



Report to the Education Department of the
Isabella Stewart Gardner Museum

on

The 8th Grade School Partnership Program
Visual Thinking Strategies Adaptation
2008-2009

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“VTS adds to the classroom experience by helping students to speak
freely, think openly, offer evidence, and make connections to other



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students' observations. I think that it empowers students to participate and to better notice their own ideas and to offer them in more respectful, thoughtful ways, and to understand that they can engage in meaningful ways with materials that they don't have lots of prior knowledge about." (BLS Treatment teacher)

This report presents the impact of Visual Thinking Strategies (VTS), as adapted and implemented in the Isabella Stewart Gardner Museum's 8th Grade School Partnership Program (SPP). VTS is a curriculum and teaching method developed by Visual Understanding in Education (VUE), which uses art to support the growth of aesthetic and critical thinking and communication skills.

This report will discuss the effect of the Program on the aesthetic and critical thinking of participating students, as well as on the aesthetic thinking of participating teachers. Data collected from teachers and students for this analysis included pre and post program Aesthetic Development Interviews (ADIs) and questionnaires. The ADI is an open-ended interview using a reproduction of a work of art developed by Abigail Housen,¹ which offers a window into a viewer's aesthetic thinking. Pre and post student writing samples were also collected.² Teacher and student ADIs were analyzed using Housen's method. When viewers talk in a stream-of-consciousness monologue about an image, and every idea, association, pause, and observation is transcribed and analyzed, different stages become apparent.

1

Housen, A. (1983) *The Eye of the Beholder: Measuring Aesthetic Development*. Ed.D. Dissertation. Harvard University

2

Only complete sets of pre and post data were included in the final analysis.



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Housen’s research demonstrated that viewers understand works of art in predictable patterns she called “Stages.” She identified five Aesthetic Stages. Student ADIs and writing samples were also analyzed by counting two of the Critical Thinking Skills fostered by VTS, supported observations and speculations. Multiple studies conducted by VUE found that critical and creative thinking accompanied growth in aesthetic thought. Third-party researchers have corroborated these findings. The studies have found that VTS builds aesthetic and critical-thinking skills that students transfer to non-art objects and other subjects, including writing.³

Data was collected on 3 groups of teachers and on 3 groups of students. The following table shows the number and kinds of VTS lessons and VTS extensions received by the 3 student groups.

	#VTS Lessons	# VTS image discussions	#VTS non-image discussions	Writing or extension activity
BLS Treatment Group	17	12	5	8
BLS Control Group	0	0	0	0
Tobin Treatment Group	5	5	0	0

