

# **Art Smart:**

**Integrating Visual Thinking Strategies into a New York  
State High School Social Studies Classroom**

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## Introduction

In November 2007, Rick Hanson, a social studies teacher at Hamilton Central School arranged to bring five students from his academic lab tutorial course to Colgate University's Picker Art Gallery. "These are 5 students that rarely are let out of the building," Hanson wrote in an email. "They haven't had much success in the classroom so I'm taking the show on the road."<sup>1</sup> Teachers from all subject areas often find themselves stumped about how to bring the subject information to life for their students, especially those struggling in the course. The best teachers continually try new strategies and educational techniques to reach those students. In Mr. Hanson's case, he turned to Melissa Davies, the education coordinator at the Picker, to help the students draw connections between the classroom content and the collection of ancient Chinese artifacts currently on loan to the gallery.

This case example illustrates the possibility of curricular interplay between art and social studies. As Mr. Hanson's students engaged over a large stone Bodhisattva head and thought of a present they would give to honor an elder, they saw tangible connections to Buddhism and Confucianism. In fact, such a collaboration is not uncommon; with an estimated 15,000 to 17,000 museums in the United States, the American Association of Museums recently calculated that art museums have a median daily attendance of 59,822 visitors.<sup>2</sup> As any weekday visitor will attest, school groups are often common fare amongst museum goers.

With museums often seen as an out-of-classroom resource, therefore, it is only natural to consider if techniques employed successfully by museum educators can be

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<sup>1</sup> Rick Hanson, "Re: Friday," 15 November 2007, personal email (15 November 2007).

<sup>2</sup> "Museum FAQ," *American Association of Museums*, 2007, <<http://www.aam-us.org/aboutmuseums/abc.cfm#visitors>> (27 November 2007).

successfully adapted to classroom use. In this light, this paper will examine Visual Thinking Strategies (VTS), a teaching technique used in some of America's top art museums. After providing an in-depth look at VTS itself as a teaching strategy, I will then examine research about the applicability of the technique to the school classroom. In particular, I will look at a longitudinal study from Byron, Minnesota that showed the transfer of critical thinking skills from VTS to content areas. Finally, I will examine work to integrate VTS into a social studies classroom the New York State learning standards and curriculum for high school social studies. Through this lens, I will consider how VTS may be included into a high school social studies classroom.

This topic holds particular interest for the social studies educator, as it offers a bridge between innovative, researched educational techniques and state learning standards. With the educational climate increasingly oriented towards high-stakes testing, especially following the 2001 No Child Left Behind Act, teachers face a great deal of pressure to foster successful students. By including VTS in a teacher's educational approach, however, they may be able to better reach some students and foster the critical thinking skills necessary for standardized test-taking.

In researching this paper, I have worked within rather closely defined parameters. Almost all of the resources I have obtained about Visual Thinking Strategies have been through the Visual Understanding in Education (VUE) website, as this organization was founded in 1995 by VTS creators Abigail Housen and Philip Yenawine to test the validity of the program.<sup>3</sup> While research conducted by an organization about their own program should signal red flags for the outside researcher, I am not as concerned for a number of

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<sup>3</sup> "VUE: Who is VUE?," *Visual Understanding in Education*, 2007, <<http://www.vue.org/whoisvue.html#Background>> (1 December 2007).

reasons. First of all, most of the supporting research is available through the VUE website; these documents are very explicit in their methods, as the success of their program depends on convincing critical educators of their research. Several have been published in reputable journals including the American Educational Research Association's *Arts and Learning Research Journal*. Secondly, VTS has been adopted by a number of major museums within the United States, including the San Francisco Museum of Modern Art, the Museum of Fine Arts and the Isabella Stewart Gardner Museums in Boston, and the Seattle Museum of Art. (The MoMA uses Visual Thinking Curriculum, a predecessor of VTS.) Additionally, a number of colleges and universities have adopted VTS including Middlebury College Museum of Art, the Frances Young Tang Teaching Museum and Art Gallery at Skidmore College, the Davis Museum and Cultural Center at Wellesley College and the Picker Art Gallery at Colgate University.<sup>4</sup>

Finally, through an internship at the Picker, I have received both training and observational opportunities in VTS, as the gallery is partnering with Hamilton Central Schools to integrate the VTS curriculum into the elementary school. In conducting our own research as part of the grant, Melissa Davies, the involved teachers and I have all made anecdotal observations of the impact of VTS. Though this research is not complete or conclusive, our initial observations have been personally persuasive.

