

The Teacher as Learning Guide

by Bonnie Bracey

Alex, a fourth grader in my class at Ashlawn Elementary School in Arlington, Virginia, broke into tears. He'd been working on the design for Marsville, a colony on the fourth planet from the sun. Through the project, sponsored by the Challenger Center for Space Science Education, kids not only learn facts about Mars, but they also grapple with the problems humans would encounter living and working in an alien environment. Alex was trying to figure out a way to cook his favorite food — hamburgers — in space. He'd been consulting with a British scientist via the Internet about the question. The tears started when the man told Alex that he'd soon be visiting Washington, D.C., for a National Science Foundation meeting. Could he and Alex get together and "do lunch?" "I didn't tell him that I'm only in the fourth grade," sobbed Alex, thinking he'd done something wrong. "I don't know how to 'do lunch.""

Such are the wonderful — yet sometimes bumpy — educational adventures that arise when students take responsibility for their own learning. Traditionally, the teacher is an all-knowing fountain of wisdom spouting facts that students are expected to soak up. During more than three decades in education, however, I've come to believe that the proper role of the teacher is to be a learning guide, an educational facilitator, and a broker of learning opportunities.

In my early days of teaching — during the 1960s and '70s — the classroom sometimes felt like a cell, with both the students and myself prisoners of time and the educational climate. As I explained lessons to the students, their little faces would glance longingly at the real world outside the classroom window. One day, a little boy stood up and said, "I'm tired of all of this talking. You just talk, talk, talk all the time."

He was bored to death, and, frankly, so was I. I wanted to be a creative teacher inspiring students to learn. I wanted my students to care about being in school. So I decided to reinvent my teaching. Rather than trying to dominate my class, I learned to make it a shared experience. In the spirit of such self-directed learners as Thomas Jefferson and George Washington Carver, I taught kids that they didn't have to depend on someone else for their education — they could learn on their own. My job was to observe, to assist, to suggest, and, when things were going well, to fade into the corners of the classroom.

The most important change I made was to see my job through the eyes of children and to really get to know the students in my care. I began to devote the first month of school to learning about my kids — a mixed group of fourth and fifth graders. We made visual maps of their family trees, interests, and ideas. We created timelines and wrote autobiographies. I arranged camping trips and museum visits that bonded the class into a group. Each child got a new start with me; I trusted and believed in them no matter what their official records said.

My goal was to tap into the spirit of curiosity and exploration that all children share. When kids are allowed free time on playgrounds, they form little groups to investigate a mud puddle or trace the paths of ants. They are forever solving problems and making things — tree houses, drawings, model airplanes. So I filled our classroom with a treasure chest of goodies, making it a hands—on learning laboratory for kids to explore. There were rocks and rockets, petrified wood and fossils, pots and pans, maps and atlases, paintings and posters, calculators and incubators, greenhouses and butterfly boxes, masks and artifacts from around the world, even a tile from a space shuttle.

Occasionally, students sat at desks as I talked to them, but most of their time was spent doing projects that combined knowledge with creative problem solving. As part of a National Geographic Kids Network project called "What is Water?" we measured and monitored the water quality in a stream outside our school. We took field trips to the Chesapeake Bay and stomped through mud in search of plankton and tiny crabs. We observed the effects of acid rain on historic buildings in Alexandria, Virginia. We

created stories, poems, magazines, and murals based on water themes. Using computers, we mapped and graphed and shared and compared data about water resources with other children around the world.

Over the years I took advantage of every opportunity to learn about — and obtain grants for — high-tech tools for my classroom. Finally, we had computers, CD–ROM players, and modems that allowed learning to reach beyond the confines of the school into the real world. Through the Internet, a virtual faculty of teachers, students, and experts was available to me and my kids. This global networking allowed the tiniest fingers to explore the biggest ideas.

I saw myself as a co-learner with my kids, and I gave myself permission to learn as much as I needed to be a good teacher. I studied marine biology and met huge mosquitoes as I tromped in wading boots through creeks and marshes. As a Challenger Center fellow, I set off a rocket, stood in a wind tunnel, flew kites, and piloted a glider.

A couple of years ago, I left the classroom to expand my role as a change agent in education. I worked with the National Infrastructure Information Advisory Council to bring electronic networking to schools, libraries, and homes, so that every student can have the kind of access to learning that my kids did. I've also helped to launch the Online Internet Institute, an electronic network dedicated to teachers teaching teachers, a place in cyberspace where educators can learn and grow together.

The underlying goal of this work, however, is the same one I've always had: to offer kids the rich education I never got as a child. The most important role for a teacher, I believe, is to introduce children at early ages to a wealth of wonderful learning opportunities so that they are inspired to think about who they can be and what they can do for the rest of their lives.

The following Web sites appeared in this article:

Online Internet Institute: oii.org/

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