1. Aesthetic Thinking

Aesthetic Development Interview Images



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Pre ADI Image



Post ADI Image

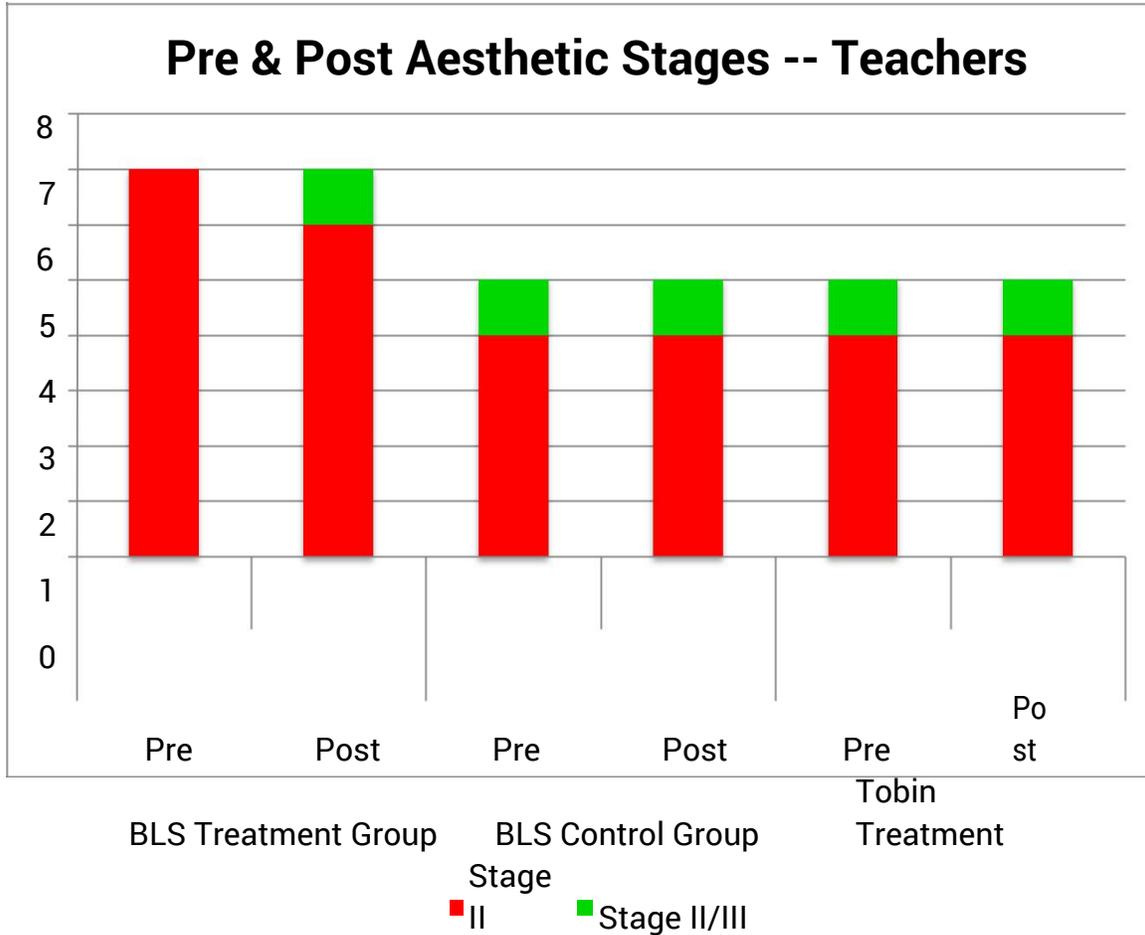
3

http://www.vtshome.org/system/resources/0000/0088/vts_research_summaries.pdf



Teachers

The majority of participating teachers in all 3 groups coded as Housen's Stage II in the pre and post samples. One teacher in the BLS Control group and one in the Tobin Treatment coded at Housen's Stage II/III in the pre and post samples, and one BLS Experimental teacher's Stage grew from II to II/III.