Additionally, throughout this paper I refer to VTS alternately as both a curriculum and a technique. A distinction should be made as to these references, though. When referred to as a curriculum, I am referring to the actual program developed and marketed through VUE which includes sequenced posters, lesson plans and writing assignments for

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<sup>4</sup> "VUE: What is VTS? Part Two," *Visual Understanding in Education*, 2001, <<http://www.vue.org/whatisvts2.html# schooldistricts>> (1 December 2007), VTS Programs: USA.

intermediate grades (4-6). This program was designed specifically for elementary school grades, though it may be adapted to meet the needs of high school and adult viewers who are still beginner viewers. When I refer to VTS as a technique, however, I am referring to the discussion process that Abigail Housen and Philip Yenawine developed. Within this context, VTS is much more transferable amongst settings, whether in a classroom or a gallery. The VTS facilitator may choose their own images, following recommended guidelines, thereby utilizing the technique to best meet the needs of the class or group.

## Visual Thinking Strategies

In the 1970s, Abigail Housen began research on the construction of aesthetic experience, with a special interest in the experiences of “naïve” viewers. After conducting a great deal of empirical research, she identified a five-tiered stage theory of aesthetic development (see Appendix 1). Housen deduced this stage theory from her research: “Her search for understanding of what she came to call aesthetic development was based on the same empirical approach that had guided both Piaget and Vygotsky—she looked for patterns and order in behaviors she could observe in the world, and allowed any interpretations to emerge from her observations.”<sup>5</sup>

To collect her data, Housen devised “a non-directive, stream-of-consciousness interview” called the Aesthetic Development Interview (ADI).<sup>6</sup> Using this technique, participants are asked to say what comes to mind while looking at a work of art; the only

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<sup>5</sup> Karin DeSantis and Abigail Housen, “A Brief Guide to Developmental Theory and Aesthetic Development,” *Visual Understanding in Education*, May 2007, <<http://www.vue.org/download.html>> (14 November 2007), 10.

<sup>6</sup> “Housen’s Methodology and Stage Theory of Aesthetic Development” *Visual Understanding in Education*, June 2000, 2.

prompts used by the interviewer are the initial question of “What is going on here?” and the follow-up, “Is there anything else?,” used only when the monologue stalls. The use of only these questions minimizes researcher bias and “provides a window into a person’s thinking processes.”<sup>7</sup>

The ADIs are analyzed both by part and as a whole by several coders to assign a stage level to the participant. The transcripts are broken into “thought units” or short phrases that contain meaning. Using the Aesthetic Development Coding Manual that Housen developed as part of her thesis for the Harvard School of Education in 1983, these thought units are classified in terms of broad “Thought Domains” and then more specific “Categories” within those domains. Thus the analysis process is able to make distinctions between thought units like “‘the ball is red,’ ‘the red ball reminds me of a lollipop,’ ‘I like the color red’ or ‘the red is brighter here than here.’”<sup>8</sup>

In her research, Housen has collected data from over 2,000 individuals of varying age, race, ethnicity, education, economic status, geographic location and art experience. Research has also been conducted in Eastern European countries including Russia, Kazakhstan, Kyrgyzstan and Lithuania, as well as with visually-impaired Americans. This research has repeatedly held up the validity of her aesthetic stage theory.<sup>9</sup>

Housen’s research has revealed that most of their study participants are “beginner viewers, ranging from stages I and II/III (the transitional stage between stages II and III).”<sup>10</sup> In fact, Housen and her research colleague, Karin DeSantis note that aesthetic

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<sup>7</sup> Abigail Housen, “Eye of the Beholder: Research, Theory, and Practice,” *Visual Understanding in Education*, 1999, <<http://www.vue.org/download.html>> (14 November 2007), 6.

<sup>8</sup> Ibid.

<sup>9</sup> “Housen’s Methodology,” 2.

<sup>10</sup> Abigail Housen, “Voices of Viewers: Iterative Research, Theory, and Practice,” *The Arts and Learning Research Journal* 17, no. 15 (March 2001), 5.

growth is related to, but not determined by, age. Quite simply, “a person of any age with no experience with art will be in Stage I. Exposure to art over time is the only way to develop, and without both art and time, aesthetic development doesn’t occur.”<sup>11</sup>

As most adult museum visitors still within the first two stages of aesthetic development, this research has called into question the appropriateness and usefulness of the presentation of art historical information within the context of the museum.<sup>12</sup> With the walk-and-gawk tour approach to museums thus found to be without legs, Housen combined her talents with Philip Yenawine, then Director of Education at the Museum of Modern Art (MoMA) in New York City, to create Visual Thinking Strategies (VTS). According to Yenawine, “To date, the VTS addresses the two early stages of development, getting viewers to the point where art history and other kinds of information becomes their preoccupation.”<sup>13</sup> With this narrowed focus, the curriculum has been designed with a focus on elementary school students, however the educational techniques have been applied to groups of varying ages. VUE currently publishes poster and training materials for a K-6 curriculum, though these could similarly be adapted for adult groups of beginner viewers.

