Individual Adopter School – Mt. Blue: Year 1 Case Study

Regional School Unit #39, Region 6 - Western Maine

Background

Mt. Blue Regional School District, regional school unit #9 (RSU #9), is a rural fringe³³ school administrative unit (SAU) 90 miles west of Bangor in Farmington that serves about 2,375 students, of whom 734 attend Mt. Blue High School ("Mt. Blue"). Co-located with Mt. Blue High School on the Mt. Blue Campus is the Foster Career and Technical Education Center (F-CTC), which is a regional learning center offering national certifications and college credits in 20 specific trades and skills, such as such as automotive technology, computer technology, and forestry.³⁴ And nearby is the University of Maine-Farmington campus, a public liberal arts college enrolling about 1,700 students. The region is also home to several outdoor recreation areas, including Mount Blue State Park and Sugarloaf Mountain. The demographic profile of RSU #9 shows a region with a lower median household income than the state average and a higher proportion of students identified as economically disadvantaged.

	SAU	Maine
Number of Students	2,375	178,860
Locale Classification	Rural	N/A
Students Identified as White	95%	88%
Students Identified as Economically Disadvantaged	47%	41%
Students Eligible For Free/Reduced Price Lunch (Mt. Blue High School)	37%	44%
Students Identified with Disabilities	18%	18%
Student/Teacher Ratio	13.47	N/A
Median Household Income	\$40,390	\$57,918
Adults with a Bachelor's Degree or Higher	N/A	32%
Adults in Labor Force	N/A	63%

EXHIBIT 1. SOCIOECONOMIC AND DEMOGRAPHIC CONTEXT

Sources: Maine Department of Education, National Center for Education Statistics, and U.S. Census Bureau

Development of pilot project

In August 2021, Mt. Blue received an RREV award (\$249,937) to develop and implement the *Oxbow Outdoor Pilot* program beginning in the 2021–2022 school year. A two-person pilot team—an English language arts (ELA) teacher from Mt. Blue and an engineering teacher at F-CTC—worked together to develop the pilot while participating in the Innovative Mindset Professional Development (IMPD) course through the University of Maine. According to the team, the inspiration for the *Oxbow Outdoor Pilot* program came from the school's Youth Expedition to Ignite (YETI) club, which has organized outdoor activities for Mt. Blue students for

³⁴ The Foster Career and Technical Education Center



³³ Rural fringe is one of 12 locale classifications assigned by the <u>National Center for Education Statistics</u>.

decades. The school's experience with the YETI club suggested outdoor education would resonate with students, but participation in the IMPD course helped the pilot team translate this experience into a more comprehensive program. Specifically. the team credited the IMPD course with helping them "step back and reassess . . . the intent of this program," especially by helping them find evidence-backed ways to connect outdoor activities with ELA content. The team also noted the IMPD course helped them become better communicators with other stakeholders, especially school board members and district leaders. One team member said, "We learned how to sell [our] idea to board members," which was vital to building support and obtaining resources for the program.

Program description

The Oxbow Outdoor Pilot program is a semester-long ELA course for students in grades 11 and 12. There were 13 students enrolled in the



The drainage pond behind the school used for practicing canoes.

program during the fall 2021 semester and 15 in the spring 2022 semester. The course is taught by a certified ELA teacher and includes a mix of classroom work—primarily focused on wilderness-related reading and skills such as mapmaking—and outdoor activities that complement the classroom work—such as woodworking, camp making, and canoeing. A preengineering instructor at F-CTC is a full member of the pilot team and advises on outdoor activities and their application to engineering concepts.

RREV funding provides for new outdoor education infrastructure that will be used in the program, including a new yurt near a pond adjacent to the school. The yurt will provide a non-traditional setting for classes and activities and will be surrounded by new pathways and trails to reinforce concepts from class. The RREV award also provides for a 21-passenger minibus and outdoor equipment for field trips, which will eventually include day trips as well as longer weekend trips to outdoor recreation areas. The pilot team is holding ongoing discussions on ways to involve other teachers in *Oxbow Outdoor Pilot* activities, including teachers who are licensed Maine Guides.³⁵ A member of the team noted that involving these teachers would grow a sense of ownership and commitment to the program across the entire school.

³⁵ The Maine Guide training program offers courses on various outdoor-related activities as well as first aid training.



