I think this has given me the sort of incentive and the inspiration to do that more. (2)

No, not really. It's just that I'm going to use it more. I think that it's a valuable learning tool. I will be using it more. I learned a great deal, too, by using it and listening to what they [students] had to say...So we will continue. Then my teaching did change. I am a little calmer now... (5)

I don't think it's changed because that's where it was going anyway, and I think the only reason that is, is because I'm fresh out of school and that's the way they're training teachers nowadays. So I can't take credit for that...Well, it affected my attitude towards them [the students] and it affected my perspective of them as learners and it just kind of reminded me that, you know, just because these are not mathematicians or great readers that they still are, have intellectual capacities. (1)

I don't think that it changed any core values and goals but again, that it reinforced my belief in just the whole process-oriented learning. And also reinforced the value of sometimes stepping back from some of the curriculum pressures to take the time, actually when you stop and look at how much classroom time it was, it's not such a huge amount of time but could have a huge impact. (4)

What I liked about this was that it wasn't coming from me. It's coming from them [the students] ...I think it fit in fine with what I want and what I feel is the right thing to be doing...That's more what I think about teaching and the way it should be. Is it what I

⁵ VUE's studies have repeatedly found that the average adult viewer is in the beginner viewer stages. Several of the teachers in this sample were in the intermediate viewer range.

always do? No, it's not...the nature of education today has sort of made us do that – we are under so much pressure to produce kids as products almost that we don't sort of look at these more humanistic pieces of life and time and conversation...It's not that it comes from bad intentions. It comes from knowing that there is so much for them to know, that they need to know. But I think we're damaging, there are a lot of missed opportunities if you don't allow time for other things. That's why [TTA] has made me sort of reevaluate all that... (3)

Group changes

TTA is discussion-based. In each lesson students look at, and respond to, carefully selected and sequenced slides and open-ended questions. TTA discussions foster students' ability to increase their observational skills, question intelligently, support assertions with evidence, respectfully differ in opinion, and build on ideas previously voiced. As evidenced in the following responses to questions about classroom dynamics, teachers benefit from increased student participation, as well as from the development of their skills related to facilitating classroom discussions - and their students learn to hear, build on, and respect others' opinions.

...I was asking them [the students] to do something that a teacher had never asked them to do, which was to think and well, of course I've asked them to think before but to look at paintings that adults have done and to talk about it and have a discussion about it, which wasn't focused on me at all, but it was focused on each other. Well, I mean that was the hope and that was what ended up happening towards the end. I mean, they were building off each other and having a discussion, and I was just there pointing and paraphrasing...It definitely has carried into other classroom discussions and other subjects... (2)

...[B]efore we started [TTA] it was like pulling teeth getting them [the students] to give me the whys, and afterwards, it was almost like they knew I was going to ask, so from [TTA], I think, that they would just come out with it. Especially now as we're nearing the close of the year that now, they're saying, you know they won't say anything without giving me a reason why, which is great because that shows that cognitively they're going up a few steps. (1)

One favorite thing [of mine] was the kids'...level of participation and the kids' comfort as they realized there was no right or wrong, which they realized almost instantaneously...The other thing was watching how they did get better at it. If there is no right and wrong, how do you get better? But they got better in the sense that they would defend their ideas without being asked. They would connect to other kids without being prompted. They seemed to tune in to what other kids were saying more. (4)

That [setting ground rules for TTA discussions] makes them listen to each other, which is really important because there are definitely times when they are not listening to each other. If they were, they'd be learning so much more. (3)

...[T]hey are working in groups, yes, and they are calmer. They are not as argumentative as they were, and they work better in the groups, because I think they respect each other's opinion a little bit more than before. (5)

They started saying...well, I agree with so and so. Or I was thinking about what so and so said. Here is what else I am thinking about that, and sort of building off of it. They did that all themselves. I thought that was pretty amazing, so those pieces where they really connected it to things we have done and were thinking about. It felt like they were putting everything together that I was trying to do. That was really nice. (3)

Changes in Individual Students

VUE has consistently received reports from teachers that the VTS creates a learning environment that encourages all students to participate, especially those who are usually reticent participants in classroom discussions. The following excerpts, provided by teachers in response to questions about changes in individual students, are concrete examples of this phenomenon. Several TTA teachers point out how students' increased participation carried over into other disciplines.