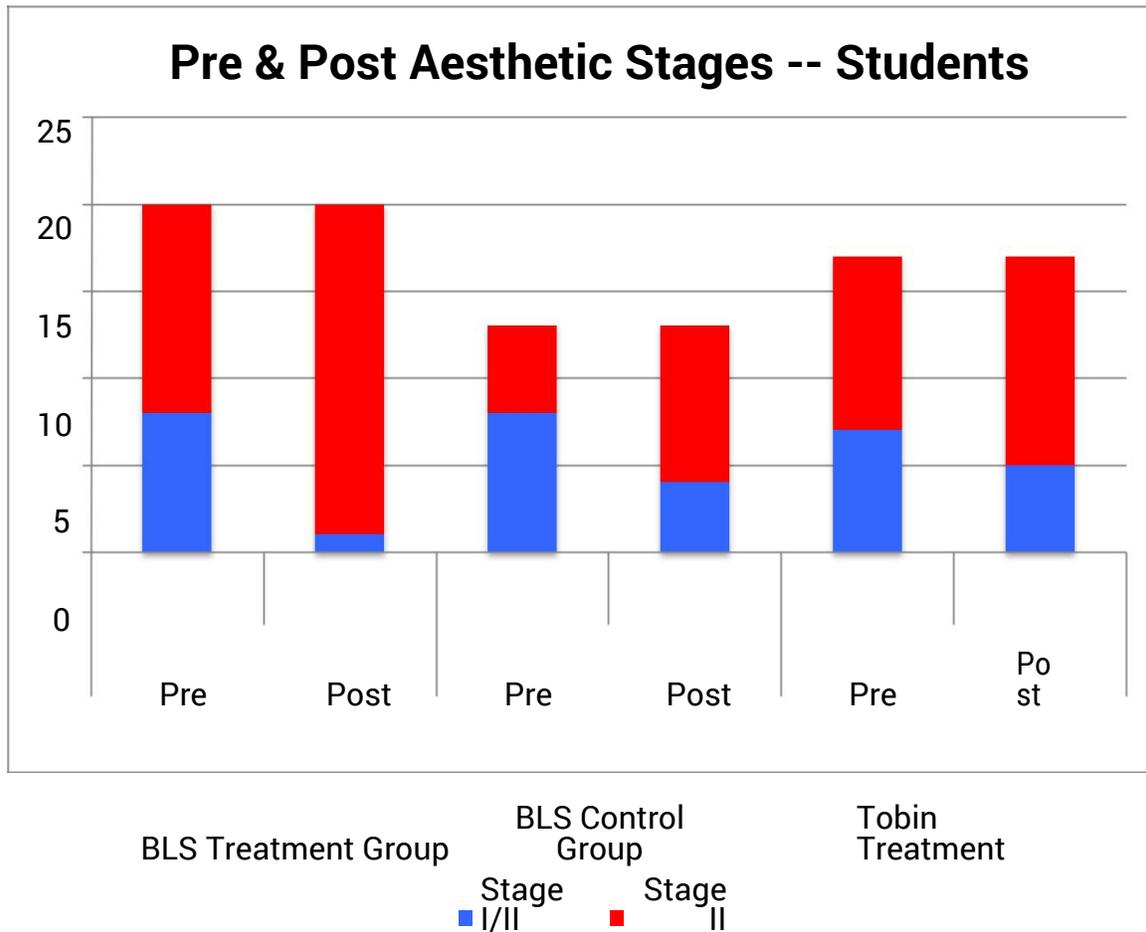
The Stage range of participating teachers is similar to that found in previous studies conducted by Housen: “Most adults interviewed seldom score above Stage II. General education teachers in our studies are most often at Stages that are roughly similar to their students.”⁴

⁴ Housen, A. (2001). Eye of the Beholder: Research, Theory, and Practice, p. 21.

The teacher data shows that Treatment teachers did not experience Stage growth as did their students. This could be explained by the fact that Treatment teachers did not participate in VTS image discussions amongst themselves.

Students

By the end of the year, there was a difference in Aesthetic Stage scores between BLS Treatment and BLS Control students, although all scores advanced to some degree. The BLS Treatment group experienced the greatest rate of growth. Eight out of twenty BLS Treatment ADIs coded as Stage I/II in the pre sample, and only one coded as I/II in the post sample. Nine out of fourteen of the Tobin pre ADIs coded as I/II and five coded as I/II in the post sample. Six out of sixteen Control ADIs coded as I/II in the pre sample, and four coded as I/II in the post sample.



2. Critical Thinking Skills – Student Aesthetic Development Interviews

In addition to coding for Aesthetic Stage, the Critical Thinking Skills (CTS) of supported

observations and speculations in student ADIs were counted. Supported observations are