The VTS curriculum, itself, is a student-centered and discussion-based. It focuses on a teacher or other trained moderator facilitating a discussion of discovery amongst the students. The facilitator uses three questions to lead the discussion: “What is going on in this picture?” “What do you see that makes you say that?” and “What more can you find?” The facilitator acknowledges each response by using a student’s name and

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<sup>11</sup> DeSantis and Housen, 13.

<sup>12</sup> DeSantis and Housen, 15.

<sup>13</sup> Philip Yenawine, “Theory into Practice,” *Visual Understanding in Education*, September 1999, <<http://www.vue.org/download.html>> (14 November 2007), 9.

paraphrases the response, pointing to the appropriate areas of the artwork both while the student is talking and as they are paraphrasing. Additionally, the facilitator must keep track of the different strands of conversation, linking them together and helping the students build bridges between their thoughts and those of their classmates.<sup>14</sup>

These questions were specifically designed to open up a discussion amongst the group. As Yenawine explains, “The wording [of the first question] gives tacit approval of story-finding, playing to the beginner’s strength. But it also gently suggests that effort be expended, addressing a tendency among beginners to stop their viewing without probing.”<sup>15</sup> The second question, in the meantime, requires that students support their statements with visual evidence. As students learn to make this connection on their own, it becomes less necessary to prompt them with, “What do you see that makes you say that?” Finally, the third question directs students to keep looking at the artwork. Yenawine also notes that “beginning viewing is often cursory. At first, the viewer observes a few salient details, then stops.”<sup>16</sup> He links this third question to increased viewing, which is associated with later stages of aesthetic development.

By posing such open-ended questions, the discussion is also opened to every student in the group. Housen reflected on her research: “When students remain silent in school, often it is because they are not sure that they know *the* right answer, which they know the teacher and some very smart classmates know. Students keep silent to avoid being evaluated; they want to avoid making mistakes and looking foolish. But with art

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<sup>14</sup> “Understanding the Basics,” *Visual Understanding in Education*, 2001, <<http://www.vue.org/download.html>> (14 November 2007), 6.

<sup>15</sup> Yenawine, “Theory into Practice,” 9.

<sup>16</sup> Yenawine, “Theory into Practice,” 10.



there is no single right answer.”<sup>17</sup> In fact, teachers often find that students who ordinarily contribute very little to class discussion are engaged and accepted by a VTS discussion. As Peggy Burchenal, Director of Education at the Isabella Stewart Gardner Museum, explained, “The teachers are amazed by some of the kids who up to that point never said much or goofed off. The kids often become incredibly engaged and the teachers often say they wish the parents could hear the rich discussion.”<sup>18</sup>

In designing the curriculum itself, Yenawine and Housen sought to draw upon the natural story-telling strategy of beginner viewers. Early lessons therefore concentrate on works that are naturally narrative.

We decided to concentrate initial lessons on works in which the artist has intentionally depicted narratives.... This decision enables viewers to do what they naturally want to do. It also respects the artist’s intentions; we want people to be operating in a way that makes sense on many levels.<sup>19</sup>

One of the unique factors of VTS, though, is that the facilitator is expected to remain neutral, allowing the paraphrasing and valuation of a student’s response to serve as the praise. He or she is also expected to refrain from offering positive or negative judgments, even if a student is mistaken in their observation. In fact, teachers often find this process contrary to traditional views of teaching, however the emphasis of VTS is on group discovery and critical thinking, skills best developed with minimal teacher input.<sup>20</sup>

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<sup>17</sup> Abigail Housen, “Voices of Viewers: Iterative Research, Theory, and Practice,” *The Arts and Learning Research Journal* 17, no. 15 (March 2001), 7.

<sup>18</sup> “VUE: Who is VUE?”

<sup>19</sup> Yenawine, “Theory into Practice,” 9.

<sup>20</sup> “Understanding the Basics,” 4.

Additionally, the structure of the VTS questioning allows a facilitator to handle “tricky” classroom situations such as a challenge from a student, a silly response or the introduction of a hurtful comment. In the first two cases, the use of the second question by a facilitator requires the student to substantiate their assertion; the pressure is thus turned from the teacher to the student, however the open-endedness of the question ensures that any answer is a correct answer. On the other hand, if a hurtful comment is introduced, the facilitator has enough freedom to defuse the situation by paraphrasing the comment using more appropriate language, which the students subtly pick up on most of the time.<sup>21</sup>

## **Developmental Background of VTS**

To further evaluate VTS, it is important to look at how it applies to developmental theory. As a cognitive psychologist, Housen sees her work within the framework of other psychologists, especially Jean Piaget, Lev Vygotsky and Howard Gardner. These three men, in particular, have been very influential in how educators understand the learning processes of children and adolescents. Therefore it is important to be able to connect VTS to developmental theory, with regards to learning, in order to better understand the technique.