...I had a couple of kids who are very shy and I wrote about one of my students. He seemed to have opened up a little more. He is able to take a risk...When we have to present something he is not as shy as before. (5)

So for him [a student with an auditory processing delay] participating in a discussion is particularly difficult...his participation increased. Some of it I think was, I mean I think it was [TTA], and I also think some of it was the time. I think they felt less rushed than they do in some settings. ...I talked to his speech teacher, his speech and language pathologist about him a little bit. She said it's interesting, he's talking more in his speech group....It made me think about all these missed opportunities of other times when he might have had these great things and then didn't want to take the risk to bring them out. (3)

One student was changed by this significantly, and I guess maybe changed is too strong a term, but she is a student who, she's definitely special needs, although she hasn't been screened for it and tested for it. She has a very difficult time articulating her thoughts, just even a basic thought or...in any event, she, every single [TTA] session, came up with the most amazing ideas about this art, and she articulated it beautifully and she brought outside knowledge into the discussion. (2)

I noticed that students who tended to not do well in other subject areas, who were kind of shining in [TTA], were more confident when we were doing other subject areas. (1)

Teachers' perceptions of their students were challenged though the process of careful observation.

...there were three levels [of learning skills] and at the lowest level I had placed one particular student and it turned out that he had so much to say, and it was so, and he actually revealed his, the only intellectual side of him that I've ever seen...and it was amazing to me that he was able to make the kind of deductions that he did from looking at the paintings, because Spanish is his first language and he was doing it in English...and students started respecting him as someone who could be a source of useful information. (1)

The other one that was interesting was, I chose a really bright student, I know in the past he has had real issues with being wrong...So I sort of thought he would be the classic example of someone who wouldn't really get into this because he wants to be affirmed as being right. But he didn't do that at all...so I just thought that was really interesting in that it was almost different than what is expected in the sense that, he too, loved the chance to not be right or wrong. (4)

...I am a believer in the seven intelligences. And I think that I had pegged her to be the most proficient viewer, and she wasn't at all. She kind of, because there was no right or wrong answer, she tended to flounder because she thrives on that...My expectation was wrong. (1)

Standards

As in other school districts nationwide, the BPS has begun to test the effectiveness of teaching through the development of learning standards.⁶ The new standards mandate the development of learning behaviors in students that stress their ability to think and to solve problems--to help them master the process of learning. TTA's use of art, only one of art's many possible uses, helps students build such reasoning skills by means of their observations about what is going on in a painting. Students make interpretations based on evidence. They discover that there can be multiple correct interpretations. They build upon others' thinking in revising their own interpretations. Thus, art can be used in the classroom to teach students how to develop the critical thinking skills mandated by current state and district standards. The following comments illustrate how the teachers saw the TTA program supporting the development of those skills.

As I said, it is just another technique for them to use when they are required to make diagrams and to illustrate or to write, describe what you see or write me a story. Before they seemed to be afraid to imagine something different of where they are and what they see. With [TTA], they seem to be able to use their imagination for writing, to be able to describe and discuss a situation and not be afraid to write it down. (5)

It would be easy to defend this to a parent or administrator or another teacher, how this complements other academic stuff, other academic areas in terms of learning. [Learning to] to support their ideas with evidence, which is a huge issue in their writing, oral discussion, just being able to articulate their ideas, which is a huge issue in language arts that we're constantly working on – listening, visual, just visual observation skills. I mean...it complements so many other standards and things. (4)

Well, undoubtedly it's public information that the new, that the city-wide standards are looking to see whether or not students have the skills to solve problems and explain why. That's the whole reasoning behind this open-ended questioning on the state test, the MCAS.⁷ And all of the key questions that we have, key questions are questions that as long as you can back them up solidly then you're OK. If you don't have those skills and you just are able to give a very surface answer, then you're not going to do well...[TTA] is priming them for, to answer those sorts of questions and helping them with the why. (1)