EXHIBIT 2. LOGIC MODEL³⁶

Resources	Strategies & Activities	Outputs	Short-Term Outcomes	Long-Term Outcomes	Impact
RREV \$ and coaching Natural resources, including Mount Blue State Park and Sugarloaf Mountain The Foster Career and Technical Center (F-CTC) and the University of Maine- Farmington	Recruit a teacher qualified to teach an ELA course that connects classroom work with local resources Create connections with F- CTC to advise on outdoor activities and their application to engineering concepts Create a course that integrates local resources, including outdoor activities and skills Construct outdoor education infrastructure, including a yurt Obtain a bus to transport students and equipment for outdoor field trips Engage teachers and volunteers for outdoor activities	Teacher recruited F-CTC advisor recruited Course curriculum developed Number of students enrolled in course Outdoor infrastructure completed Number of teachers who participate in field trips or other outdoor activities Number of field trips	Improved staff use of local resources Strengthened connections between Mt. Blue and local institutes of higher education Students demonstrate academic growth Students demonstrate socio-emotional learning	Teachers incorporate local assets in their teaching practices Improved graduation rates Students feel connected to their community	Mt. Blue capitalizes on local assets Mt. Blue students appreciate the outdoors and the assets of their community

³⁶ Logic model format adapted from Regional Educational Laboratory Northeast & Islands Logic Model Template from the *Logic Models for Program Design, Implementation, and Evaluation: Workshop Toolkit* referenced in RREV Module 4: <u>https://ies.ed.gov/ncee/edlabs/regions/northeast/pdf/REL_2015057.pdf</u>.



Innovativeness and responsiveness of learning model

The Oxbow Outdoor Pilot program is innovative and responsive for three main reasons:

- 1. It strengthens collaboration between the high school and local institutes for higher education. Mt. Blue High School is co-located with F-CTC on the Mt. Blue Campus, but these are considered two separate institutions operating on one campus. According to a member of the pilot team, the RREV pilot has provided an opportunity to strengthen collaboration between the institutions by establishing common purpose and structure on the campus. During the first year of implementation, the Oxbow program was primarily administered through the high school, but starting in 2022-2023 the program will become a career and technical education (CTE) course titled Outdoor Leadership administered by F-CTC. According to a member of the pilot team, "This new arrangement will make it much easier for students from other schools to participate," while further strengthening institutional connections between Mt. Blue High School and F-CTC. For example, collaboration between the institutions related to the RREV pilot will offer students opportunities to earn credits and certifications such in wilderness first aid and CPR based on their participation in the Oxbow course. In addition to strengthening the relationship between Mt. Blue and F-CTC, the pilot has also been an impetus to strengthen Mt. Blue's relationship with the University of Maine. Specifically, students in the Oxbow program will earn 3 credits in Outdoor and Adventure Activities through the Early College Program.
- 2. It leverages the community's unique outdoor assets to support student academic growth and mental and emotional health. The program offers an opportunity to take advantage of Mt. Blue's unique natural surroundings for activities—such as canoe trips, hiking trips, and team-building exercises—that promote student academic and non-

academic outcomes. Specifically, the pilot promotes academic outcomes by channeling student interest in the outdoors into a more formalized, credential-based ELA pathway in which students can gain high school or college credit. According to the pilot team, "[Before *Oxbow*], we were taking kids into the woods on weeklong canoe trips, hiking in the western Maine mountains, and we were meeting once a week and doing team-building activities. . . . Kids were planning these trips themselves and they weren't getting credit."

Even as students earn academic credit for these activities, the pilot also seeks to improve students' social and emotional well-being following the impact of the COVID-19 pandemic. According to one pilot team member, "Within 50 yards across the street are fields and woods all around us. So even being able to utilize

INNOVATIONS

- Can be scaled up and across schools
- Links local outdoor opportunities with student wellbeing
- Expands popular club's features into a model for all students

the things directly around us . . . the mindset that learning could happen outdoors." Being able to teach outside was perceived as a facilitator in improving students' social and emotional well-being and is seen as the primary factor in maintaining higher levels of student engagement in the course and continuing to build interest for future iterations.



The team reported that they have also been collaborating with Partnerships in Education and Resilience (PEAR), an organization that aims to integrate new models of education that incorporate health, public policy, and psychology perspectives.¹ By partnering with PEAR, the *Oxbow Outdoor Pilot* program will have access to PEAR's holistic student assessment tool that collects, analyzes, and tracks data to promote social emotional development among students. In the spring 2022 class, pilot staff implemented the PEAR assessment tool and saw positive impacts in student emotional well-being in preliminary results.

