Designing Effective Projects: Projects in Action
Anatomy of a Project Plan: Grade K-2

Pond Water and Pollywogs: A K-2, Life Science Project

Primary students rear frogs from eggs, and share their expertise in an informative brochure for visitors at a new amphibian's exhibit at the local zoo. You may want to print this page as you view the entire Pond Water and Pollywogs Unit Plan.

Essential Question: *Why do people say there is no place like home?*

Before Projects
Ms. Shapiro's kindergarten class visited a natural frog habitat, collected information, and then designed an artificial frog habitat. They made observations, watched the frog cycle of life, and created newsletters and slideshow presentations about the experience. The Essential Question focused on the growth of animals; however, this did not reflect an enduring question for her kindergarten students nor did it make a strong, personal connection to his students and to the products.

After Projects
Ms. Shapiro decided to restructure the Essential Question, so that it encompassed an overarching idea immediately relevant to her young students and clearly connected to the assigned projects: *Why do people say there is no place like home?* Other instructional strategies such as cooperative grouping, modeling, and tapping prior knowledge made the unit more accessible to his students.

Challenges
In developing the project, Ms. Shapiro faced two key challenges. First, it was important to make the study of frog habitats relevant to her students' lives. She wanted to come up with an Essential Question that her students could relate to and that would connect animal habitats and life cycles to their own lives. She also saw a challenge in having so much for younger students to accomplish. She was concerned about time management and individual accountability. She wanted to be sure that each student could complete the tasks successfully.

Overcoming Challenges
1. **Relevance.** Ms. Shapiro decided to focus the unit on the idea of habitats. This allowed for an exploration of homes in a larger context, and the Essential Question was broadened to fit into several social studies topics. By making the comparison to their own homes, students could see the importance of a frog's habitat to growth and survival.
2. **Time.** In order to solve the problem of time, she used specific instructional strategies like organizing her students in small, cooperative groups to complete the slideshows and newsletters. The project was split up into tasks, making it more manageable for the students to complete. She offered templates to aid in their design process and utilized older buddies, parents, and community volunteers to type up the newsletters. Small groups completed puzzles which pieced together the life- cycle of a frog and graphic organizers generated questions and promoted thinking.