Report on the Visual Thinking Strategies Implementation and Assessment Project

at Ripton Elementary School

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Ripton Kindergarten teacher and students at Middlebury College Museum of Art
“Of all the initiatives on which the Ripton School has embarked over the past five years, we believe that this program has the greatest impact on student learning. The program has strengthened teachers' ability to listen, paraphrase, expand vocabulary and lead enriched discussions about art. At the same time students have gained skills in all areas of communication: listening respectfully, taking turns, building upon others' ideas, disagreeing respectfully, etc. We have also noticed that VTS quickly becomes an area of strength for students with lower academic abilities. This is a unique opportunity for teachers and students to grow together.”

Jane Phinney, Principal, Ripton Elementary School

Executive summary

The *MiddArts: Learning through the Arts* program is an arts education partnership between Middlebury College and the Addison Central Supervisory Union (ACSU). In 2005-06 *MiddArts* introduced Visual Thinking Strategies (VTS) school-wide at Ripton Elementary School as part of a three-year implementation plan.

VTS was created by Abigail Housen, Philip Yenawine, and their colleagues, and is based on Housen’s Stage Theory of Aesthetic Development. VTS is a student-centered curriculum and teaching method that uses art to build the capacity to observe, think, listen, and communicate. VTS lessons consist of carefully researched, open-ended questions that are facilitated by classroom teachers. These questions, designed to decode meanings in works of art, constitute a teaching and learning strategy that can be applied to non-art subject areas and objects.
Ripton was selected as a model school for implementing VTS by *MiddArts* for several reasons:

- the full commitment of the principal, Jane Phinney, to the project;
- the enthusiasm of the faculty for teaching VTS (three of the four teachers had some VTS experience);
- the faculty’s agreement to mentor Middlebury College pre-service teachers;
- and the small size of the student body

Ripton Elementary School has 65 students in 4 multi-age classrooms. The teachers are Susan Mock (pre Kindergarten and Kindergarten), Charlotte Holmquist (Grades 1 and 2), Susan Ogilvie (Grades 3 and 4), and Steven Lindemann (Grades 5 and 6). Sandi Olivo, Curator of Education, Middlebury College Museum of Art, and VTS Trainer, and Stephanie Gallas, ACSU Arts Educator and VTS Trainer, implemented the sequential VTS training at Ripton Elementary School. Ms. Gallas was also responsible for data collection and observing and coaching Ripton teachers throughout the Implementation and Assessment Project.

"It has been both gratifying and humbling to be so closely involved in the VTS implementation in Ripton. Over time, I have watched the staff grow as practitioners as their students have grown as problem solvers, speakers and viewers. Ripton Elementary began with an already established commitment to collegiality and community building. It is
wonderful to see how their engagement with the process of VTS has served to make this existing commitment even more eloquent.”

Stephanie Gallas, ACSU Arts Educator and VTS Trainer

By the end of Year I of the VTS Implementation there were anecdotal reports of a trend towards growth in terms of students’ art viewing, thinking, and communication skills. Teachers observed that they were using the VTS questioning strategies in other subject areas, particularly social studies and the sciences, and that students were applying VTS-supported skills unprompted in other lessons.

In Years II and III Ripton teachers continued to teach VTS. Additionally, they initiated and participated in the Ripton Assessment Project, which included training in VTS data collection and assessment. Central goals of the Project were to support teachers’ abilities to observe and document VTS-supported changes in their students’ thinking and communication skills, as well as support in-depth reflections on their teaching practice. As this report illustrates, the data collected during the Assessment Project documents evidence of the growth of VTS-supported skills and transfer of skills in Ripton students, the growth of teachers’ ability to identify and assess these learning skills, and growth and transfer of teacher practice.
Ripton Elementary School is now in Year IV of school-wide implementation and is committed to continuing VTS. The success of the VTS implementation at Ripton Elementary School represents the achievement of a major goal of the MiddArts: Learning through the Arts program: to provide a sequential school-wide art program with a sustainable school-museum partnership and strong professional development component.