Piaget offers an excellent starting point for such an evaluation, as he is often considered to be the preeminent developmental psychologist of the twentieth century. Though not formally trained, much of his work is still viewed today as essentially to the understanding of childhood development. Piaget produced a stage theory of Cognitive

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<sup>21</sup> “Understanding the Basics,” 4-5.

Development, which at its very core recognizes that children build schemas to understand and process information. As new information is taken in, these schemas are either strengthened or adapted. Thus either information is assimilated into the existing schema, or the schema must be modified to accommodate new information.<sup>22</sup>

Looking at his stage theory more in depth, it is important to recognize several key principles. Piaget proposed that cognitive development followed a predictable sequence, each stage builds on the previous stages, each stage is equally important, and stages are contiguous and sequential.<sup>23</sup> The stages themselves progress from sensori-motor (0 to 2 years) in which an infant absorbs information through senses and movement, finally developing an ability to act deliberately on the surrounding world, to the formal-operational stage (12 years and up) in which an adolescent is able to think logically, abstractly and systematically.<sup>24</sup> Piaget also recognizes that it takes time for children to learn certain principles like the law of conservation and reversibility. These ideas develop in the concrete operational stage (6 to 12 years), at which point the child is better able to understand processes and logic in the world around them.

Piaget's theory and observations are thus important to the development and understanding of VTS, as they inform the process by which children learn. They must process information from their own personal observations – either accommodating or assimilating that information into their schemata. These changes in stage cannot be forced, however; children must reach a certain stage in development before they can move on to the next. Housen's aesthetic development stage theory is similarly

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<sup>22</sup> Michael Cole, Sheila R. Cole and Cynthia Lightfoot, *The Development of Children*, 5<sup>th</sup> ed. (New York: Worth Publishers, 2005), 150.

<sup>23</sup> DeSantis and Housen, 5.

<sup>24</sup> Cole, Cole and Lightfoot, 151.

constructed and relies on the same principles. Both theories are also distilled from empirical observation. Such connections to Piaget are thus quite evident to any developmentalist.

Housen's work also draws on that of Lev Vygotsky. Perhaps most formatively, the VTS technique depends on the concept of the "zone of proximal development" – the social area in which a child interacts with someone of greater competency to build on their existing abilities. Thus the child is pushed further to achieve a new expertise that is within their grasp, though they would not be able to reach that achievement on their own.<sup>25</sup> This is seen in VTS as a great emphasis is placed on the group discussion. Yenawine reiterated this point: "When someone is attempting to solve a problem or master a task for which he or she is ready, another person can share information or demonstrate behavior that assists the learner in a lasting way....People of only slightly differing capacities can significantly help each other."<sup>26</sup>

Vygotsky's work also draws on the importance of language in developing understanding. He observed children routinely talking themselves through problem-solving processes and concluded that thought is highly dependent on language.<sup>27</sup> Thus within the context of VTS, it is important to "get people to talk about art, actively constructing meaning from what they see. In this way, they will explore the art they are viewing and, at the same time, practice a process that develops both thinking patterns and concepts related to viewing more generally."<sup>28</sup>

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<sup>25</sup> Cole, Cole and Lightfoot, 196.

<sup>26</sup> Yenawine, "Theory into Practice," 7.

<sup>27</sup> DeSantis and Housen, 9.

<sup>28</sup> Yenawine, "Theory into Practice," 7.

More broadly, the VTS technique epitomizes constructivist philosophy of which Piaget and Vygotsky were both proponents. Piaget focused on cognitive constructivism, while Vygotsky's work has greatly influenced the development of social constructivism. According to the theoretical perspective of human development advocated by Piaget, children play an active role in shaping their own development. Both biology and the environment play a part, however the child's own role is perhaps most important at guiding discovery. Meanwhile, social constructivism purports that students "construct knowledge in a social context and then appropriate and internalize it."<sup>29</sup> Within an educational setting, this means that learners construct knowledge that makes sense to them, new learning is dependent on current understandings, and that social interaction fosters learning.<sup>30</sup>

In light of this, it is obvious that VTS draws heavily on constructivist ideals. The very essence of the program minimizes the role of the teacher, focusing instead on the discovery of knowledge by students. As Housen summarized, "Effective learning is discovery built from firsthand understandings, which have been internalized."<sup>31</sup>

Finally, Howard Gardner's research presents an interesting connection to VTS, as he is a contemporary of Abigail Housen. Both worked at Project Zero at Harvard, where Housen developed her Aesthetic Development theory and Gardner his theory on Multiple Intelligences (both published in 1983). Though Housen and Gardner recognize artistic intelligence (she calls it aesthetic, he calls it spatial<sup>32</sup>) as unique forms of intelligence,

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<sup>29</sup> Paul Eggen and Don Kauchak, *Educational Psychology: Windows on Classrooms*, 7<sup>th</sup> ed. (Upper Saddle River, NJ: Pearson Prentice Hall, 2007), 235-6.

