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KidScience, produced by the Hawaii Department of Education, is a live, interactive distance-learning television program that makes science accessible and relevant to students in grades 4-8. Classroom science can often be dull and disconnected from the real world, yet it is not practical for the classroom teacher to plan and execute weekly science field trips. *KidScience* brings the exciting world of science to the classroom by way of the television in exciting and dynamic live programs. *KidScience* is delivered live into classrooms in Hawaii, across the mainland United States and into Micronesia and American Samoa.

Living in a place like Hawaii, the ocean becomes a natural setting for a unique classroom. *KidScience* has taken advantage of the location to produce some creative and engaging educational programs. The marine content focuses on the biology, the science and research going on in the ocean to the importance of the oceans and issues and impacts that the oceans are facing. We incorporate live guest scientists who share their knowledge and expertise, student demonstrations and pre-taped video segments which take students out to locations where scientific data is being collected and to places where science is happening. It has become a challenge to find the most unique ways to bring the ocean into the classroom.

One of our more creative endeavors was to broadcast from underwater. We wore special helmets that were wired for sound and set up the underwater classroom, with desk, teacher, computer and marine biologists. What better way to understand life underwater, than to try to live there. We compared the adaptations we had to make to live underwater with the characteristics of the fish. We used divers to simulate the air bladder of the fish by inflating a balloon and demonstrating the impact that a small amount of air can have. We had a very attentive school of fish that joined us in the underwater classroom. A camera hidden in their breakfast head of lettuce gave us a great view of their eating habits. Technology enables us to bring exciting live images into the classroom.

The KidScience series incorporate a studio class of students and the expertise of guest scientists. We film the scientists in the field and/or we bring them into the studio to share their knowledge. Scientists are encouraged to bring hands-on demos into the studio to interact with the students. Students in the studio demonstrate activities and experiments that can be used in the classroom. The students are also featured in pre-taped videos as role models or student experts, kids listen and learn from other kids.

KidScience delivers two very different types of science programs. One is a locally broadcast series of hands-on science lessons. During these programs, students participate in a variety of investigative activities and may interact via telephone with the television teacher. These programs are a team-teaching effort between a classroom teacher and the television teacher; the television teacher delivers the content of the lesson, while the classroom teacher provides students with the appropriate supplies and facilitates the student interaction.

KidScience also produces three-part series that investigate specific topics in-depth. These series are not only shown in Hawaii, they are also broadcast via satellite across the mainland United States and throughout Micronesia. These series focus on topics such as: marine issues and environments, volcanoes, the Space Station and coastal and environmental issues. We like to get students involved in current events, topics such as climate change, and ocean policies. It's a great way to help students get involved and understand what is going on in the real world.

This fall, *KidScience* will feature a new 12 part marine biology series to be broadcast live from Coconut Island, a University of Hawaii Research Station off the Windward Coast of Oahu. The series will be offered free to audiences across the mainland. Students will be able to join researchers out in the field. The programs are broadcast live, offering the students the opportunity to interact and ask questions both via the telephone and the Internet during the programs. Web cams will enable students to participate in monitoring research projects. The series is intended to bring a marine curriculum into the classroom and to also introduce students to new careers.

The *KidScience* programs are designed to be interactive. There are many ways that students can interact. They can e-mail or telephone in questions. They can participate in hands-on activities or live observations during the live shows. The television teacher can pose "Think Time" questions. Students can be given time to brainstorm ideas, or diagram thoughts. The objective is to get the students involved, to have them take an active part in the learning. The television teacher delivers the content and the classroom teacher facilitates the student involvement. The *KidScience* website, located at www.kidscience.net, features a wealth of information and resources to complement the television programs. Here, teachers may find lesson plans and supplementary classroom activities, while students may click on the KidStuff link to access fun interactive activities.

KidScience is produced cooperatively by the Hawaii Department of Education, and Hawaii Public Television. Additional funding comes from a variety of grants and local agencies.

Technology can greatly enhance student learning. Teachers need to learn how to incorporate technology into their classrooms and teaching. Students need to learn how to access it. The experts need to figure out how to make the technology “teacher friendly” and available to all classrooms.