“Over the past three years, we have seen a remarkable dedication and commitment by the teachers and principal at the Ripton Elementary School to implement and assess the VTS curriculum school-wide. The success of this project is apparent during VTS tours at the museum - the students are at home in the galleries and are eager to discuss their ideas about works of art, backing up their interpretations by citing evidence from the images. The Ripton project will serve as model for implementing the VTS curriculum at other schools in the district.”

Sandi Olivo, Curator of Education, Middlebury College Museum of Art, and VTS Trainer
Ripton Assessment Project

As previously mentioned, MiddArts program administrators and Ripton teachers were intrigued by their Year I observations of growth in student skills and teacher practice and identified a need to formally assess the VTS program in Years II and III. They were eager to explore how a more thorough assessment could strengthen art education in area schools and provide a model for action research for area teachers. The following professional development goals were identified:

Ripton teachers will:

- Identify, document, track, reflect on, and analyze changes in student thinking (such as making increasingly detailed observations, providing more supporting evidence for opinions, and increasing their speculation among possibilities)
- Identify and study improvements in student communication (such as listening to one another, building on each others’ comments, and constructively articulating agreement or disagreement)
- Understand the correlation between the VTS teaching method and the development of the above skills
- Note skill changes not only within the VTS classes but also when transferred to other disciplines
- Establish the correlation between skills fostered by VTS and those Vermont State Standards, which address the advancement of thinking and communicating
MiddArts and Ripton teachers also recognized the need to design more specific guidelines for VTS training and implementation, as well as for data collection and teacher assessment training. Karin DeSantis, Senior Research Associate at Visual Understanding in Education, was asked to work with Ripton teachers on VTS assessment. While developing and supporting teacher understanding of VTS assessment is a central component of VTS programs, in order to meet the above-outlined goals the assessment component played a larger than usual role at Ripton. As in previous VTS assessment projects, each Ripton teacher was asked to select three students for closer observation, one each from the high, middle, and low range of abilities represented in their classrooms, and a training program was developed. The program included:

1. Assessment workshops
   A. September 22, 2006
   B. October 26, 2007

2. VTS trainings and group debriefings throughout each school year

3. Teacher reflections and reviews

4. Collecting student writing samples, Aesthetic Development Interviews and reviews

5. Observations with co-teaching and individual debriefings and reviews

6. Videotaping of VTS lessons and reviews

7. Presentation of Findings to MiddArts teachers and administrators, October 30th, 2008
The introductory assessment workshop provided an overview of the data collection tools used to evaluate VTS programs. The goal was to provide teachers with a set of tools that would allow them to find concrete evidence of student behaviors they had observed in Year I and that they brainstormed during the workshop, such as: learning to support and respect others’ opinions even if they disagree; listening and attending better to tasks at hand; using more descriptive language; and transferring VTS skills to other disciplines. The second assessment workshop focused on examining data from Ripton.

**Teacher reflections**

Three of the VTS assessment tools introduced to Ripton teachers and addressed in this report are teacher reflections, student writing samples, and videotapes.

Regular and ongoing reflections by teachers of VTS implementation and student behaviors are an essential part of VTS assessment. Teachers are encouraged to keep track of student comments, group interactions, their own practice, and the transfer of VTS teaching strategies and VTS-supported skills to other areas. As one Ripton teacher wrote, “[o]ur reflections also help to document our own growth as teachers and leaders.” These reflections provide documentation by individual teachers of changes in thinking, viewing, and communication skills in both larger groups and individual students. The following are comments on changes in student and teacher behaviors from Ripton teachers’ written reflections on VTS lessons, writing samples, and
videotapes. They illustrate their ability to meet the professional development goals identified above, such as identifying, documenting, and analyzing changes in student thinking and communication, and understanding the correlation between the VTS teaching method and the development of VTS-supported skills across disciplines.