<sup>30</sup> Eggen and Kauchak, 238-9.

<sup>31</sup> Housen, "Voices of Viewers," 7.

<sup>32</sup> Cole, Cole and Lightfoot, 510.

and though their goals have been distinctively different, this recognition places value on the understanding of art.

Additionally, as a contemporary, Gardner has played an interesting role in the development of VTS: he introduced a frustrated museum educator (Yenawine) to a cognitive researcher full of ideas (Housen).<sup>33</sup> It is from this partnership that both the VTS curriculum and technique have developed.

Thus Housen's work fits very closely into a niche carved out by other developmentalists including Piaget, Vygotsky and Gardner, her contemporary. DeSantis and Housen summed this up in the following explanation:

A teacher must offer strategies fitting to the stage of the viewer: developmentally appropriate concepts will not 'stick.' This is confusing, because students can be 'taught' stage-inappropriate information, for example, and it can be memorized and retained for the short-term, and perhaps recalled with prompting. But...teaching anything but what...is within their 'zone of proximal development' will not become operational to the student. Just as indicated by Piaget and Vygotsky, behaviors that are not part of a natural arc and are not germane to a student's needs will not show up in unprompted, independent behavior.<sup>34</sup>

## Transferability of VTS

In 1999 Housen published a particularly important study of the effects of VTS. Using a longitudinal model over a span of five years, Housen, Yenawine and DeSantis worked with a school district in rural Byron, Minnesota to implement the program with two groups of experimental students who began the program as second and fourth graders

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<sup>33</sup> Yenawine, "Theory into Practice," 3.

<sup>34</sup> DeSantis and Housen, 14.

in 1993. They collected samples at numerous times throughout the five year study from both the experimental group and a similarly matched control group.

The researchers used both the ADI tool originally created by Housen to measure aesthetic development, as well as a newly created tool, the Material Object Interview (MOI). Conducted in the same fashion as an ADI, in an MOI, participants were given non-art objects to explore. Such items used include a Danish coin, a trilobite fossil, calipers, a mortar and pestle, an anemometer and a candle-snuffer.<sup>35</sup>

The results of this study are impressive from an educational standpoint. The study was conducted to address early anecdotal evidence about the transference of VTS thinking skills to other subject areas,<sup>36</sup> and, in fact, this is what they found. The researchers found not only transfer of context (transfer of critical thinking skills across different settings, i.e. from VTS discussions to ADIs),<sup>37</sup> but also transfer of content (transfer of critical thinking skills across subject areas).<sup>38</sup>

Housen recapped these results, explaining: “By Year II, we saw that experimental students use significantly more Supported Observations and Speculations in their ADIs. Furthermore, when the content is shifted from art to artifact, the experimental groups outperform the control groups.”<sup>39</sup> This is especially significant, given that the older experimental group had more special needs students and fewer gifted students than older control group. In spite of this, the experimental group had greater success in the development of critical thinking skills.<sup>40</sup>

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<sup>35</sup> Abigail Housen, “Aesthetic Thought, Critical Thinking and Transfer,” *Arts and Learning Research Journal* 18, no. 1 (May 2002), 103.

<sup>36</sup> Housen, “Aesthetic Thought,” 99.

<sup>37</sup> Housen, “Aesthetic Thought,” 106-7.

<sup>38</sup> Housen, “Aesthetic Thought,” 109.

<sup>39</sup> Housen, “Aesthetic Thought,” 116.

<sup>40</sup> Housen, “Aesthetic Thought,” 113.

## New York State Social Studies Curriculum

New York State has five learning standards for Social Studies education that are applied at three levels: elementary, intermediate and commencement (see Appendix 2). While these offer a wealth of information, I will focus on Standard 1: History of the United States and New York to narrow my study.<sup>41</sup>

The key ideas within Standard 1 are focused primarily on building connections within larger swaths of American and New York State history, whether across time, social movements, or other connecting factors. There is certainly an expectation that students will graduate from high school with an understanding of American culture, historical developments, and historical analysis. Additionally, there is a great emphasis placed upon the interpretation and creation of textual sources, with sample tasks like: “read Dr. Martin Luther King’s ‘Letter from Birmingham Jail’ and discuss how this letter expresses the basic ideas, values, and beliefs found in the United States Constitution and Bill of Rights.”<sup>42</sup> Though the fourth key idea recognizes that a variety of primary sources may likely include artistic or graphic sources like graphs and cartoons, overall there is a greater expectation that sources will be “readable.”