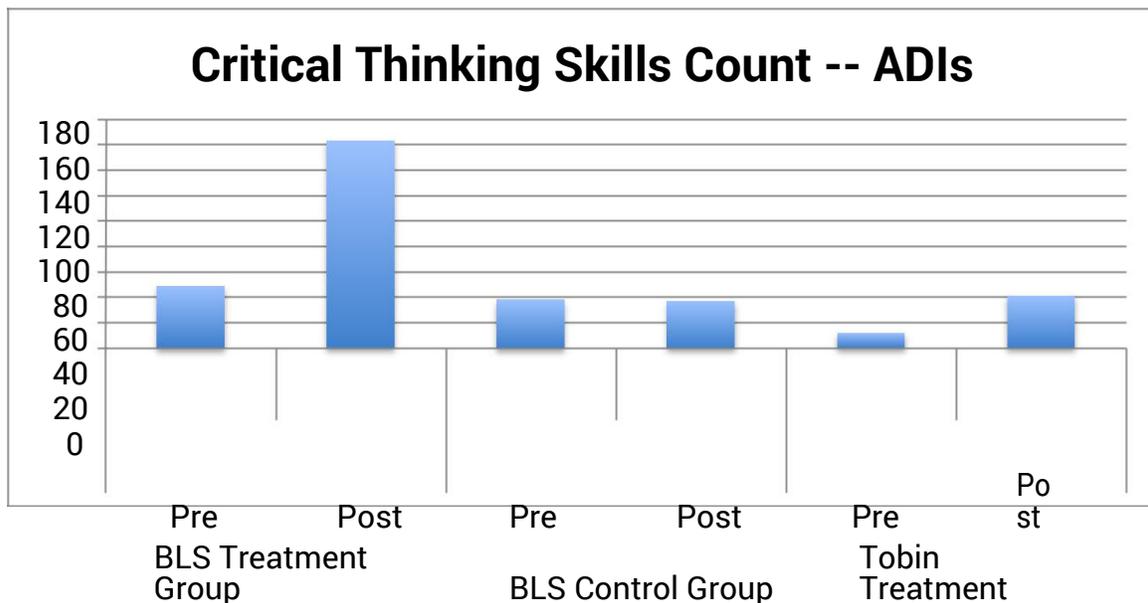
observations backed up with evidence, such as in the following ADI excerpt:

OK, so I see a kid. And it looks like he's kind of sitting, and it looks like he's in front of a piano, just because you see part of the music book sort of, and the stand where the music book would go. And also there's a

metronome, which is what you use when you're playing piano. I don't know. The house is kind of like, I think he's in a house, but it just seems kind of abstract, sort of. Yeah. You can tell it's like a room that he's in, not just space because there's like a little fence there, sort of, like a railing thing. And I think somebody's listening to him play, I guess, because that looks like a person in the corner.

Speculations are comments using conditional language, showing the viewer in a speculative mindset, such as in the following ADI excerpt:

Well, there seems to be, well, this actually could be a piano I think, now that I look at it. It seems like there's a head and it's like the person's playing piano, and then there's a book open, and it's probably a music book. So they're probably playing on the piano, and there's like a candlestick maybe on the table of the tabletop of the piano, and some other weird objects, but I don't know. And maybe these people are listening to them.



Noteworthy is that there is a threefold increase of Critical Thinking Skills in the post ADIs of the BLS Treatment and Tobin Treatment students. Treatment students make more supporting observations - they provide evidence from the images to back up their assertions and observations - and more speculations than the BLS Control students do.⁵

Treatment teachers observed these increases in their classrooms: “Students are more likely to stop and think before they speak about an observation/opinion.” (Tobin Treatment teacher). “They also seem more open to the possibility that there are multiple truths possible.” (BLS Experimental teacher).

The following excerpts from pre and post Treatment ADIs provide examples of the increases in CTS counts in Treatment students.

BLS Treatment Student

Pre

I see, it's like a girl looking into a mirror at herself but one of them, like the girl that's looking into the mirror, she looks like the colors are like positive and then the girl in the mirror, her reflection looks more like negative colors, darker colors and my eyes go to the background mostly. And it's kind of like that one has a different, the picture of the mirror, it looks like it has a different mood than the one looking into it. I think that's about it.

⁵ One Control student who had an unusually high count of Critical Thinking Skills in the pre ADI was not included in the final analysis.

Post

OK. So I think that this might be like a kid, and then that might be the mom because he kind of, I don't know, it's just probably his face, and he has like no hair, so it reminds me of like a baby or something. And it looks like he either might be in some type of crib or a bathtub. And if that is his mom, she looks like she's sitting on a chair like looking at him, or watching over him. And this looks like some type of maybe a window, and that could be symbolize like light or something, because it's different than the rest of the room.

