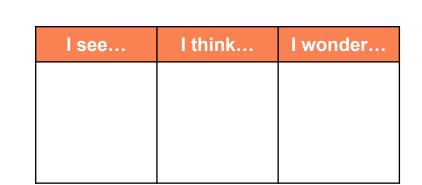


# Bringing Thinking to Light: Visible Thinking as a Component of Effective Teaching

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# SEE, THINK, WONDER



#### **PURPOSE**

- Encourage careful observations and thoughtful interpretations
- Stimulate curiosity and set a stage for inquiry

#### **PROCESS**

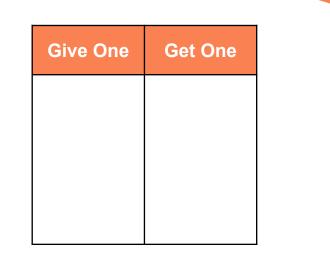
- Present a relevant object: artwork, image, video, chart/data, artifact, etc.
- Give time to observe and process thinking about the artifact:
- What do you see?
- What do you think about that?
- What does it make you wonder?
- Share student thinking in group discussion.
- Post record of responses for documentation and further consideration.

#### **PRODUCT**

• Variations: Notice & Wonder; OWL: Observations-Wonderings-Learnings; Think-Puzzle-Explore



# GIVE ONE, GET ONE



#### **PURPOSE**

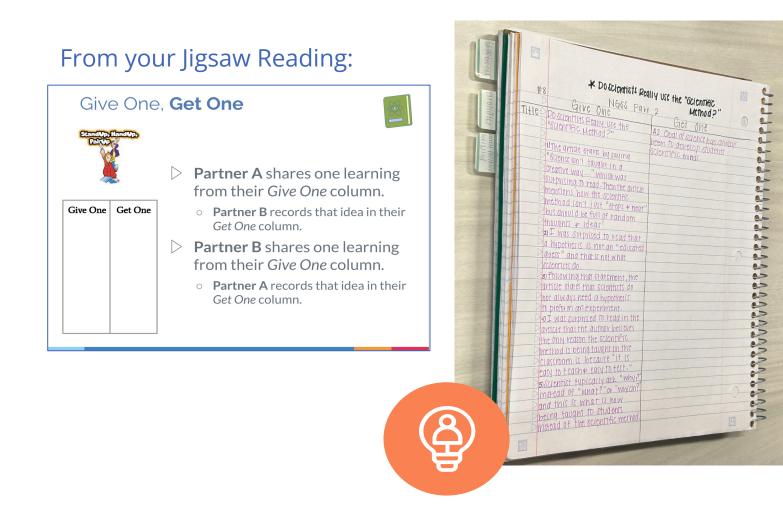
- Encourage active and close listening to others
- Promote perspective seeking, divergent thinking, and elaboration of ideas on the topic

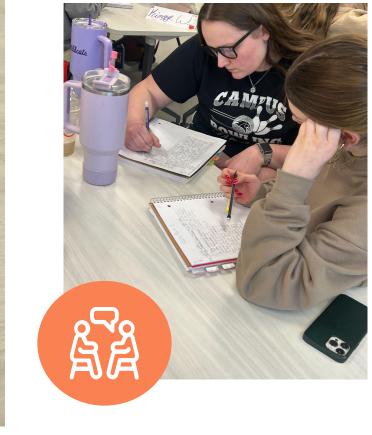
#### **PROCESS**

- Present a prompt or question. Students record their responses in *Give One* column.
- Pair students to discuss responses to "give" one idea to their partner while also "getting" an idea from their partner.
- Each partner documents new ideas, thoughts, perspectives in the Get One column.
- Repeat the process with new partners multiple times.
- Instructor identifies patterns in student thinking: common misconceptions, need for elaboration, etc.

### **PRODUCT**

 Variations: Jigsaw readings, reciprocal teaching, background generation/pre-assessments, unit review





## I USED TO THINK... NOW I THINK...

### **PURPOSE**

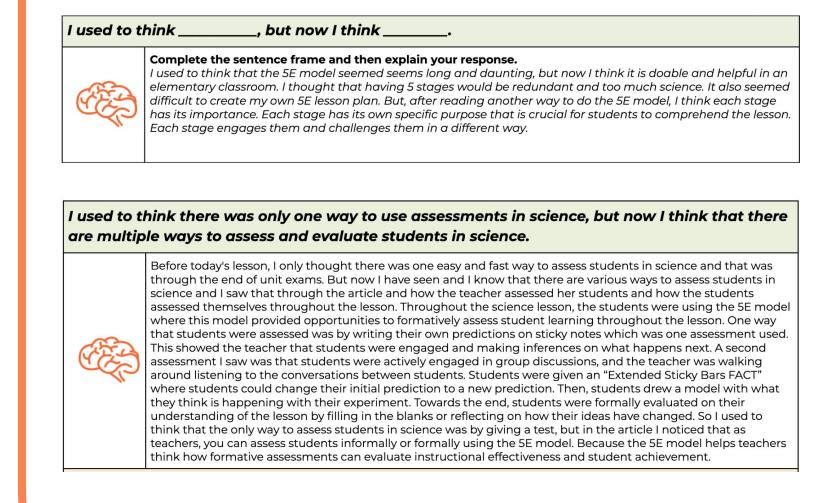
- Encourage reflection on how and why our thinking changes
- Consolidate new learning

#### **PROCESS**

- Use after students' initial thoughts, opinions, or beliefs are likely to have changed as a result of a learning experience.
- Present the sentence frame: I used to think \_\_\_\_\_\_\_\_, but now I think .
- Ask students to share and explain their shifts in thinking.

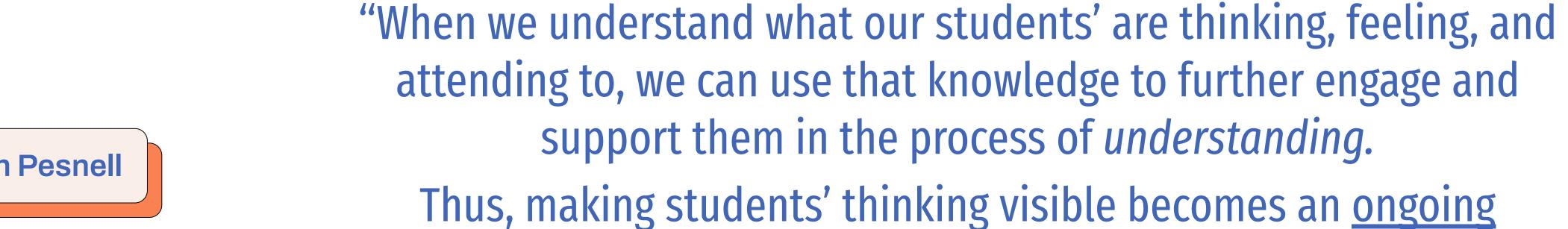
### **PRODUCT**

 Variations: exit tickets, paragraph starters, oral discussions



Example: In-Person Undergraduate Methods Course

Example: Online, Asynchronous Graduate Methods Course



"When we make thinking visible, we get not only a window into what students understand but also how they are understanding it. Uncovering students' thinking gives us evidence of students' insights as well as their misconceptions."



Scan for more information and resources. Ritchhart, Church, Morrison (2011, p.27)



component of effective teaching. "