In thinking of VTS in relation to these Standards, therefore, the Byron study’s conclusion that VTS critical thinking skills are transferable becomes very important. The standards require students be able to read documents for information, just as VTS challenges students to “read” a painting or other piece of art. Similarly, they must then

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<sup>41</sup> Additionally, this is the subject area in which I will be student teaching in Spring 2008. By focusing on this particular standard, therefore, I can develop ideas that, while they may be transferable to other curricula, will be particularly pertinent to my own teaching needs.

<sup>42</sup> New York State Education Department, *Learning Standards for Social Studies* (Albany, NY: State Education Department, 1996), 6.



extract information from that “reading” and apply it in another context such as writing a report or having a discussion. The second question of VTS – “What makes you say that?” – certainly reinforces this need to use supporting details in crafting a historical argument. Thus, as the Byron study proposes, the basic skills taught in VTS are, in fact, basic skills that are used across curricula.

The New York State Education Department is even more explicit in material that should be taught than just providing the *Learning Standards*. In 1999 the Education Department and the University of the State of New York published *Social Studies: Resource Guide with Core Curriculum* which breaks down curricular points by year. In this text, the Education Department lays out eight “Dimensions of Teaching and Learning” which include: intellectual skills, multidisciplinary approaches, depth and breadth, unity and diversity, multiculturalism and multiple perspectives, patterns to organize data, multiple learning environments and resources, and student-centered teaching, learning and assessment.<sup>43</sup> In fact, VTS seems to be a perfect fit with a number of these teaching dimensions.

In the context of a history classroom, VTS is a student-centered, multidisciplinary approach to education, as well as an alternative teaching resource. Teachers that are so encouraged to take students out of the classroom to foster such learning are also introducing an alternative learning environment to their students. By developing transferable critical thinking skills, VTS fosters the development of intellectual skills and basic organization patterns, demanding that students support their observations and assertions with documentable evidence. Additionally, depending on the selection of

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<sup>43</sup> New York State Education Department, *Social Studies: Resource Guide and Core Curriculum* (Albany, NY: State Education Department, 1999), 4-6.

images used, teachers can use VTS as a way to bring depth and breadth, unity and diversity, multiculturalism and multiple perspectives into the classroom. Therefore, with some thought, a social studies teacher may use VTS to meet all eight of the teaching dimensions that the state encourages.

Turning to the core curriculum for United States History and Government, the applicability of VTS seemingly disappears as the pages are overwhelmingly burdened with the important events, movements, and figures of American history. Discussion of art history as part of the overall curriculum pops up only twice: with regard to the development of the Harlem Renaissance and arts in the Great Depression (WPA, fine arts, comic books).<sup>44</sup> Still, this lack of explicit instruction offers some of the most opportune times to make use of art and VTS within the social studies classroom. We must remember that the emphasis of VTS is not on art history; thus for the VTS practitioner this curricular situation is, perhaps, ideal. Instead of being required to teach about the development of a particular art movement, works can be shown in a timely fashion. If students make a connection between the historical content, then that only furthers the educational value of the lesson. At the very least, they are still being encouraged to develop visual literacy, which, in fact, is an excellent motivation in itself.

Perhaps the best evaluation of New York State social studies curriculum, however, comes in the investigation of the New York State Regents exams for the appropriate subjects. These tests, given at the end of the course year (generally in June, although make-up tests are offered in January and August) are required to pass the respective course. Both the Global History and Geography and U.S. History and Government exams have been comprised of the same general format since January 2001.

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<sup>44</sup> *Social Studies*, 142, 144.

Students must answer a number of multiple choice questions and write two essays: one thematic and one Document Based Question (DBQ) essay.<sup>45</sup> On the DBQ portion of the exam, students must analyze a selection of primary source documents which may include diary accounts, political cartoons, record book excerpts, newspaper stories, or other sources. Each document has one or two accompanying questions to help scaffold a student's response. In an example on the Education Department website, a cartoon is shown depicting Andrew Carnegie playing with building blocks that spell out "LIBRARY." Students are then asked "According to the cartoon, what did Andrew Carnegie do with much of his wealth?" A correct answer would iterate that he donated money to build libraries or, more generally, supported philanthropic activities.<sup>46</sup> These scaffolded sources must then be integrated into an essay on an assigned, relevant topic.

Thus students are required to read images as well as text for information and present their inferences analytically. The development of such visual literacy is at the very heart of VTS. While the Board of Regents of New York State does deem that there are correct answers to this visual interpretation, certainly students exposed to VTS develop the skills necessary to make these interpretations.

