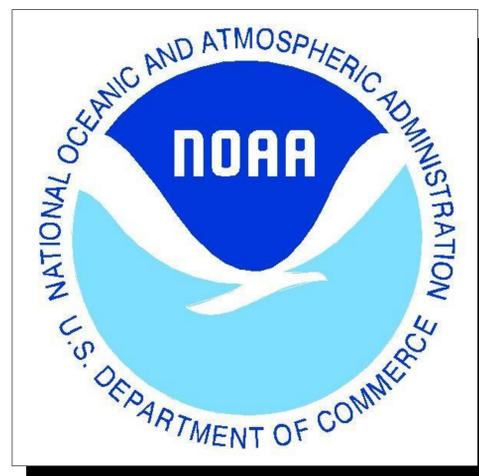
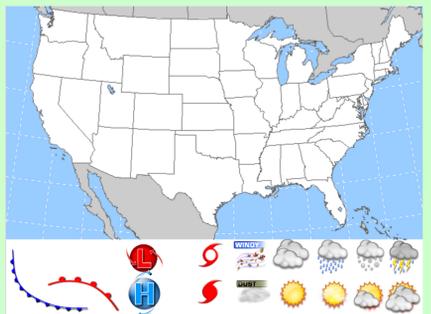




Teaching Teachers to Teach the Weather



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The Problem

Both Texas and New Mexico require a weather section in their curricula and thus elementary and middle school teachers in both states are faced with teaching a weather unit.

Some teachers have expressed to us that they find the teaching the weather unit challenging because they themselves do not fully understand the most basic weather concepts.

The Research

To develop our weather teaching curriculum we first had to better understand what the teachers were expected to teach.

To do this we took a very close look at the weather section included in the end of the year state exams given to students in New Mexico and Texas.

We took the exam information and combined it with what we thought were basic meteorology concepts for the basis for our teaching curriculum.

TEKS SUBSEQUENT	
<p>Academic Vocabulary weather units that cover temperature, wind, weather symbols, fog, frost, high pressure, low pressure, barometer, barometer, anemometer.</p> <p>Spanish Academic Vocabulary temperatura, viento, clima, temperatura, viento, símbolos del tiempo, niebla, helada, alta presión, baja presión, barómetro, anemómetro.</p> <p>Content Instruction: TEKS recommendation is for teachers to provide 50% direct instruction.</p> <p>Weather Unit in Report: Science, Pacing 181 - 182 - Lesson 2: What Are Types of Weather? pp. 250 - 272 183 - 184 - Lesson 3: How to Measure Weather pp. 273 - 288 185 - 186 - Lesson 4: How Can We Observe Weather? pp. 289 - 304</p> <p>Weather Unit in Report: Science, Pacing 187 - 188 - Lesson 5: How to Measure Weather pp. 305 - 320 189 - 190 - Lesson 6: How to Measure Weather pp. 321 - 336</p>	<p>Example Instruction TEKS recommendation is for teachers to provide 50% direct instruction.</p> <p>Weather Unit in Report: Science, Pacing 181 - 182 - Lesson 2: What Are Types of Weather? pp. 250 - 272 183 - 184 - Lesson 3: How to Measure Weather pp. 273 - 288 185 - 186 - Lesson 4: How Can We Observe Weather? pp. 289 - 304 187 - 188 - Lesson 5: How to Measure Weather pp. 305 - 320 189 - 190 - Lesson 6: How to Measure Weather pp. 321 - 336</p>

Example of the weather unit of Texas Essential Knowledge and Skills (TEKS) given to teachers

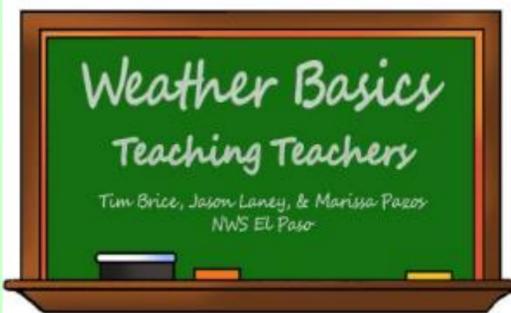
The Training



Virtual Training via Hangouts



On-site Teacher Training



Website for teachers to learn, review and get weather teaching ideas

<http://www.weather.gov/epz/weatherbasicshomepage>

The Training

Teachers have difficult and unpredictable schedules. In order to accommodate as many teachers as possible we developed several modes of training.

The first was virtual training via Hangouts. These Hangouts occurred right after the school and lasted one hour.

The second was an on-site teaching training. This type of training allowed for more in-depth teaching of subjects and hands on demonstrations.



Lastly, we developed a website dedicated to basic weather topics for teachers who couldn't participate in the trainings laid out above.

The Result

No direct results have been gathered so far, but we hope to compare test scores from prior years to see if our methods are helping. Teacher feedback has been very positive.

Our hope is that by helping teachers better understand the basics of weather they will feel more confident in teaching on the subject and that will result in students having a better understanding of meteorology and producing higher test scores.