3. It builds on a popular after-school club. One of Mt. Blue's specific assets in implementing the *Oxbow Outdoor Pilot* program is the pilot team's previous experience facilitating outdoor club activities, particularly with the YETI club, and previous career experience. According to one team member, "When I started here 16 years ago, there was already an outdoor experiential group here called YETI.... It's the group that preceded *Oxbow*; I think of it as the inspiration for *Oxbow*." It was noted by the pilot team that YETI allowed students to have new opportunities and experiences in an outdoor setting while also learning new skills. While the YETI club is longstanding at Mt. Blue, the frequency of the activities offered have dwindled the past 2 years due to COVID-19.

Implementation of learning model

Infrastructure and materials

Construction activities of the yurt and purchase of transportation equipment did not begin during the first year. The pilot team explained that they decided to focus on other components of the pilot, especially developing the curriculum, before turning their attention to the physical infrastructure. Stuff turnover, including the loss of the district's facilities director, contributed to this decision. In the meantime, pilot staff have purchased various outdoor equipment with RREV funds, including life jackets and paddles for canoeing, outdoor chairs for activities in the field, and study materials to assist in elements of the course such as a wilderness first aid certification that were secured through a partnership with the University of Massachusetts.

Course scheduling and length

In the pilot plan, *Oxbow* was intended to be a full-year course where students would spend two semesters learning and applying the skills and knowledge that made up the *Oxbow* curriculum. However, during the first year it was offered as a one-semester course. According to the pilot team, this decision to condense the course into two semesters was "not ideal," but necessary because the pilot award was not announced until almost the beginning of the school year, and the school was not able to add a full-year course into the schedule with such short notice. Starting in 2022–2023, the course will be offered through F-CTC as a full-year course, which the instructor anticipated will offer students a deeper experience, especially because they will have opportunities for outdoor activities in all four seasons.

¹ Learn more about <u>PEAR</u>.





The future site of a yurt intended for outdoor instruction.

Staffing

Mt. Blue has experienced some staffing challenges in 2021–2022 that affected implementation. Before Mt. Blue applied for an RREV award, the principal had become the district interim superintendent and had very limited involvement in RREV planning with the pilot team. After serving as the interim superintendent, the administrator came back to the original role of principal only after the RREV application was submitted and approved by the Maine Department of Education. Ultimately, this led to a missing administrative perspective when planning for implementation, particularly in terms of the logistical challenges involved with establishing a new elective course that mixes core curriculum and elective standards.

Additionally, the school decided to engage one of their current ELA teachers for the class instead of hiring a new staff member. An administrator at Mt. Blue explained that hiring a new position that would be a "half-time English teacher and half-time outdoor coordinator" would be impossible to find because they "struggle to find English teachers, period," much less someone who could fill such a unique role.



Class activities

Outdoor activities have been offered to students participating in the pilot, including tying knots, building outdoor camps, and working with canoes. Members of the pilot team commented that their different backgrounds and skills have been complementary. For example, the team member affiliated with F-CTC has helped incorporate engineering concepts and activities in the Mt. Blue ELA class. Going forward, this team member intends to integrate aspects of the course in the preengineering class he teaches at F-CTC.

The *Oxbow* program has also helped Mt. Blue build a relationship with the University of Maine system. Participating students can earn college credit through dual-enrollment in courses such as Wilderness First Aid and Outdoor Leadership.

Oxbow did not carry out any field trips in the fall 2021 or spring 2022 semesters but has continued planning for future field trips, including some during the school week and some longer weekend trips. These trips will ideally include other teachers on the Mt.



Students in the Oxbow course going outside with their instructor to practice paddling canoes in a nearby pond.

Blue campus who are licensed Maine Guides. One pilot team member said, "We have an incredible staff as far as licensed Maine Guides that work in the building; I think we have three or four. And we have some overlap with some science teachers, and so the hope is that there's going to be a lot of ownership in the building from lots of different individuals."

Outcomes

The Oxbow pilot was designed with a variety of impacts in mind, including student academic and emotional outcomes as well as impacts on teachers and the broader school and community. While some of these impacts are still in the process of being measured and examined, some of the intended metrics and measures are described below.

Student outcomes

Throughout the two semesters the course has been implemented, students have demonstrated mastery of core English Language Arts and Reading (ELAR) learning principles and have been able to perform to a standard that has helped them receive credit for graduation. Across the course, 78 percent of students received higher than a B in the course. According to the course instructor, students grew in many of their measurable hard skills related to the course material, but also developed significantly in soft skills, such as communication and leadership, through the course activities. Student feedback also indicates that the non-traditional nature of the



course has helped in their learning and retention of ELAR course content. Students described being able to identify better with course content because it was presented in a more applicable, real-world context than that of other more traditional courses they were taking. This led to higher engagement in the material, and connected knowledge and skills with memories of course activities leading to higher perceived retention of course content.