In fact, very recently Harry Lasker, the President of the board of VUE, and Karin DeSantis looked at the relationship between VTS and standardized test scores. They had originally noted such a result in the Byron study, as the school remarkably improved its testing to place in the top eight percent of Minnesota schools.<sup>47</sup> In this recent study, Lasker and DeSantis analyzed English Language Art tests from four states with VTS

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<sup>45</sup> Benjamin Richardson and Thomas Caswell, "Oswego High School Online Writing Guide: DBQ Essays," *Oswego High School*, 1999 <<http://oswego.org/staff/tcaswell/wg/dbq.htm>> (1 December 2007).

<sup>46</sup> "United States History and Government Test Sampler (Draft)," *State Assessment*, 2007, <<http://www.emsc.nysed.gov/ciai/socst/pub/3samus.pdf>> (1 December 2007), 74.

<sup>47</sup> Housen, "Aesthetic Thought," 115.

programs and found that “79% of questions required at least one of the four categories of critical thinking.”<sup>48</sup> Though their sample size was not large enough to offer definitive answers, further examination of California schools showed that VTS schools with high-rates of non-English speaking and economically disadvantaged students had greater gains on test scores than their non-VTS peers.<sup>49</sup>

## Conclusions

Visual Thinking Strategies (VTS) is a student-centered, constructivist educational technique originally developed to enhance the aesthetic development of students according to the research of Abigail Housen. Through the use of three probing questions, the VTS facilitator fosters a discussion amongst participants. The application of VTS, while intended to encourage aesthetic growth for viewers in the first two stages, has been shown in the Byron, MN study to also foster critical thinking skills that are transferable to other content areas. This is significant as it opens up the possibilities for VTS to a wider audience of educators.

Developmentally, VTS pulls from the psychological research of Piaget and Vygotsky, as well as Housen’s contemporary colleague, Howard Gardner. The work of these theorists supports the conversational, student-centered discovery process of VTS as well as Housen’s aesthetic stage theory. From this, it is important to note that Visual Thinking Strategies are solidly grounded in educational theory and employ research from some of the most influential developmental psychologists in the twentieth century.

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<sup>48</sup> Harry Lasker, “VTS and The Impact on Test Scores,” *What’s new at VUE: A Quarterly VTS Newsletter*, January 2007, 2.

<sup>49</sup> Ibid.

Given all of this information and a thorough analysis of New York State learning standards and core curriculum for high school social studies with a particular emphasis on U.S. History and Government, VTS is a technique that can and should be employed in the social studies classroom. It has been shown to have an impact on the development of critical thinking skills which are essential for success in the social studies curriculum, both in terms of the Regents exam and the performance indicators the state expects all students to meet. Thus in addition to building visual literacy, the use of worthwhile images within the social studies classroom may help to offer students a better-rounded, multidisciplinary educational experience.

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## Appendix 1: Housen's Stages of Aesthetic Development

### Stage I – Accountative

Accountative viewers are storytellers. Using their senses, memories, and personal associations, they make concrete observations about a work of art that are woven into a narrative. Here, judgments are based on what is known and what is liked. Emotions color their comments. Such viewers seem to enter the work of art and become part of its unfolding narrative.

### Stage II – Constructive

Constructive viewers set about building a framework for looking at works of art, using the most logical and accessible tools: their own perceptions, their knowledge of the natural world, and the values of their social, moral and conventional world. If the work does not look the way it is “supposed to” – if craft, skill, technique, hard work, utility, and function are not evident, or if the subject seems inappropriate – then these viewers judge the work to be “weird,” lacking, or of no value. Their sense of what is realistic is the standard often applied to determine value. As emotions begin to go underground, these viewers begin to distance themselves from the work of art.

### Stage III – Classifying

Classifying viewers adopt the analytical and critical stance of the art historian. They want to identify the work as to place, school, style, time and provenance. They decode the work using their library of facts and figures, which they are ready and eager to expand. This viewer believes that properly categorized, the work of art's meaning and message can be explained and rationalized.

### Stage IV – Interpretive

Interpretive viewers seek a personal encounter with a work of art. Exploring the work, letting its meaning slowly unfold, they appreciate subtleties of line and shape and color. Now, critical skills are put in the service of feelings and intuitions as these viewers let underlying meanings of the work – what it symbolizes – emerge. Each new encounter with a work of art presents a chance for new comparisons, insights, and experiences. Knowing that the work of art's identity and value are subject to reinterpretation, these viewers see their own processes subject to chance and change.

