Erikson Institute Early Math Collaborative

Notice & Wonder

Purpose

A whole class or small group routine using a compelling image to inspire conversation. A playful opportunity for all children to practice using language to make sense of the world. An ideal photo chat library to begin with – once the rhythm of notice and wonder takes hold in your classroom all other photo chat routines will fall into place.

Structure of the Routine

Notice Statements

Asking students what they notice is an ideal starting place for a conversation. What students notice and see can offer a window into their thinking. Prompts such as "I notice . . . " and "I see . . ." offer an entry into the chat. Noticing is a means for students to make sense of the world; it is the first step towards deeper learning and wondering.

Wonder Statements

Once students are aware of what they notice they are primed to ask deeper questions or wonderings. The first wondering will fuel a host of other questions in the classroom. The teacher is not concerned with answering these wondering. The purpose of wondering is to extend conversation, drive future learning and foster a community of curiosity about the world.

Structure of the Routine

- Step 1: Look carefully at the photo What do you notice?
- Step 2: **Think silently** for a moment.
- Step 3: **Turn and talk to a partner Share one thing you notice**. Then listen to your partner's *ideas*. Take turns sharing noticing until time is up.
- Step 4: **Share ideas as a whole class** Have students share their ideas of what they noticed. Support students to build or add on.
- Step 5: **Turn and talk to a partner Share one thing you wonder.** Then listen to your partner's ideas. Take turns sharing wonderings until time is up.
- Step 6: **Share ideas as a whole class** Have students share the questions they are wondering about. Support students to build or add on.

Step 7: **Summarize** – Chose one take-away to emphasize at the conclusion of the photo chat. You may want to notice turn taking, listening skills, building on one another's ideas, or something related to the content of the photo.

Troubleshooting

We want to hear many different points of view while keeping the conversation focused on what students notice and wonder about the image.

- Turn and Talk structure ensures all children are offered an opportunity to talk.
- Prompts such as "Tell me one thing you notice"
- If students get off topic the teacher can offer something they notice to bring the conversation back to the image.

Growing the Routine Over Time

Collect images from your community such as the school crossing guard helping children cross the street or an image from a shared experience such as class field trip or nature walk. Once the routine is comfortable consider recording the class noticing and wonderings on chart or whiteboard for shared reading.

Notice and Wonder as a practice can be integrated into other parts of your day:

- Writer's workshop when children share a story or illustration with the class, Notice and Wonder statements are a productive way to give peer feedback
- Read aloud pause at a compelling illustration to discuss what students notice and wonder to build comprehension
- Support mathematical thinking and reasoning through conversation
- Active prior knowledge and curiosity about a science phenomenon

Look at this photo, we have outlined important "teacher moves" or high impact teaching strategies to support children's oral language development.



High Impact Teacher Moves to Support Language Development

Teacher Move	Rationale	Example	
Wait time	Allow children time to react or respond.	Teacher is observing but not responding with words or actions.	
Say what you see using descriptive language	Model precise language to describe what you see. This supports children receptive understanding of language.	"I notice a robin is holding a tiny, squishy worm in her beak."	
Rephrasing/ Revoicing	To amplify a comment or idea to the benefit of the entire learning community.	"Ivette noticed the baby robins have opened their beaks very wide."	
TPR Gestures for specific academic vocabulary	Layering gestures with your words supports children's receptive language understanding. Model for children and expect them to use the gesture, too. A high impact strategy, especially for English Learners.	Ivette notices the baby robins have opened their beaks very wide. Create a beak with you hand – open your hands to support the understanding of wide.	
Provoking comment	Pushing for specificity Extend a child's thinking from noticing into wondering.	Desi noticed there is only one worm but 2 baby robins. Can anyone tell me more about what you might be wondering?	
Turn and Talk	Ensures all children get a chance to practice speaking in pairs before whole class. Teachers can use these noticing to build conversation within a whole group. Offer teachers an opportunity to collect data.	Teacher is listening as children talk in pairs.	
Building the conversation	Extend and deepen the thinking or reasoning. Support language building.	"Build on" gesture Does anyone want to build on that?	