**See, Think, Wonder**

***What it does***

Like anticipation guides, the *See-Think-Wonder* strategy does a number of things simultaneously. It hooks students into a lesson with a high interest visual. It promotes careful observation, thoughtful interpretation, and meaningful questioning (a skill that will be more fully explored in the next chapter). Because the students move from concrete seeing to abstract thinking, by design the strategy scaffolds learning. It also activates any prior knowledge that exists and helps to build a bit of background knowledge if it is lacking. Finally, like the anticipation guide, *See-Think-Wonder* provides formative assessment data on many aspects of student performance.

The strategy comes from the organization Visible Thinking, which has its roots in Harvard’s Project Zero. Here’s what Visible Thinking has to say about their core thinking routines, of which *See-Think-Wonder* is one: “Visible Thinking is a flexible and systematic research-based approach to integrating the development of students' thinking with content learning across subject matters… [It] has a double goal: on the one hand, to cultivate students' thinking skills and dispositions, and, on the other, to deepen content learning.[[1]](#endnote-1)”

I’ve found this strategy to be a perfect fit for kicking off a social studies and science unit or chapter, but it can also be used in the middle of a lesson sequence or at the end of your teaching. I’ve also discovered that teachers generally like this strategy and find it to be effectively. Most recently, while working with the teachers of Nicholas County, West Virginia, many of them enthusiastically endorsed *See-Think-Wonder* to me, saying it did wonders for building background knowledge, setting the stage for reading, and helping students develop the skill of asking meaningful questions.

***What It Looks Like***

The heart of the *See – Think – Wonder* strategy is a large and engaging picture, rich in imagery, that relates to the unit or theme you are teaching. You will also need your preferred medium for capturing student thoughts. During the lesson, students observe the picture carefully, commenting on all that they see. You catalog what they see. Next, the students tell what they think about what they seen. You catalog these thoughts. Finally, the students formulate questions. These questions spring from what they see and what they think. You make a list of these questions. Typically, statements are voiced using the stems, “I see…,” “I think…,” and “I wonder…”

With regards to the picture, you can choose one from your classroom textbook, bring in a picture that you’ve taken, or search the web for something appropriate. I typically search the web using Google Images. Regarding the medium you use to capture student comments and questions, you can go low tech, high tech, or somewhere in between. If you’re going old school, use large sheets of easel paper. I especially like the sticky note version, which I pull from the pad and hang somewhere in the classroom. If you go high tech, use a Smart Board or a word processing app on a tablet or laptop that beams through a projection system.

By the way, objects can be used in place of pictures. Paintings and sculptures work, as do collections of rocks or seeds or bones, specimens in jars, live animals, or historical and cultural artifacts, such as an arrowhead collection or a piece of kente cloth. I have used objects on occasion, but I have found that giving a large number of kids close access to an object (so they can see it clearly) can be problematic, so I typically stick with a high quality digital image projected on a big screen at the front of the room.

***How to Use It in Science and Social Studies***

The teaching sequence I use to teach this strategy is the one I often use in my teaching: I model for the whole class (I D0), the students and I practice together (guided practice or We Do), and then I release to the students and ask that they work independently (independent practice or You Do). If, during the You Do phase, I see that students are not proficient in the use of the strategy, then at some point I move back to more modeling and more guided practice.

Because I have been teaching 4th graders social studies content, I’ll use Chapter 5 (The Midwest) of McMillan/McGraw Hill’s textbook series, *Our Country and Its Regions* as the basis for this example of See-Think-Wonder in action. One of the main ideas with this unit of study is that rich topsoil is an important natural resource and people settled in the Midwest region to take advantage of areas vast expanses of fertile soil. At the start, I want to get the kids thinking about the importance of soil, not only in the Midwest, but anywhere on the planet. In many countries, when poor farming practices (human activity) occur simultaneously with drought (natural process), the result is a serious depletion of a valuable natural resource, topsoil. The picture [Figure 3-12] I’ll use to illustrate this concurrence is a Depression-era Dust Bowl photograph from the National Archives.

*Figure 3-12 copy.pdf*

After projecting the picture on screen, I begin to model the strategy.

1. I begin with an introduction, saying, *“OK, everyone, to get us ready to read Chapter Five, The Midwest, I’m going to show you a strategy called See-Think-Wonder. You can use this strategy when you read your social studies book or when you read your science book. In fact, you can use it when you read any book with photographs or pictures in it. Today I will model the strategy. Later, you will practice it. And after you have practiced it a few times, you will be able to use it on you own whenever you encounter a picture in your textbook. You will want to use this strategy on your own because when you use it prior to reading, you understand the text more deeply when you read it.”*
2. Next I model the strategy. To do this, I use the think aloud method, in which I tell my students what thoughts are occurring in my mind as see the picture, think about the picture, and wonder about the picture. First up is I See. I write down what I see, and as I look and write, I say things like, “I see cars. I see men and women. I see hats on some of the men…” These observations are specific. At this point, I am only writing down what I see. For example, I See…

*A huge cloud*

*A guy in coveralls*

*A landscape that looks like a desert*

*Dried up bushes and grasses, maybe a tumbleweed*

*Looking a little closer, I think I see somebody sitting in the back of the last car.*

*More men than women.*

I Think comes next. Now I move from the concrete details of what I see to the more abstract thoughts that my mind generates as I look at the picture. I write down these thoughts as I say them aloud. If you are writing on a Smart Board, perhaps you will use a new slide to capture your “I Think” thoughts. If using easel paper, you will now be on to your next sheet. Here are some of my thoughts on the Dust Bowl picture.

