

## **BILL ANALYSIS**

H.B. 1700  
By: Hilderbran  
Public Education  
Committee Report (Unamended)

### **BACKGROUND AND PURPOSE**

Since 2003, Texas Tech University at Junction has operated a very successful K-12 outdoor science program called the Outdoor School. The program began with three partner school districts in the first year. In FY 2006, Outdoor School enrolled 3000 fifth-grade students and teachers in week-long, residential science programs at the TTU Center in Junction.

The Outdoor School uses water and watershed issues as an integrating thread to bring together all aspects of the science, social studies and language arts curriculum in project-based applications featuring real-world problem solving. Students address science and math learning objectives while dealing with contemporary problems concerning water supply, conservation, environmental concerns and planning.

Participating school districts send up to 120 students and teachers to the Junction campus for one week to participate in outdoor, hands-on, student-centered instruction which brings together the entire science curriculum using the environment as an integrating concept. The program addresses all of the TEA science, math and social studies TAKS and has been successful in raising assessment test scores of participating elementary students. Of note, the greatest improvement has been noted in students from Title I schools who come from disadvantaged backgrounds.

Primary curriculum for the Outdoor School involves Aquatic Biology, Watershed Ecology and Pioneer Studies (history of pioneer migration and relationship to natural water supply). Secondary curriculum modules involve map reading, orientation, wildlife biology, and range ecology. The Texas Parks and Wildlife's Project Wild curriculum is used at the Outdoor School.

This bill seeks to implement this nature science curriculum on a statewide level, developed by the State Board of Education, and make it available at the Outdoor School at the TTU Center in Junction, the T-STEM Center at Texas Tech University, and South Llano River State Park.

### **RULEMAKING AUTHORITY**

It is the committee's opinion that this bill does not expressly grant any additional rulemaking authority to a state officer, department, agency, or institution.

### **ANALYSIS**

The bill provides that the State Board of Education shall assist the following entities, acting jointly, in the development of a nature science curriculum:

- the Outdoor School at Texas Tech University Center at Junction;
- the Texas Science, Technology, Engineering, and Math (T-STEM) Center at Texas Tech University; and
- South Llano River State Park.

The bill provides that the curriculum must be designed for instruction in grades six through 12, must provide grade-level appropriate instruction in essential knowledge and skills identified by the State Board of Education for science and, to the extent practicable and relevant, for mathematics, social studies and language arts, and, through participation in outdoor learning projects, must provide for scientific study of conservation, wildlife or aquatic biology, range ecology, or other areas of nature science, problems affecting nature and possible solutions to

those problems. The curriculum must be designed to be capable of implementation in any state park, use state park resources in providing instruction, and be presented by classroom teachers and park employees.

The bill further provides that the T-STEM Center shall make the curriculum available through the university's Internet website or a separate Internet website developed by the center for that purpose, and that the Texas Tech University Center at Junction, with assistance from the South Llano River State Park, shall present staff development courses to teachers and park staff beginning September 1, 2008.

The bill provides that the curriculum project must be implemented and maintained using money appropriated for such purposes.

#### **EFFECTIVE DATE**

Upon passage, or, if the Act does not receive the necessary vote, the Act takes effect September 1, 2007.