

RREV School Snapshot – Telstar High School

Background

In June 2020, the Maine Department of Education (MDOE) was awarded a \$16.9 million grant from the U.S. Department of Education’s Rethink K–12 Education Models program to implement the Rethinking Responsive Education Ventures (RREV) program. The overarching purpose of RREV is to support Maine educators to create, implement, and disseminate responsive and innovative educational models that help all students learn and thrive.

Pilot Description

In March 2022, Telstar High School received an award from RREV to implement the Local Ecology and Aspirations Pathway (LEAP). This pilot is in the Extended Learning Opportunities (ELO) category.

The goals of this pilot are to

- Provide a more experiential, interdisciplinary, and community-based curriculum that increases student engagement by applying traditional academic concepts to a real-world context.
- Empower students as change agents for sustainable community development by fostering a collaborative innovation mindset among students, teachers, and community partners for tackling local challenges and building on local assets.
- Create sustained connections between the community and the high school curriculum to support responsive education that prepares students for local opportunities and challenges.

Key activities of this pilot include:

- Linking science and social studies courses to the local economy and history by having the ELO Coordinator and department chairs develop a sequence of alternative core courses for students in grades 10-12 that include an experiential focus, opportunities for off-campus independent projects, and potential internships and work placements.
- Engaging students directly in the design and construction of eco-friendly learning spaces through LEAP classes and internships, including:
 - Having a contractor work directly with students to construct an Outdoor Pavilion for use as a community hub and outdoor classroom, with building decisions informed through a design challenge process built into LEAP science classes.
 - Renovating the sugar shack on campus as part of the industrial arts curriculum.
 - Engaging a landscaper as a community partner to advise students on greenhouse and garden design and to ensure the natural flow of water from the wetlands surrounding the Telstar school complex.
- Scheduling field trips to community venues and guest speakers for school visits to build stronger awareness across the Telstar Complex (grades 6-12) about community needs and opportunities.

Exhibit: RREV Award Summary

- Table showing budget breakdown

Category	Year 1	Year 2	Total
Personal Services – Salaries and Stipends	\$0	\$2,500	\$2,500
Employee Benefits	\$0	\$500	\$500

Purchased Professional and Technical Services	\$0	\$26,000	\$26,000
General Supplies	\$0	\$55,000	\$55,000
Property	\$0	\$160,000	\$160,000
Technology related hardware	\$0	\$6,000	\$6,000
Total	\$0	\$250,000	\$250,000

- About 30 students served during 2022-23 by the LEAP core courses, including one social studies and one ecology class. However, all 185 Telstar High School students have opportunities to participate through the internship component, field trips, and guest speaker events.
- Grades 10-12 served by LEAP core courses. Grades 9-12 served by internship component, field trips, and guest speakers.
- LEAP team includes one history teacher, one science teacher and the ELO coordinator.

Responsiveness of the pilot

Telstar’s pilot is responsive to local needs and/or assets because:

- **Students learn about careers tied to the local economy.** The curriculum draws on community partnerships and connections with local businesses to increase awareness of local opportunities and challenges. Participation by Irving Forest Products Saw Mill and the Maine Forestry Collaborative help students explore forestry careers. Interactions with land conservation groups through field trips and speaker visits teach ecology concepts. Hands-on experience constructing the outdoor pavilion cultivates interest in building practices, with at least one student now seeking an internship and exploring college programs related to post and beam construction.
- **Continuity in experiential, hands-on learning is now available to students following their immersion in the Telstar Freshman Academy (TFA).** A partnership between Bryant Pond 4H Learning Center and Maine School Administrative District 44 launched the experiential TFA for 9th graders in 2015, but the options for students in grades 10-12 have been limited mostly to a more traditional academic experience.
- **Learning activities leverage local natural resources to teach relevant skills for addressing local community needs.** For example, a functioning sugar shack will allow students to tap the maple trees throughout the Telstar Complex and develop entrepreneurship skills by producing and marketing maple products. Designing eco-friendly structures such as the outdoor pavilion and greenhouse relies on an understanding of wetland conditions and requirements to allow for the natural flow of water through the environment.

Innovativeness of the pilot

Telstar’s pilot is innovative because:

- **Learning is interdisciplinary exploring academic concepts in real-world contexts.** Core social studies and ecology classes focus on the local economy and history. Hands-on activities are comprehensive. For example, students are engaged in all phases of building the outdoor pavilion, including planning the design, identifying what materials are needed, applying for permits, and participating in construction activities.
- **The student-driven curriculum empowers students.** Students are creating learning spaces and opportunities to address their own learning needs and aspirations. In designing the outdoor

pavilion, students opted for scaled-down technology, rejecting the proposed television screens to create the community space they wanted. They can also opt in and out of the LEAP curriculum throughout high school to participate in other Telstar pathways when desired.

- **Students discuss their aspirations with their parents.** The non-traditional curriculum with field trips and internships requires parents to be involved. Parents must approve their kids' LEAP schedules, increasing the likelihood of conversations at home about learning. An increasing number of events are planned to engage parents in the LEAP experience, particularly through using the new outdoor space for community events such as community theater, evening fire pits, and other gatherings.

Sustainability of the pilot

Telstar's LEAP pilot has been designed as a sustainable learning pathway. The RREV award is being used largely for investing in physical structures and professional services rather than in recurring expenses. Ongoing needs for professional development and limited supplies can be addressed through the regular school budget process. The ELO Coordinator was already established before the RREV award, and this position will continue building community partnerships to broaden LEAP opportunities and experiences. The new and improved structures—including the outdoor pavilion, sugar shack, and greenhouse—will enable students, teachers, and the broader community to harness local natural resources as part of the learning experience. The LEAP team will explore possible resources for maintaining and upgrading these structures over the longer term.