**Example of Typical Introductory Workshop**

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**The *Writing in Science* Approach: Scaffolding Instruction to Develop**

**Conceptual Understanding, Scientific Thinking and Practices, and**

**Oral and Written Scientific Communication**

**Overview of Workshop:**

* Introduce the *Writing in Science* Approach and how it can benefit students, including those who are learning English, have special needs, or have highly developed academic skills.
* Explain rationale for the approach: fosters development of expository writing skills in the context of learning science concepts, scientific thinking and practices; science and writing instruction mutually enhance learning in the other domain.
* Demonstrate specific components of the approach (e.g., word banks, graphic organizers, language structures, and writing frames).
* Engage participants in modeled lessons for writing scientific observations and comparisons, and for analyzing data and writing scientific conclusions and explanations, including metacognitive reflection.
* Critique student notebook entries to see differences between scientific and creative writing; and differences between scientific observations, inferences, and opinion.
* Explore the attributes of a classroom that supports the learning of science and scientific practices, including scientific writing. (Watch video of a teacher and his students interacting in science and science-writing lessons.)
* Critique several conclusions and explanations using *Writing in Science* protocols for providing constructive, positive feedback (descriptive and prescriptive feedback rather than evaluative feedback, which research has shown not to be effective in improving student achievement in science).
* Look at student notebook entries from pre-kindergarten through eighth grade to see development of basic to complex skills in making and writing scientific observations, comparisons, cause/effect, data analysis, and conclusions and explanations.
* Discuss common challenges and potential solutions when implementing the approach.
* List strategies that teachers can implement in their classrooms tomorrow and strategies that they can implement over time.