...[T]here are some of what they call strands which talk about making oral presentations. Not just making oral presentations, but the whole idea of expressing oneself verbally, and [TTA] fits right into that. Again, it has to do with language arts, but it extends to my mind through all subjects. So I think that it fits right in there in terms of the state. I'm assuming that [TTA], a lot of [TTA] has drawn on the state's...So I think it fits in that way. (2)

⁶ According to the BPS website (<http://www.boston.k12.ma.us/teach/standards.asp>), "[t]he Learning Standards are general descriptions of what every student in the Boston Public Schools will know and be able to do in order to pass each subject, be promoted to the next grade each year, and graduate from high school." "Students will provide details to support opinions" is an example of a Language Arts standard.

⁷ Massachusetts Comprehensive Assessment System - a component of statewide education reform.

Conclusion

By examining the teachers' interviews and observation forms, VUE found that they were able to

- identify, document, track, reflect on, and analyze changes in both group and individual student participation levels;
- similarly identify and study improvements in student communication (such as listening to one another, building on each others' comments, and constructively articulating agreement or disagreement);
- identify and reflect upon changes in their teaching practice;
- understand the correlation between the TTA teaching method and the development of the above skills;
- note skill changes not only within the TTA classes but also when transferred to other disciplines;
- and establish the correlation between skills fostered by TTA and those district- and statewide goals which address the advancement of thinking and communicating.

In addition to the above observations and reflections, the in-depth interviews provide useful feedback on the Thinking through Art program in general. Overall, teachers found the program to be well-structured, and the materials easy to use.

It was incredibly well organized - not only the sessions themselves but our whole guide here. If I ever had any questions, I could go directly to this packet. The slides were well organized. I mean the whole thing was just very professionally put together, and that enabled me to access it very easily. (2)

...this is really structured. This is what I need to do by this date, this is what I need to do by that date...When you have something really efficient like that, it takes even less of your time...(4)

Several teachers mentioned that TTA provided a much needed and welcome break, as both they and their students felt constrained and under pressure from the many demands placed upon their time.

I think they were grateful for it, as was I, because they could...express themselves, and they rarely get...an opportunity as much as I would like to have them speak freely about things that they want, because the schedule is so structured and organized. I actually found it a little bit hard to get [TTA] in sometimes, because there's so much material to cover. But it was a nice little break for them to be able to not have to worry about having the right or wrong answer, and to just communicate their own way and feel comfortable and listen to each other. It was great. (1)

We are so driven by curriculum. We have to cover this, we have to cover that, we have to make sure they are addressing all eight strands in math and all these periods in American history...There is so much to cover in one year that I always feel that I am rushing. And taking the time was really important for me, to take the time to stop. Even from the very first time we did it, we turned out the lights, put on the slide projector, there was this sort of collective "wooh" that went through the room of the kids. They could feel it, too. It was like this was a very different thing. It gave us permission to sit and talk together. ...Just in terms of it's a break from this frenetic pace we are subject to now. (3)

The Thinking through Art program represents a paradigm shift from delivery of facts to a process-oriented, development-based learning of critical thinking skills and strategies. Unfortunately, in the prevailing climate of increasingly high stakes testing there is little time for the kind of learning that supports the development of these crucial skills. In a recent KCAAEN and Kennedy Center Partners in Education After-School Protocol Task Force Report, Allen Greenspan, chairman of the Federal Reserve Board, is quoted as saying that “[c]ritical awareness and the abilities to hypothesize, to interpret, and to communicate are essential elements of successful innovation in a conceptual-based economy.”⁸ TTA provides a ways for students to learn the skills they need to not only meet the new state- and district-wide standards, and other school and life challenges, but to do so in a learning environment that teachers and students clearly find both beneficial and rewarding.

⁸ Kennedy Center Alliance for Arts Education Network and Kennedy Center Partners in Education’s After School Protocol Task Force Report, 2000