*Some of the men are farmers; they have coveralls on.*

*The cars are waiting. Not sure why, though.*

*The picture looks a little scary.*

*The scene looks like a desert.*

*Some people are looking away from the cloud, but some are looking at it.*

*Because of the way it looks, I think this photograph was taken long ago.*

Finally, I move to I Wonder. I Wonder is the questioning stage. To model this, I look at the picture, say aloud any question that comes into my mind, and then write them down. Here are some of the questions I model.

*What are these people thinking?*

*Is the wall of clouds a dust storm?*

*If the scene is of farmland, why does it look so dry, like a desert?*

*Is the dust moving towards them or away from them?*

*If the dust is moving towards them, why are they just standing there?*

*Why the line of cars is stopped? Are they out of gas? Are they watching?*

*How do the people feel? Are they frightened, mad, resigned, angry?*

1. After I ask the questions, I explicitly tell the students that as I read through my text (and go through the lessons), I’m going to think about these questions. And I’m going to try and answer at least a few of my questions because good readers not only ask questions, they try to answer them by using information they gain from the text and from experiences. I also tell my students that I may not find exact answers to my questions, but I bet I can infer or make deductions based on what I learn.
2. Once I model the strategy, I move into guided practice with the whole group. This might or might not occur on the same day. Whenever it happens, I put up a second picture, give my students 10 seconds to carefully observe the details (like a detective looking carefully for clues), and then randomly call on students to tell me **one thing** they see. It is important that I reinforce the **one thing** **rule** because I know some kids will try to tick off a long list of the things they see, leaving little for the rest of the class to comment on. So teach them that they can only share one item at a time. I write down what the students see then give 10 more seconds of “think” time. After the think time, I solicit comments about what they are thinking, write down those comments, and repeat the process for “Wonder.” All the while, I am providing positive reinforcement for student statements that demonstrate careful examination of the picture, for well-stated thoughts, and for questions that are insightful or especially relevant to the picture.

Don’t be alarmed if this initial modeling and guided practice takes up the bulk of one or two lessons. All strategies take up a fair amount of class time when they are first introduced. However, if you do a routine like *See-Think-Wonder* consistently throughout the year, you’ll find that as time goes the routine will happen more automatically and naturally for both you and your students, and running through it in January won’t take nearly the time it did in September. The key to proficiency is consistency and practice.

After you have modeled this strategy with the whole group, as well as guided your students in a guided practice session, put your students into groups of 2, 3, or 4 and have them try it for themselves. I strongly suggest you allow them to just *talk* at first, rather than writing their comments and questions down in three columns or completing some type of worksheet. Our tendencies can be to formalize strategies through some type of writing, but there is good research to support the effectiveness of students simply talking in groups about what they have read (or in this case, seen) (cite K. Beers and others). Writing can come later, when students have a much firmer grip on using the strategy. Also, writing everything down can be a drag, while talking can be enjoyable, so why not give kids time to talk via an educational activity? You want to create the sense that *See-Think-Wonder* is a tool that students can carry with them at all times and use when they encounter pictures in their content area textbooks. So have the buddies or trios or quartets discuss what they see, what they think, and what they wonder. Meander among the groups and listen to the talk. Take a clipboard and paper with you and take notes on who is saying what. Nudge back into line any groups or individuals that are straying from the topic, and positively reinforce those groups and individuals who are exhibiting behaviors that are appropriate to the task.

Later, pull whole group back together and spend a few minutes on a debriefing session. Here you can point out comments that were especially pertinent and provide praise for those who expended excellent effort. And while back in the whole group, explicitly point out that the *See-Think-Wonder* strategy is one that you will expect them to use prior to reading future chapters in their content area text. Say, *“Good readers take the time to see, think, and wonder about the pictures, maps, and diagrams in the books they read. We are practicing this strategy so that you can use this strategy independently when you read. When you use this strategy, you become a reader who understands more.”*

***I See, I Think, I Wonder: Tying It Together***

Like the anticipation guide, See-Think-Wonder has close ties to *Thick and Thin Questions* and Raphael’s *Question Answer Relationship* strategy, which we will discuss in in the next chapter. Good readers ask and answer questions and the See-Think-Wonder strategy gets students started down the road of asking thoughtful and meaningful questions, thus giving them a reason to read (to answer their questions) and helping them to develop critical thinking skills. See-Think-Wonder also addresses Common Core anchor standards in multiple areas, such as “Read closely to determine what the text says explicitly and to make logical inferences from it” (Key Ideas and Details), “Integrate and evaluate content presented in diverse media and formats, including visually…” (Integration of Knowledge and Ideas), and “Read and comprehend complex literary and informational texts independently and proficiently” (Range of Reading and Level of Text Complexity).

1. <http://www.visiblethinkingpz.org/VisibleThinking_html_files/VisibleThinking1.html> [↑](#endnote-ref-1)