

## Oklahoma Climatological Survey K-12 Educational Outreach - EarthStorm



The K–12 educational outreach program of the Oklahoma Climatological Survey brings rural and urban classrooms together on the information superhighway by integrating learning modules with real time weather data. The program, called EarthStorm, has been recognized for its attention to results-based professional development for teachers. EarthStorm teachers and classrooms participate in their own research activities, communicate with scientists, and coordinate projects on-line via the Internet.

### Capabilities

The EarthStorm Program provides the following key capabilities:

- A suite of learning modules integrated with recent and real-time environmental data and products;
- Real-time data from NEXRAD radars and surface observations from the Oklahoma Mesonet and the National Weather Service (NWS);
- Forecasts, watches, warnings, and advisories from the NWS;
- Easy-to-use visualization software developed in tandem with teachers and students;
- Intensive, hands-on education on how to access, use, and apply weather data and resources; and
- Online reference materials and hands-on workshops to enhance teachers' content knowledge.

## Activities Available to Schools

Data, products, and instruction from the EarthStorm program are used in hundreds of classrooms to fulfill new standards in earth science education. Activities that are available for public, private, and home schools including the following:

- Hands-on workshops that include instruction on meteorology, geography, mathematics, and technology;
- Annual science fair focused on weather-related projects and judged by noted federal, state, and university scientists and engineers;
- Scientific mentors available to answer weather-related questions; and
- Unique software for Mac OS and Windows.

## Accomplishments and Awards

- EarthStorm was recognized by the National Staff Development Council as a “results-based program” in its publication “Results-Based Staff Development for the Middle Grades Consumer’s Guide.”
- Staff recognized by the Oklahoma Science Teachers Association with the 1st Annual “Science Beyond the Classroom” Award

## Quotes from Participants

“Never in my 20 years of teaching have I had students begging to come and stay at school for any other curriculum.” – L. Painter, 6th grade science teacher, Monroe Elementary, Enid, OK and winner of the Presidential Award for Excellence in Mathematics and Science Teaching

“We now work in a laboratory without walls. Rural areas are at a disadvantage no longer.” – J. Ball, Comanche Public Schools

“I appreciate all the personal help that you gave us during the workshop, it was very refreshing and encouraging to be reminded that higher education will help us with ideas to train students to be ready for further careers.” – Teacher Participant, EarthStorm Weather Workshop July 2003

“I learned some activities I could use to motivate my students towards higher level thinking.” – Teacher Participant, EarthStorm Weather Workshop July 2003

“The web site has everything about weather you could ever need for a classroom.” – Teacher Participant, Workshop held in Stillwater, OK in June 2002



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