Background
The 5E Instructional Model was chosen in this capstone project to teach science concepts, learn inquiry skills, and help students make science connections to their daily lives.

The students chosen to learn through the 5E Instructional model were from a rural school in southeastern Montana. The class is a small fourth grade class of eight students, five girls and three boys. Six of the students were Native American, one White Caucasian and one Hispanic. The elementary school is located just off the Northern Cheyenne Indian Reservation.

Focus
The treatment for this study was to use the 5E Instructional Model to teach science concepts to fourth grade students. The focus question was to learn if using the 5E model would increase conceptual understanding. The sub questions were to learn if the students would gain and practice inquiry skills and make science connections to their daily lives.

Literature Review
The 5E Instructional Model is a teaching sequence developed by the Biological Sciences Curriculum Study. It can be used for teaching specific units, individual lessons, or entire programs. The model consists of the following five phases: engagement, exploration, explanation, elaboration and evaluation. The phases are designed to put the student at the center of the learning experience (Bybee et al 2006).

Methodology
The 5E Instructional Model was used to teach eight science lessons. The lessons consisted of using appropriate measurement tools to measure distance, mass, volume and capacity, characteristics of matter, mixtures, energy and forces of motion.

Data Analysis and Interpretation.
The data showed that the students did improve in conceptual understanding. They gained and practiced inquiry skills and made connections to their daily lives. The interviews and surveys before the treatment period showed a lack of inquiry skills. In the post interviews a student talked about connecting his knowledge of forces to what he was watching on cartoons. Other students set up experiments at home measuring depth and distance. All the students talked about the concepts they learned. The assessments showed that the students were understanding the concepts taught in the 5E lessons.

References Cited

Students were actively involved while testing the forces acting on a sled during the exploration phase of a 5E lesson on forces. Students learned about gravity, friction, and inertia.