**Viewing skills**

“I was feeling that as the year progressed in each individual year, each class of students rose to the challenge of the complexity of the images and they participated with a comfort level that only comes with doing VTS with the same peers over and over throughout the year. I also think that the whole school doing VTS paid tremendous dividends because this year’s fifth grade students [Year 3] were able to look at high[ly] complex images easily.”

**Communication Skills**

“Classroom interactions also reflect growth in the student’s communication skills. Through respectful listening to each other during the lessons the children have become better at listening to each other and building on each other’s comments. They are more articulate and accepting of different points of view...The children show they are listening to each other by referencing the comments of others in their own observations. They are seeing and hearing connections with the image and their own responses. The students are stating whether they agree or disagree with previous observations as part of their own response and then are giving reasons why!”

“It has been most exciting to see how students have learned from each other through their discussions. All students benefit by looking at works of art, developing and sharing their understanding of it. They are
sharing how they think about art. These strategies are evident in their discussions and how they support them with evidence. Students are able to evaluate ideas and build upon opinions or disagree stating other possibilities.”

“Over the last three years, I have observed how VTS has taught my students to become polite, respectful listeners to their peers. Instead of negative tones and words that could sometimes be voiced when children are talking about something, I have witnessed the use of polite words such as ‘I disagree with that. I don’t think it is a lake. I think it is an ocean because they are a lot bigger.’ The skill of building on each other’s comments could be heard through many of my VTS lessons over the past three years.”

Critical Thinking Skills

“In looking at the goals listed, I have identified the ones I feel that my students have become proficient in. The first one that jumps out is the goal which states ‘to develop thinking skills, including making observations, using opinions with their observations and respecting and considering the ideas of others.’ This was evident throughout many of our VTS sessions where my students would say such phrases as ‘I noticed that there are wild and tame animals together. I know they are wild animals because I see leopards and lions.’ Or ‘I think this picture is not true because the wild animals and the tame animals are together’.”

Transfer of VTS Skills

“I was fortunate to see the VTS skills transfer to other curriculum areas over the past three years. Two examples come to mind. The first example is when I was doing a picture walk of the big book Ox-Cart Man during my theme time. One of the first graders raised their hands and said ‘I think this book happened a long time ago because they are riding in a covered wagon.’ This comment was initiated on her own without me asking the two VTS prompt questions.”
“When students have the opportunity to think and discuss art broadly and deeply their communication skills improve dramatically. They are actively listening to each other, sharing thinking strategies, adjusting their schema and evaluating opinions. This detailed analysis makes an impact on academic performance in other areas of school.”

**Language Skills**

“Another goal that I feel my class has mastered, especially my Language Deficit kids, is how VTS has strengthened their language skills. [G]iving them the opportunity to tell what they see in the picture using their own words and thoughts and then providing them with the 2nd question ‘what do you see that makes you say that?’ allows for the articulation practice that these students need by letting them participate in natural conversation.”

“My lowest student was very reluctant to talk and share his observations as a new third grader. He began to gain confidence sharing and participating and then took off in the class VTS discussions. I have seen the biggest difference in students with language delays and learning differences through the VTS process.”

**Growth and Transfer of Practice**

“I have found the specific VTS questions to be transferable to literacy and math comprehension. Expectations for meta-cognition are found in both the VTS program and our math Bridges program. Both programs encourage students to explain and to give evidence of their thinking.”

“My involvement in the Visual Thinking Strategies program has resulted in the growth of my questioning and discussions techniques, as well as more thorough assessments of my students. The VTS lessons have added more depth to my understanding of the thinking of
young children. I have found it rewarding to be involved in this program, which so clearly supports children and their learning."

“In conclusion, I would just like to reflect on my own growth as a VTS facilitator. I feel that I have learned how to facilitate an open-ended discussion about works of art in a sequential manner. I also feel that I am able to use developmental questions about a work of art and I use a supportive method of responding to my students’ participation during a VTS lesson.”

