



Visual Thinking Strategies and Fossil Detectives

Visual Thinking Strategies - Basics

This technique can be used in the classroom with photographs or images, or in the museum with exhibits. It develops critical thinking skills, uses prior knowledge, and encourages student tolerance for multiple interpretations and complex meanings.

Educators/Teachers are asked to use three open-ended questions:

- What's going on in this picture? or What's going on here?
- What do you see that makes you say that?
- What more can we find?

3 Facilitation Techniques:

- Paraphrase comments neutrally.
- Point at the area being discussed.
- Link contrasting and complementary comments.

Students are asked to:

- Look carefully at images.
- Talk about what they observe.
- Back up their ideas with evidence.
- Listen to and consider the views of others.
- Discuss many possible interpretations.

For further information:

<http://www.vtshome.org/pages/a-vts-discussion>

Basic VTS at a Glance

By Abigail Housen and Philip Yenawine (May 2010)

Starting the Lesson (Getting Ready)

At the start of the first class, introduce VTS: it allows students to examine art, think, contribute observations and ideas, listen, and build understandings together.

Project the first image. Always give students a moment to look in silence before inviting them to speak.

Asking Questions

After they have examined the image, ask the question, **What's going on in this picture?**

Whenever students make an inference (comments drawing conclusions based on observations), respond first by paraphrasing and then ask, **What do you see that makes you say that?**

In order to keep students searching for more observations, frequently ask, **What more can you find?**

Responding to Students' Comments

Listen carefully to students, making sure that you hear all of what they say and that you understand it accurately.

Point to what they observe in the image, pinpointing precisely, even if the observations are not new. Use encouraging body language and facial expressions to nurture participation.

Paraphrase each comment. Change the wording, but not the meaning of what is said. In rephrasing, demonstrate proper sentence structure and vocabulary to assist students with language development.

Accept each comment neutrally. Remember that this process emphasizes a useful pattern of thinking, not right answers. Students are learning to make detailed observations, sorting out and applying what they know. Articulating thoughts leads to growth even when they make mistakes.

Link answers that relate, including both agreements and disagreements. Show how the students' thinking evolves, how some observations and ideas stimulate others, how opinions change and build.

Concluding the Lesson

Thank students for their participation. Tell them what you particularly enjoyed. Encourage them to think of viewing art as an ongoing, open ended process.

VTS Elements

Art images selected for the audience

Peer group

Silent looking (*take a quiet moment to look at this picture...*)

3 Questions

What's going on in this picture?

What do you see that makes you say that?

What more can we find?

Listen carefully to each comment

Point to features described in the artwork through discussion

Paraphrase all comments

Remain neutral

Link related ideas and points of agreement / disagreement

Close by thanking the group

Working on Paraphrasing

Paraphrasing is a key element in VTS facilitation for important reasons. For example, when you paraphrase comments consistently and well, you not only honor individual contributions to discussions but also set a supportive context to encourage full participation. You show that you not only hear but also understand what someone has said, and the boost this provides to confidence cannot be overestimated. You ensure everyone hears each comment signaling how important everyone's contribution is. You model language, including vocabulary a participant might be searching for, and data show the profound effects over time.

Given these reasons, when learning VTS, you want to pay attention to paraphrasing, and learn to do it as well as possible.

A tip that helps: pay close attention to what participants say -- hearing their words -- but take a moment before paraphrasing to ask yourself:

What are they trying to say?

Take the time to think about the meaning of the comment, and words to rephrase it come more easily.

As you paraphrase, point to what was mentioned both to help you recall details and to make it clear visually that you understand.

Here are some questions to help you reflect on any paraphrase:

- Did you understand the idea(s) contained in the comment?
- Did you convey the overall idea(s) that the student was trying to express as well as the particulars?
- Did you express only what the student said and not add your own ideas?
- Was the paraphrase as well worded and succinct as you want it to be?
- Did you stay neutral?

Fossil Detectives Facilitation - Basics

We use a variation on VTS at the La Brea Tar Pits Museum to encourage critical thinking in students, and improve their observational skills.

Museum Facilitators use open-ended questions:

Specimen Questions

- What do you notice about this animal?
- What might that tell us about how this animal lived?
- What do you see that makes you say that?
- What more can we find?

Environment Questions

- What's going on in this picture? or What's going on here?
- What do you see that makes you say that?
- What more can we find?

3 Facilitation Techniques:

- Paraphrase comments neutrally.
- Point at the area being discussed.
- Link contrasting and complementary comments.

Students are asked to:

- Look carefully at fossils and murals.
- Talk about what they observe.
- Back up their ideas with evidence.
- Listen to and consider the views of others.
- Discuss many possible interpretations.