### Stage V – Re-Creative

Re-creative viewers, having a long history of viewing and reflecting about works of art, now “Willingly suspend disbelief.” A familiar painting is like an old friend who is known intimately, yet full of surprise, deserving attention on a daily level but also existing on an elevated plane. As in all important friendships, time is a key ingredient, allowing Stage V viewers to know the ecology of a work – its time, its history, its questions, its travels, its intricacies. Drawing on their own history with one work in particular, and with viewing in general, these viewers combine personal contemplation with views that broadly encompass universal concerns. Here, memory infuses the landscape of the painting, intricately combining the personal and the universal.



## Appendix 2: Learning Standards for Social Studies at Commencement Level

*The five bolded standards and numbered points (key ideas) below Standard 1 exist at all three levels of social studies instruction. The bulleted points under the key ideas are performance indicators at the commencement level. Key ideas and performance indicators also exist for Standards 2 through 5.*

### **Standard 1: History of the United States and New York**

Students will use a variety of intellectual skills to demonstrate their understanding of major ideas, eras, themes, developments, and turning points in the history of the United States and New York.

1. The study of New York State and United States history requires an analysis of the development of American culture, its diversity and multicultural context, and the ways people are unified by many values, practices, and traditions.
  - Students analyze the development of American culture, explaining how ideas, values, beliefs, and traditions have changed over time and how they unite all Americans.
  - Students describe the evolution of American democratic values and beliefs as expressed in the Declaration of Independence, the New York State Constitution, the United States Constitution, the Bill of Rights, and other important historical documents.
2. Important ideas, social and cultural values, beliefs, and traditions from New York State and United States history illustrate the connections and interactions of people and events across time and from a variety of perspectives.
  - Students discuss several schemes for periodizing the history of New York State and the United States
  - Students develop and test hypotheses about important events, eras, or issues in New York State and United States history, setting clear and valid criteria for judging the importance and significance of these events, eras, or issues
  - Students compare and contrast the experiences of different groups in the United States
  - Students examine how the Constitution, United States law, and the rights of citizenship provide a major unifying factor in bringing together Americans from diverse roots and traditions
  - Students analyze the United States involvement in foreign affairs and a willingness to engage in international politics, examining the ideas and traditions leading to these foreign policies
  - Students compare and contrast the values exhibited and foreign policies implemented by the United States and other nations over time with those expressed in the United Nations Charter and international law

3. Study about the major social, political, economic, cultural, and religious developments in New York State and United States history involves learning about the important roles and contributions of individuals and groups.
  - Students compare and contrast the experiences of different ethnic, national, and religious groups, including Native Americans, in the United States, explaining their contributions to American society and culture
  - Students research and analyze the major themes and developments in New York State and United States history (e.g., colonization and settlement; Revolution and New National Period; immigration; expansion and reform era; Civil War and Reconstruction; The American labor movement; Great Depression; World Wars; contemporary United States)
  - Students prepare essays and oral reports about the important social, political, economic, scientific, technological, and cultural developments, issues, and events from New York State and United States history
  - Students understand the interrelationships between world events and developments in New York State and the United States (e.g., causes for immigration, economic opportunities, human rights abuses, and tyranny versus freedom).
4. The skills of historical analysis include the ability to: explain the significance of historical evidence; weigh the importance, reliability, and validity of evidence; understand the concept of multiple causation; understand the importance of changing and competing interpretations of different historical developments.
  - Students analyze historical narratives about key events in New York State and United States history to identify the facts and evaluate the authors' perspectives
  - Students consider the different historians' analyses of the same event or development in United States history to understand how different viewpoints and/or frames of reference influence historical interpretations
  - Students evaluate the validity and credibility of historical interpretations of important events or issues in New York State or United States history, revising these interpretations as new information is learned and other interpretations are developed

### **Standard 2: World History**

Students will use a variety of intellectual skills to demonstrate their understanding of major ideas, eras, themes, developments, and turning points in world history and examine the broad sweep of history from a variety of perspectives

### **Standard 3: Geography**

Students will use a variety of intellectual skills to demonstrate their understanding of the geography of the interdependent world in which we live – local, notional, and global – including the distribution of people, places, and environments over the Earth's surface.

**Standard 4: Economics**

Students will use a variety of intellectual skills to demonstrate their understanding of how the United States and other societies develop economic systems and associated institutions to allocate scarce resources, how major decision-making units function in the United States and other national economies, and how an economy solves the scarcity problem through market and nonmarket mechanisms.

**Standard 5: Civics, Citizenship, and Government**

Students will use a variety of intellectual skills to demonstrate their understanding of the necessity for establishing governments; the governmental system of the United States and other nations, the United States Constitution; the basic civic values of American constitutional democracy; and the roles, rights, and responsibilities of citizenship, including avenues of participation.