



RPDP Elementary Science Newsletter

Southern Nevada Regional Professional Development Program

Using Science Notebooks in an Effective Science Lesson

The *Components of an Effective Science Lesson – introduction, concept/skill development and application, and linkage/closure* – provides a structure for which teachers can use strategies that will enable their students to develop and apply scientific concepts and skills. Imagine a tool that can be used in every component of an effective science lesson! It can be used to set the stage of a lesson, develop a concept or close a lesson. This wonderful tool is called a science notebook.

During the *introduction* a science notebook can help set the stage by having the students refer to their notebooks and review what they did yesterday. This information can be linked to what they will be doing in the current lesson. Making the connection using the notebook not only shows students how new material will connect to what they've already learned but also demonstrates an authentic purpose for using the notebooks. Teachers can also have their students do a focused free write on the topic they will be working on for that day as well.

During the *concept/skill development and application*

component science notebooks can be utilized to help students develop, use, and learn appropriate science vocabulary. Students can record new vocabulary words in a word bank section of their notebook. They can refer to this section when recording their observations, findings, and conclusions. This helps students connect their informal language to the more precise scientific vocabulary. Students also use their notebooks to record observations, questions, materials, and data, organize their data, develop explanations based on evidence, communicate scientific procedures, and generate new questions as a result of their findings.

As for assessment, science notebooks can provide information as to what students know and are able to do. Teachers can review the notebooks when working with small groups or individual students. Using this information teachers can adjust their lessons as necessary.

Bringing *closure* to the lesson is a crucial component that is often left out for a variety of reasons. Science notebooks can help teachers accomplish this. Students can use their notebooks to summarize what they learned and reflect upon it. They can also use it to link the new information to previously learned material, make connections within the content area, across the strands and to real life experiences.

Science notebooks are an invaluable tool that can be utilized throughout an effective science lesson.