

SCIENCE BUDDIES *in Action*



Teacher

Karen Delgado
Hampton, New Jersey

Summary

Karen Delgado, teacher of 76 7th grade students, has been teaching for 28 years and says that Science Buddies' resources are "invaluable to me as a teacher."

Overview

Karen Delgado has involved her students in hands-on science projects for nearly a decade. In contrast to the typical science fair, where students are judged on a single experiment or engineering project, Ms. Delgado's students carry out long-term, in-class independent research projects in small groups. Her students then share their investigations with younger students at their school and with the community, at large. This non-traditional approach to hands-on science education allows Ms. Delgado's students greater opportunity for "aha!" moments and in-depth understanding of scientific concepts.



When she discovered Science Buddies' library of teacher resources last year, Ms. Delgado was struck by the quality of the content provided on the site. "It's a gold mine!" she says. "I don't think there is anything out there that is comparable." Ms. Delgado and her students use a wealth of Science Buddies' resources as they work on their projects, including the Project Guide, Teacher's Guide to Science Fair Projects, Science Fair Project Grading Rubrics, the Scientific Method Classroom Poster, and numerous Project Ideas.

She thinks that the Project Guide is particularly lucid. "It is one of the easiest-to-understand explanations of each step [of the scientific method] that I have ever seen—especially the section that describes variables," shares Ms. Delgado. "Your explanation of variables can't be beat!"

Ms. Delgado doesn't just have her students use the Project Guide; she also uses sections of the Project Guide as the basis for lesson plans. In addition, she has her students use the self-check questions at the end of each section of the Project Guide to self-evaluate their work. "Whenever they come to ask me if their section is 'right,' my response is 'Did you do the self-check?'" Ms. Delgado observed that using the Project Guide resulted in a noticeable improvement in the quality of her students' work.

Another highlight of the Science Buddies website for Ms. Delgado is the Project Ideas section. Her students have used several of them, ranging from "Are Laminates Stronger?" to the "Viscosity of Motor Oil." Even if they don't replicate the exact lab," says Ms. Delgado, "Project Ideas serve as FANTASTIC exemplars." By using Science Buddies' Project Ideas as springboards, Ms. Delgado's 7th-graders are able to explore scientific concepts more thoroughly, while indulging their voracious curiosity.

Science Buddies' Scientific Method Classroom Poster has also been a boon to Ms. Delgado and her students. "We refer to it as we go through each step," she says. "It's nice to have the website, but things like posters, which are up all the time, are invaluable."

Partly because of the incredible effort Ms. Delgado puts into helping her 7th-graders develop hands-on research skills, Ms. Delgado received the "Teacher of the Year" award as part of the Governor's Teacher Recognition Program.

Even though her students work harder while they are doing their research projects than at any other time in the school year, the experience is a highlight of the 7th grade, and it's a topic frequently mentioned at 8th-grade graduation.

"True pride, self-esteem, and a sense of accomplishment," says Ms. Delgado "comes from real, authentic hard work. When students—no matter what their academic abilities—are given the opportunity and motivation to investigate something of interest to them, it is AMAZING what they can accomplish! Thank you, Science Buddies, for your contribution to their success!"