In Northern Wisconsin, the outdoor growing season barely overlaps with the school year. But at Washburn High School, students can find school-grown tomatoes and basil when they return in the fall, and spinach from their garden program graces the salad bar for months. This is all thanks to the school’s growing high tunnel greenhouse, which allows students to participate in garden-based education in a less conducive climate. This year, “by the third week of school, we already had frost,” explains Greta Kochevar, Washburn High School family and consumer sciences teacher. “If we didn’t have a high tunnel, we wouldn’t be able to have a garden program. It wouldn’t be worth the effort of summer to have no real program during the school year... And it’s nice when you get an extra month of tomatoes growing.”

Washburn High School’s high tunnel was made possible by a grant that they received, thanks to help from UW Extension’s Jason Fischbach, through the National Farm to School Program, funded by the Bayfield Regional Producers Farmers’ Cooperative. The generous funding was enough to equip the high tunnel with some extra features to make gardening inside more manageable. Temperature sensors allow the sides to roll up and down automatically. This is especially handy during times of year when the weather can suddenly change from warm to brisk.

In the few years since the high tunnel’s installation, Washburn High School’s garden program has expanded to include entrepreneurial opportunities, research collaboration with Extension, and curricular integration. It is also available for students just looking for some green space. “We’re an open-campus lunch so sometimes kids go out there,” says Kochevar.

Last year, the Washburn High School high tunnel became an integral part of a real-life crop study, giving students a first-hand look at research and data. Partnering with UW Extension, students are researchers are participating in a project aptly named, “Meeting the Challenge of Winter” to test the impacts of added heat and light on high tunnel spinach production. The
school's Food Science and the Environment class are able to use the data collected through this study for coursework with real-world applications. And the school keeps the spinach, which is eaten in the salad bar, used in Kochevar's cooking classes, and sold locally. Last year, there was so much spinach that, Kochevar lamented, “we need to find more ways to use it so it doesn’t go to waste!”

Students also have the opportunity to experience the business end of growing food. The UW Extension “agri-peneur” program funded two students to take care of the high tunnel through the summer, including growing and selling crops. The first year, students successfully grew tomatoes to sell to restaurants. Over the next two years, the agri-peneurs have diversified, adding melons, beans, cukes, basil, peppers, and parsley. This year, basil in the high tunnel was so plentiful that the students were able to sell hundreds of pounds to local restaurants. While the positions are no longer funded through Extension, the money from these sales goes back into the program to fund summer (and now winter!) agri-peneurs in future years.

Even with a well-established program now in place, Washburn High School’s garden-based education program is still evolving. This year, the raised beds inside the high tunnel will be twice as deep to help with drainage. Kochevar is optimistic that this design change will allow them to grow carrots. They are also growing a more diverse array of greens through the winter to provide the school’s salad bar with more than spinach.

“There are other advantages, too, besides extending the growing season,” notes Kochevar. “Students can work outside in rain and grow crops all winter...Students learn technical aspects of innovative growing technology. A high tunnel is the single most important piece of technology/tool that you can buy for a farm to school program in the winter. I would recommend it to anyone north of highway 8.”