Arlee High School students win statewide award for radon testing

By Char-Koosta News staff
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AHS is one of two Flathead Reservation schools to be recognized

ARLEE — Arlee High School students found the presence of a radioactive gas at their school and they just won a statewide award.

Radon is a gas that forms naturally when radioactive metals like uranium break down, but it can be toxic to those exposed to it at high levels. For a class project in Environmental Science taught by Mrs. Bonnie White, several AHS students learned about the hazard and decided to test for it. What they learned had a positive outcome.
“Their work showed there was a problem that no one knew about,” Mrs. White explained; “It’s getting fixed now because of their amazing work.”

After learning about the cancer-causing dangers of toxic levels of radon, several students decided to test the radon levels in the basement of the school.

“I had to research how much radon is actually lethal and what it can actually do,” said junior Damyen Coates. “At first it was a little strange because I didn’t even know radon existed, but after a while we were able to see how much radon was in the school and it kind of freaked me out.”

A simple charcoal-based testing kit was purchased online and set out to measure the levels. After sending the test kit back to a lab located in Texas, the students learned the radon levels in the basement exceeded EPA standards.

“We saw that it was a little high and gave it right to our administration and they took immediate action,” Mrs. White said, explaining that many older buildings don’t get properly ventilated to reduce radon levels. She said however, the classrooms were tested at safe levels, and that administration has now contacted the state government to begin mitigation.

Madison Daniel, a junior who was part of the winning team, said that the learning opportunity was a fun one.

“It’s a lot more fun than doing classroom work. It’s more hands on, so it gets us more interested. And plus, it gets us more knowledge about stuff like radon because none of us really knew stuff like that existed,” Daniel explained.

At Arlee High School, juniors and seniors have the opportunity to take Environmental Science with Mrs. Bonnie White - a student-led, project-based class in conjunction with the EAGLES (Environmental Advocates for Local and Global Ecological Sustainability) initiative of the CSKT Climate Change Committee (CCAC).

Mrs. White said that about six years ago AHS became the first EAGLES school followed closely by others across the reservation. The CCAC created EAGLES in order to educate and engage Tribal and other reservation youth in climate change and environmental issues and planning including traditional knowledge, as well as current and future careers. Mrs. White said that thanks to the leadership of Mike Durglo Jr., CSKT Tribal Historic Preservation Department Head and CCAC
Chairman, the beginning help of Rene Dubay, Native Tracks Educational Consulting, and the continuing support of Maryrose Morigeau of the Natural Resource Department, students have had many opportunities they would not have had otherwise.

Many other partners including SKC Extension and CSKT Forestry have provided important support.

Any student can participate in EAGLES, but Mrs. White said only students in Environmental Science can serve as leadership at AHS.

“What I like is just letting it develop organically,” Mrs. White explained. “I love to leave it wide open for them to make it whatever they want and really put their own stamp on it.”

Every year, the projects students complete are submitted to a friendly competition called SMART schools hosted by the Department of Environmental Quality. The challenge aims to encourage students in Montana to integrate learning with conservation, efficiency and healthy environments.

This year, Mrs. White’s class submitted each class project they worked on - which included a solar capability study, a native plant project, among other things. She said they submitted a 20-minute video to the DEQ explaining all the projects and their findings.

The radon testing project ultimately won the Indoor Air Quality category, winning Mrs. White’s classroom $2,000 in prize money. Students in her class also submitted a bonus entry for the DEQ’s logo challenge, winning an additional $500. The earnings go back into the classroom to fund future projects.

Mrs. White says the competition helps students understand their impact on the planet; “These are life skills. Even though you are a small person in this world, you can have a large impact just being mindful.”

AHS was not the only reservation school to win this year. Polson Middle School also won an award in the Upcycling category for their work in several classrooms. Char-Koosta News is working to follow up with those teachers, students, and staff to learn more and will provide further coverage next week.