BLS Treatment Student

Pre

Basically I see their stomachs. I'm assuming that's a stomach. And it kind of looks like they're pregnant so I'm guessing it's like a celebration or something of pregnancy. I notice that it seems to be suggesting an interracial, it's white and other colors, yellow and black and brownish. And I don't really...um...It's very colorful, obviously. They seem to be doing some sort of gesture with their arms, almost like an embrace or kind of lifting their arms up in happiness I suppose. The background is consistent diamonds in different colors with either, dots inside that are either just one color or more like a bull's-eye target. That's about it.

Post

OK. So the first thing I noticed was that it seems to be painted kind of abstractly, where it seems like the person, the chair seems to be painted in the background, but could also just as easily be painted as part of the wall where this kid is sitting, at this piano, I suppose. The chair seems like it, there's a person sitting on it. It also looks like it could be a chair designed to look like a person, because of this white splotch right here. It could be almost an open space where you'd sit down, but could also be part of a dress. I noticed that there's, I don't know what this is for, but there's a green section where it's triangular. It's part of the wall, I'm going to say, but it could also be opening into as a balcony, because these two French doors right here indicate a balcony space. There's a kid that I

mentioned earlier. He looks angry almost. One of his eyes is outlined by a dark green triangle, which gives sort of an impression of, to me anyway, of anger. It's slanted down at an angle, and his facial expression is sort of blank, almost, but his mouth is open in a way that to me expresses anger.

Tobin Treatment Student

Pre

The picture is a different picture than most pictures. It has like different colors. It's like different face expressions. It's like one face is white, and the other one is yellow. The designs are like weird. The colors don't look plain. They look like they're mixed. The style of the picture is rare. It's not a lot of time, you can see them mostly in museums. There's hands there. I don't know. It's a weird picture, pretty much...The faces. They're weird, like there's not a picture that has a black, red and purple face, or yellow and white face. It's like hard to tell, like where does her body start? You can see her faces and a whole bunch of designs. And the background is like different, too.

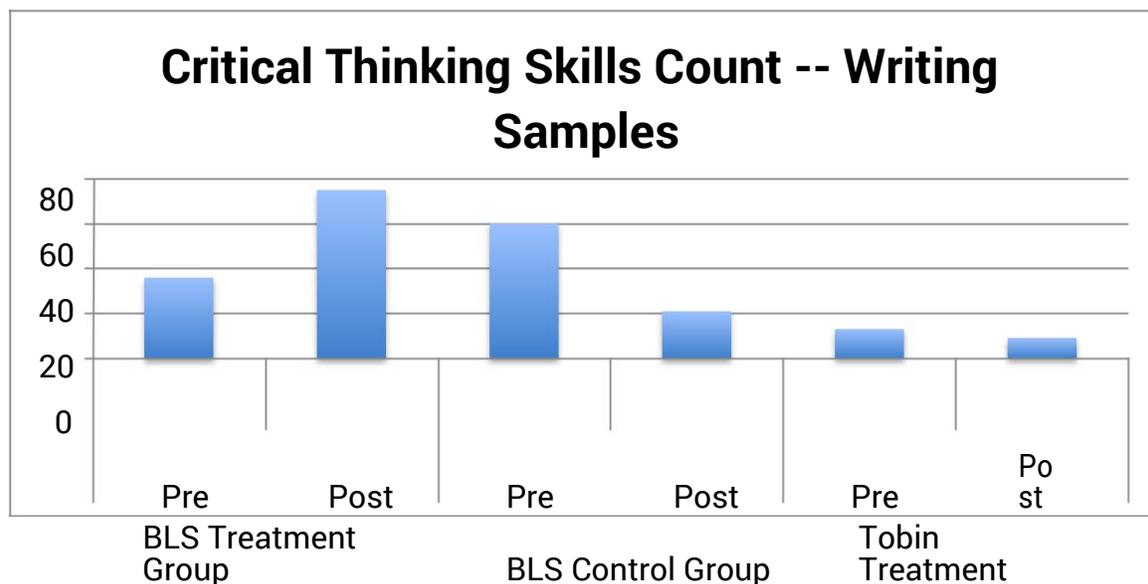
Post

I see a brown background with a green like [belt or velvet?] thing, probably might be like a window curtain. I see a lady in the back, looks like an ironing table, probably ironing like a shirt. I see some designs right here, the spirals and what-not. I see a lady right here, probably maybe like a doll, because it looks kind of wooden. I see this pinkish area right here. Might be like a floor with like a lamp. Not a lamp, but like a candle with fire. I see triangle shapes. I see like a bed, mattress, box spring type of thing with the sheets on top and the pillow. And I see a head, looks kind of deformed, but it looks like, probably like one of those Chinese monks or whatever. Probably like just walking to bed but all you can see probably, he's probably coming from this area walking down.

