Armour kindergarten students are an amazing group of kids who just happen to love birds.

This love of their feathered friends is fostered in the interdisciplinary problem based learning classroom of Kelly Preheim. She has taken her passion for birding into the classroom and starts the youngest students in the Armour School District with a strong foundation in reading, math and the sciences using birds as the catalyst.

Preheim first started the design of her kindergarten classroom four years ago in a South Dakota Innovation Lab professional development program. She took knowledge from the program and continued to collaborate with other SDIL teachers to provide a rich learning environment centered on birds.

Preheim gets the students interested in birds and the many ways in which she incorporates birds into the curriculum helps learning become more enjoyable for the students.

This type of learning creates experiences that are long lasting and builds an immense applied knowledge base. The foundation built in a problem based classroom gives students the strong understanding that what they are learning is real and it has meaning beyond their classroom and even their school.

One day during a reading lesson, Preheim asked the students who could name the five vowels. One boy excitedly said, “Great Gray Owl, Snowy Owl, Great Horned Owl, Eastern Screech-Owl, and Northern Saw-whet Owl!”

Preheim’s kindergarten students write about birds and their natural world in a class nature journal and monthly personal journals. The class reviews letter sounds and practices phonics standards using bird flashcards. Students research, illustrate and write about birds to create a class book about backyard birds that has been published each year.

The young students each have a Backyard Birds of South Dakota booklet from the SD Dept. of Game Fish and Parks Wildlife Division they use as their guide to identify different bird species and also to help them explain the features of the birds to the guests that come to their classroom. They also have a library full of books about birds.

Preheim marvels at how her students become more aware and pay more attention to details through the lessons. “The self-esteem of the children grows as they realize that they know something that many others are unaware of,” Preheim said. “These 5-6 year olds are the experts and they like that feeling! Their parents are very impressed with their child’s expertise.”

As the young birders leave Preheim’s room they teach others about birds.

When they are first graders, students continue to be mentors to the new birders that enter kindergarten. They collaborate and learn together in the “Chickadee Bird Club” where students come together for bird talks and new learning once a week.

Preheim has developed quite a team of experts to help facilitate the learning in her classroom, as well. The class works with the high school biology students to build nest boxes for an area at the local lake and collaborate with Dr. Dave Swanson, an ornithologist from USD, who bird bands with them. Local people like the folks from the seed store in their community and other bird enthusiasts have also played a role in helping the students succeed.

Timothy Barksdale, a nature filmmaker, is filming the class for an episode in the upcoming nature series for PBS titled “Adventures with Birdman.”

The class had the honor of attending the SD Birding Festival this spring, as distinguished guests and featured speakers.

The students and parents were able to attend birding field trips and bird banding during the day. At the evening banquet they stood before a crowd of nearly 100 birders from across the state where the kindergarten birders shared their knowledge of birds with the crowd.

The kids knocked their socks off when they started identifying birds by their song. One festival attendee said, “I am trying to guess the bird before them, but it isn’t possible. They are amazing!”

By the time the students spend the year with Preheim, they have honed their visual and auditory discrimination skills to the point of being able to identify over 400 birds by sight and more than 100 birds by sound.

“It really isn’t difficult to teach them something that they really love,” Preheim said.