Watershed Classroom

Curriculum Standards

Bird Biodiversity in the Petaluma Watershed
a project by Kirsten Franklin

Content Standards addressed: LS1: From Molecules to Organisms: Structures and Processes
LS2: Ecosystems: Interactions, Energy, and Dynamics
LS4: Biological Evolution: Unity and Diversity
ESS3: Earth and Human Activity
ETS1: Engineering Design

CCSS ELA and math standards will be addressed as well and more specifically identified when I know what grade I will be teaching.
Reading Tasks: What primary documents and informational texts will be read/analyzed?: Informational reading about birds and the Petaluma watershed from a variety of sources including field guides, trade books, the local museum, and internet sources such as Cornell Ornithology Lab will be utilized.

Writing Tasks: What kinds of writing tasks (Arguments and Drawing Evidence) will be required?: Students will record observations, inquiry questions, and explanations of phenomena in science notebooks. They will write scripts for public service announcements to educate the school community and beyond. They will write up investigations using a scientific format and style with appropriate discipline-specific language.

Collaboration: How will students collaborate, communicate and organize together (Speaking and Listening/Discussion): Students will regularly engage in collaborative groups as they work on citizen science tasks, investigations, and to create public presentations to educate the public about their work. Rubrics from the Buck Institute for Education that measure 21st century skills will be a regular part of their self assessments and reflections. Grade level common core speaking and listening standards will be addressed particularly for discourse expectations, protocols, and routines.

Integration of Media Sources and Skills: How will students use technology for research, communication, documentation and or presentation purposes?: Use of their 1:1 iPads will be integrated into their investigations and field work as they take photos and research information. They will make their learning visible through the creation of digital presentations using apps like ChatterPix Kids, Book Creator, Explain Everything, etc.

CA Core Standards-based Assessments: How will students demonstrate their acquisition of new knowledge and skills?: The Watershed pre and post tests will be administered to assess general

knowledge known and gained about the Petaluma Watershed. Teacher created and commercial formative assessments will be conducted throughout student activities to monitor student learning and to inform instruction. Teacher created and commercial summative assessments as well as final digital products will be used to assess the acquisition of new skills and knowledge.

Presentation of Knowledge/Student Public Forum: Students will share their learning and recommendations with the school community, with the Watershed Classroom Project, and with bird experts including Pt. Blue Conservation, Sonoma Birding, and Cornell Ornithology Lab.