3. Critical Thinking Skills – Student Writing Samples

The increase in Critical Thinking Skills found in the BLS Treatment ADIs was also found, albeit to a lesser degree, in the post writing samples of the BLS

Treatment students (only a small number of post writing samples were collected at Tobin due to school closure caused by swine flu). Housen documented this pattern in a previous VTS study.⁶ Context transfer, transfer from the group performance in the VTS classroom discussions to the individual performance in the ADIs, occurs before content transfer, transfer to a non-art object or writing.



⁶ Housen, A. (2002). Aesthetic thought, critical thinking, and transfer. *Arts and Learning Research Journal*, 18, No.1.

Writing Sample Images



Pre Writing Sample Image BLS Control & Tobin



Pre Writing Sample Image BLS Treatment



Post Writing Sample Image – All Groups

The following excerpts from pre and post writing samples provide examples of increases

in CTS counts in BLS Treatment students.

BLS Treatment Student

Pre

This picture shows a woman in the front dancing. There are men in the background playing music on guitars. It seems like it may be Spanish judging by the outfits and guitars. I also see some women on the far right dancing. There is one man who is not wearing a hat, and who seems to be either sleeping or passed out. The woman's arm seems to be in a funny position, but it might be just the style of the dance.

Post

...They could possibly be related; they have the same facial structure. The girl appears to be trying to inch herself away from the woman. Her dress has some of the same accents as the unusual wall, so maybe the artist wanted her to blend in a little bit. The younger woman could also be the older woman's servant, and be cowering in her presence. The two faces don't seem to be normal faces, so maybe the artist wanted it that way. It could be either the artist's style or some kind of feature to suggest something. There could be some reason for the wall in the room being so oddly painted...

BLS Treatment Student

Pre

In this picture it looks like the girl in the middle is dancing...On the right side it looks like a group of people dancing, and in the background it has people clapping and playing guitars. The room also looks dim because the picture is a little dark and there are shadows casted on the wall. Something that draws my attention though is drawn to [an] empty chair, and maybe that was where the lady sat...



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Post

...The lady in the black sitting down looks like the leader possibly since she is the only one sitting down, which might make her seem more important. The girl to her side is against the wall and looks like she is bowing her head to the lady sitting down (the important lady in black), which also supports my theory that the lady sitting down is the leader. The people might also be wearing masks to protect themselves/their identities from outsiders...

4. Conclusion and Recommendations

The post data shows that Treatment students grew in their aesthetic and critical thinking, with the Treatment group with the greater exposure (BLS) experiencing a greater rate of growth. Critical Thinking Skills supported by VTS image discussions transferred to individual art viewing interviews and to student writing.

The post data also shows that the majority of Treatment students and teachers are at Stage II. Going forward, all SPP teachers should participate in regularly scheduled VTS image discussions. This will support their growth in Aesthetic Stage. Without such growth it is very difficult for VTS teachers to paraphrase student comments and to support further student growth. Teacher participation in VTS discussions also allows for deeper understanding of VTS theory, method and process. While Housen's theory was presented to the teachers as part of their training, a deeper understanding is made possible through participation in VTS image discussions. One Treatment teacher wrote in the questionnaire that she "was surprised that despite the added conversation about the new questions, some of the students continued to list..." Another wrote that "[s]tudents seem primarily focused on narrative, not message or influence." These are both behaviors that are typical of beginner viewers, behaviors that beginner viewers need to engage in order to grow in their aesthetic and critical thinking. Image discussions will support teacher aesthetic growth and help teachers better understand the viewing behaviors of their students and themselves.