From Visual Information to Narrative Writing:  
A Strategy for Analyzing and Sequencing

Peter Tonsoline
Iroquois Central High School

Introduction

Typically in science, the student is provided a picture depicting a scene, image or event to illustrate a major concept. This graphic usage is certainly not germane to the science disciplines only, but a technique employed in every academic subject. Yet, how effective or beneficial are these sweeping, panoramic images in inducing the student to better understanding or a deeper thought processing. Do they conjure up a thousand words, or do they merely provide firebreaks to paragraphs of words sweeping across a page?

If indeed visual imagery can foster another avenue into deeper mental processing or enhance more inquisitive, creative thinking, then there must be a methodology in place to capture and describe these thoughts. Thinking must be performed, organized and presented in words that proceed beyond normal conversational tones. Some method of instruction must be implemented to guide and support potential writers through the passageways of visual-mental imagery and scientific undertones into a logical, accurate written translation.

Step 1: Identifying the Strategy

The intent of this lesson will to direct the student through a sequential process of visual analysis and interpretation. This strategy is designed to address problems centered on the student’s inability to fully recognize, comprehend, integrate and eventually narrate in the written form what they have learned by observing a picture or diagram. The methodology constructed to instruct the student through these stated
problems is called "The Three W's." This system incorporates three w's in the form of "WITNESS – WITHIN – WEAVE."

The first step is for the student to WITNESS the picture or diagram that has been assigned by the teacher to highlight or compliment the lesson. This point relies on the powers of observation, but sometimes the student is not quite sure what is considered to be “observed.” The Witness step should include description, images, evidence, data, facts and/or any other visually relevant information. What has been described is typically what good observation is in any science discipline.

After the collection of this information, the student moves on to the category for the lesson that has been labeled, WITHIN. This progression will now require the student to list the scientific principles/concepts that they feel are being presented by the picture or diagram. The scientific principles should be clearly stated apart from the picture, meaning the student should present an accurate and concise definition or explanation of the science.

The conclusion of these preparatory steps leads into the phase called, WEAVE. This is where the student begins the actual writing process by arranging the stated facts, data, images, etc. with the scientific principles and concepts they defined into a narration of what the picture/diagram is attempting to convey.

**Step 2: Modeling the Strategy**

The teacher will need to explain thoroughly each step, but primarily the first two steps. Students seldom understand that observing is merely what it means. By providing a picture or diagram, the instructor will lead students through a lesson of observing by collecting facts, data, images, etc. This information will be listed on the thinksheet under WITNESS. It must be emphasized that there are no inferences or suppositions as to what is in the picture or diagram, only the facts. From here, the teacher can then discuss with the group what scientific principle or concept is being depicted. This will be entered under the WITHIN column and not only includes the correct principle, but also its proper definition or explanation.

Obviously, the most difficult task will be the integration of observed facts with principle into a written narration that is accurate, logical, sequential, but also flows. Perhaps this task has been made a bit easier for the student since so much preliminary information has been gathered. The teacher can now model a final version of an acceptable written narration that has incorporated information from the WITNESS and WITHIN columns. This completed task should fulfill the requirements of the WEAVE column on the thinksheet.
Step 3: Scaffolding the Strategy

Upon completion of this group explanation, the teacher should assign a picture/diagram task to the group. Initially, the same picture/diagram should be provided for the entire group and students can be assigned in groups of 2-4 to collaborate on the thinksheet to complete the WITNESS and WITHIN columns. However, the actual written narration or the WEAVE should be performed individually. When the teacher has been assured that the strategy taught is understood and performed to expectation, then individual different pictures/diagrams can be provided with possible oral presentation to the class.

Step 4: Providing Additional Practice

A suggested application of this strategy would be in a lab situation. There are many instances in science where duplication of events or materials in a laboratory environment is next to impossible. TRIRANGING could be incorporated in interpretations of environmental pollution, evolution, space travel, nuclear reactions, landscape formation, etc. A written submission of the above mentioned would certainly suffice as a meaningful, insightful and acceptable lab report. Obviously, further applications could be made in essay test questions or individual projects.

Conclusion

The development of the The Three W’s strategy is guide the reluctant writer through a sequential process to develop his or her skills. However, many students find writing in the science disciplines difficult because they do not how to phrase or narrate scientific principles. These strategies of WITNESS –WTIN – WEAVE will guide the student through observation, collection and incorporation of scientific principle into a written narration. If indeed “a picture is worth a thousand words” then there must be a strategy capable of capturing those often undiscovered, elusive thoughts.

Suggestions for Adapting the Strategy in other Grades or Content Areas

The incorporation of this strategy across the curriculum would be applicable to any academic disciple and any grade level, since the usage and reliance of visuals has become such a major portion of classroom instruction.

Thinksheet

Copy is attached.
<table>
<thead>
<tr>
<th></th>
<th><strong>The Three W's</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WITNESS</strong></td>
<td><strong>WITHIN</strong></td>
<td></td>
</tr>
<tr>
<td>(Observing the</td>
<td>(What science is contained</td>
<td></td>
</tr>
<tr>
<td>visual)</td>
<td>in the visual)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>WEAVE</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Tie together the visual</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and its science meaning)</td>
<td></td>
</tr>
</tbody>
</table>