Writing Samples

VTS has been proven to support the growth of critical thinking skills such as evidentiary reasoning, speculation, and elaboration. These essential learning skills have also been proven to transfer to writing. VTS also supports the growth of writing skills, such as providing relevant examples and development of argument. A goal of the Ripton Assessment Project was to support teachers’ ability to document these changes.

The following are examples of VTS-supported skills from Ripton students’ writing samples.

Image A: Winslow Homer, *Snap the Whip*
Image B: Pablo Picasso, *The Saltimbanques*

**Evidentiary reasoning**

“I think that this picture is set in the old days because of the clothes.”

*Winslow Homer, Snap the Whip*

**Speculation**

“I notice that there are a lot of kids (boys and girls) playing, perhaps they are playing tug-of war.”

*Winslow Homer, Snap the Whip*

**Elaboration**

“I think it looked like two groups of people. One of the groups was the boy in the blue clothes and the man with the bare feet and the big hat...”
and the rest of the people were in the other group. I think that the larger group was part of a traveling circus. I think the smaller group was just some poor wanderers.”

Pablo Picasso, *The Saltimbanques*

*Observing and providing details*

“I noticed that all of the boys have bare feet except for the littler boys.”

Winslow Homer, *Snap the Whip*

*Insightful interpretation*

“They look like lost, traveling circus people. I think this because of their outfits, which look like tightrope walkers outfits, clown outfits or acrobat’s outfits. I think that they might be lost because they are in a desert-like area and because I cannot see any other objects in sight.”

Pablo Picasso, *The Saltimbanques*

*Relevant examples*

“I think this picture takes place in the desert because of what the ground looks like. I think it has sand on it.”

Pablo Picasso, *The Saltimbanques*
Development of argument

“In the picture we looked at I noticed some boys playing a game that looked like human tug-a-war. I think this because the boys are all in a line and they are all holding hands. There is one person on each side pulling.”

Winslow Homer, Snap the Whip

Varied vocabulary

“Little boys scramble to safety through the green grass.”

Winslow Homer, Snap the Whip

Student growth over time

The following are Pre Year II and Post Year III writing samples from two Ripton students. The samples show growth in critical thinking skills, growth that was identified by Ripton teachers in their analysis of the writing samples. As one Ripton teacher wrote, “I think the only way to find concrete evidence is through the writing samples and the videotaped sessions. You do not have to be an expert to see the growth demonstrated by a majority of the students in their writing by the end of the year. The VTS writing samples absolutely show this growth.”
Student 1
Grade 2
Writing sample #1
September 2006

There are boys tugging on each other. I see a house. I see some girls with a hula hoop.

Winslow Homer, *Snap the Whip*

Grade 3
Writing Sample #6
May 2008

I think in this picture it involves lots of traveling because some of the people look like actors and one of them has a sack over his back. I’m guessing that he is carrying his belongings in that sack. I also see a man and a boy. It looks like they are related some way because of their faces. The man with the boy has a barrel over his back and (I think) that he is meeting this boy because he is related to the boy who is an actor. I think these are run-away actors and I think they are traveling to come live with that man with the barrel over his back. I think that the artist (Picasso) was inspired to paint this picture because of a view that he had seen because of some different life styles. I think this picture takes place in the desert because of what the ground looks like. I think it has sand on it.

Pablo Picasso, *The Saltimbanques*

Student 2
Grade 4
Writing Sample #1
September 2006

I notice that there are a lot of kids (boys and girls) playing, perhaps they are playing tug-a-war. The setting looks like a country. They are playing in a meadow near a schoolhouse. There are green trees, blue skies and beautiful mountains. The girls are playing with a hula-hoop, the boys play tug-a-war. I think it is recess. I think (they) are having fun. The grass is green and the flowers are blooming. Most of the boys are barefoot but some have shoes and all of the girls have shoes. Most boys have hats but some boys' hats fell off (while) playing. The air is crisp and cool. Although the sky is blue dark clouds lurk like shadows. I think a storm is coming. The boys have pants with suspenders and long white shirts. The girls have long dresses. I think this picture is unique and lively. It has detail and expression. I like looking at and studying this picture.

