Science Workshop Model Lesson Plan

by Natasha Cooke-Nieves

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(adapted from: Science Workshop by Wendy Saul, Heinemann, 2002 and Lucy Caulkins, The Art of Teaching Reading and Writing, Teachers College Press, 2003))

Grade Level: _____

Unit/ Topic: _____ / _____

Teaching Point Good scientists _____

E.g.: Good scientists identify the diet of early humans by examining the teeth of early hominid skulls.

Mini-Lesson (10-15 minutes):

Connection: The teacher makes a connection for the lesson at hand with previous work done. *"Last science period, we…Today we will…"*

Problem Presentation: The teacher explains in clear definition to the students what the lesson is going to consist of. *"Today, you will receive an introduction on handling the model skulls. I will review all of the components of the jaw and mouth. And, you will have a handout to fill in as the parts are being reviewed."*

Model: The teacher demonstrates what he/she expects the students to do during the work period.

Link: In the last part of the mini lesson, the teacher explains what it is that the students must accomplish during the independent work time and how it relates to everyday life. *E.g. "What teeth do we use to eat vegetables, nuts, and steak?" Students can study the teeth to determine the diet of the organism.*

Independent/Group Work Time (25 minutes): Students will work on an investigation individually or as a group of 2-4 students. E.g. Tier I students will look at the teeth on each skull and draw a picture; students will write one major difference they noticed overall. Tier II students will also look at the teeth on each skull and draw a picture; students will write one similarity and difference they notice. Tier III students will also look at the teeth on two skulls and draw a picture; students will then use a Venn diagram to compare and contrast those two skulls. *For definition on Tiering as a differentiated strategy, please refer to "Ideas for Differentiating Your Science Classroom."*

Student Share: Students will share their observations with the class (whole class share) and point out any difficulties or techniques they applied in determining the diet of early humans.

Direct Teaching: Teacher clears up any misconceptions evidenced during student share or witnessed during the active engagement/work time. This is a key component of the Science Workshop Model.

Closing: *Today and everyday, I want you to know that as good scientists you should…*

Formative Assessment: What student artifact will you use to assess understanding of concept? Will you assess the artifact by process, product, or content? You must distribute a rubric beforehand so that the student will know expectations for the task/activity. *See rubric below.*

SCIENCE INVESTIGATION RUBRIC

Skills and Strategies for Interdisciplinary Problem Solving (Based on NYC Elementary Science Core Curriculum)

Science Inquiry Process Skills	Exemplary 4 *Reflects highest level of the following performance characteristics…*	Accomplished 3	Developing 2	Beginning 1
Working Effectively	☺Contributes to cooperative learning group ☺Plans procedures ☺Identifies and manages roles of group	Masters most of the Level 4 characteristics	Development and movement toward mastery of performance Level 4 characteristics	Beginning mastery or does not show level of performance Level 4 characteristics
Gathering and Processing Information	☺Accesses information from at least three or more sources ☺Uses senses to make observations ☺ Uses tools to make observations ☺ Uses texts as resource ☺ Uses media as resource	Masters most of the Level 4 characteristics	Development and movement toward mastery of performance Level 4 characteristics	Beginning mastery or does not show level of performance Level 4 characteristics
Generating and Analyzing Ideas	☺ Develops Ideas/hypothesis for solution ☺Investigates ideas ☺Collects data ☺Shows relationships and patterns in the data (i.e. tables, graphs, charts)	Masters most of the Level 4 characteristics	Development and movement toward mastery of performance Level 4 characteristics	Beginning mastery or does not show level of performance Level 4 characteristics
Presenting Results	☺Uses data gathered to evaluate results ☺ Uses data gathered to communicate in their science journal, with peers, and/or with teachers	Masters most of the Level 4 characteristics	Development and movement toward mastery of performance Level 4 characteristics	Beginning mastery or does not show level of performance Level 4 characteristics