Winslow Homer, Snap the Whip

Grade 5
Writing Sample #6
April 2008

I noticed that in the picture we looked at today there are 6 people. There are 2 females and 4 males. The tall man on the left looks like he may be part of a traveling circus. He looks like he may be a gymnast in the circus or even a clown. The man who has all red on looks like a clown also. The little girl with the pink dress and black top might be a girl that rides on horses and does tricks on them. There is a basket next to her. It is full of flowers. The crowd might have thrown the flowers to her and she put them in that basket. The woman that is sitting in the lower right hand corner might also be from the circus. There is a vase of some kind next to the woman. (I)
think that the man that has no shirt is carrying a barrel on his back. I think that he feeds the animals in the circus. I think that the barrel is full of food. I noticed that the boy that has on all blue and red clothes is also part of the group. I noticed that the little girl has a rose in her hair. They might have gotten lost on their way to the next place they were going to perform. They may have gotten separated from the rest of the people in the circus. I think that they are lost in the desert. I think this because I cannot see any other buildings and the ground looks yellow like sand. I think that it is a sunny day because the sky is blue and there are big, white, fluffy clouds around the blue. I think that the man in the red is talking to the man in the checkered outfit about where to go. I think that the vase that the woman has is filled with water. The woman sitting down has a hat on. Both the man with the barrel and the girl with the basket have no shoes or the shoes that the people do have on are black. The man that has all red on has a joker hat on. I think that this is in the afternoon when it is really hot. The woman that is sitting down might be (the) wife of the tallest man (the one with the scarf) and she might be the mother of the girl that is holding the checkered man’s hand. They all look confused. They probably don’t know where to go. I noticed that the boy all (in) blue and red is looking at the woman. The woman might also be the mother of that boy. The woman has flowers on her hat. She also has long, brown hair. I think that this is a painting because it is not as distinct as a photo and it is signed. Most photos are not signed. Overall, I think that this picture is cool and it unfolds a whole story.

Pablo Picasso, The Saltimbanques

Videotapes – and conclusion
Videotapes were collected to provide opportunities for teachers to carefully - and repeatedly - observe VTS discussions, and to mine these taped discussions for evidence of growth in their students and in themselves (see Teacher reflections).

The Ripton videotapes provide strong evidence of the growth of a wide range of student growth in viewing, thinking, and communication skills, as well as changes in teacher practice. Teachers addressed the value of having taped VTS discussions to review:

“I think the other forms of growth are very subtle and can only be captured on video in order to see if students are now Stage Two [Housen’s Aesthetic Stage Model]. I also think that the teachers will continue to grow in being able to articulate the growth they observe in their students the more VTS is done in the class.”

“In examining my own tapes of me facilitating a VTS Lesson, I will need to grow in the area of asking the second question correctly in order to provide for an open ended answer.”

As a fitting conclusion to this report, which has documented the growth of VTS-supported skills in students as well as growth in teacher practice at Ripton Elementary School, the following are videotaped student responses to a Ripton teacher’s question “What do you learn from viewing these [VTS] images?”
1. “We learn to look at pictures.”
2. “How to express what you see, and your thinking about it.”
3. When you are looking at a picture you can like act it out, like you can go up and act it out.” [Teacher: “Like we did with the tableau.”]
4. “It helps you like tell whys, like a lot of math problems you have to tell why…”
5. “Well I learned that it helps you to explain your thinking. It also helps you to get your imagination going, like you could think on this picture those two girls are sisters, so that girl…It helps your imagination get flowing.”
From more information on the Visual Thinking Strategies Implementation and Assessment Project at Ripton Elementary School please contact:

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