In addition to academic outcomes, student emotional well-being has also been an area of focus in measuring the impact of the *Oxbow* pilot. During the first year, the PEAR assessment was administered at the beginning and end of the semester for each cohort. Even though the PEAR assessment is intended to measure change across an entire school year instead of a single semester, the pilot team described positive findings, including improvements in all measured areas of emotional well-being, including Resiliencies, Learning and School Engagement, and Relationships.² However, the course instructor noted that students during the fall semester demonstrated greater growth in well-being, which he attributed to some seniors feeling "done" with school in the spring. Going forward, the pilot team anticipates greater improvements.

Student also indicated in focus groups as well as in survey results that having *Oxbow* built into their school day has helped them look forward to coming to school and helped improve their overall emotional state. Students noted that these improvements were due to being able to enjoy more time outside of the classroom, the relationships they developed throughout the class, and the feelings of self-efficacy that come from learning skills that could help them survive or help others in the wilderness. These skills, as well as tangible certifications, such as in CPR and wilderness first aid, are evidence of positive impacts on students that go beyond traditional academic metrics.

Student survey results were also very positive (Exhibit 3). All respondents (n=15) somewhat or strongly agreed that they had more opportunities to learn outside a traditional classroom this year than in the past, that going outside helped them learn this year, and that they liked their experience in the Oxbow program overall. All but one student also agreed that they are glad they went outside to learn this year.

Survey Item	Strongly or somewhat agree	Neither agree nor disagree	Somewhat or strongly disagree
I am glad I went outside to learn this year.	93%	7%	0%
Going outside helped me learn this year.	100%	0%	0%
Overall, I liked my experience going outside to learn this year.	100%	0%	0%
This year, I had more opportunities to learn outside a traditional classroom than in the past.	100%	0%	0%

EXHIBIT 3. SUMMARY OF STUDENT SURVEY RESULTS (n=15)

² It is outside the scope of ICF's evaluation to analyze each school's individual data beyond what they report for their performance objectives. This summary is therefore based on qualitative data collected from the pilot team and does not reflect ICF's own analysis of Mt. Blue's PEAR data.



Teacher outcomes

As mentioned previously, during the 2021–2022 school year there was one teacher for the *Oxbow* course. During an interview, this teacher described positive changes in his own outlook toward innovation in education, especially the possibilities for using outdoor education to achieve academic and mental and emotional outcomes for students. However, *Oxbow* has not so far achieved its goal of broader change in the ways other teachers integrate outdoor activities in their pedagogy. According to the *Oxbow* teacher, getting the program up and running during the pilot year demanded his full attention, but in the future he plans to share his experience and reflections about the program with his colleagues who teach other courses.

Family outcomes

The families of all enrolled students were asked to complete an anonymous survey that included open- and closed-ended questions about their satisfaction and perceptions of the Oxbow program. Although only three parents completed the survey, their feedback was uniformly positive. All respondents answered that their students had more opportunity to participate in responsive educational activities this year compared to the previous year, and all said they would recommend Oxbow to other parents. When offered the opportunity to provide open-ended feedback, one parent commented that the course helped their daughter "do outside things that were outside her comfort zone, and she enjoyed that." Another parent described the program as a "healthy outlet" for students, especially in light of the stress and disruption they experienced during the pandemic.

Question	Results	
How important is it to you that schools offer responsive educational activities?	Very important – 100%	
How satisfied are you with the availability of responsive education activities offered through your child's school?	Very satisfied – 67%	
	Somewhat satisfied – 33%	
Compared with last school year (2020– 2021), how much opportunity has your child had to participate in responsive educational activities this year?	A lot more opportunity – 100%	
Would you recommend this program to other parents?	Yes – 100%	

EXHIBIT 3. SUMMARY OF PARENT SURVEY RESULTS (N=3)

School and district outcomes

As one of the innovative aspects of the *Oxbow* pilot involved cross-institution coordination, there has been some progress in developing the pilot with the input of staff from both the high school and technical school. These efforts at coordination—both in terms of logistics such as the sharing of facilities and storage of materials, as well as more academic aspects, such as designing a course that also grants ELAR credit—have allowed staff and administrators to seek out additional ways of communicating and aligning efforts across institutions. While there are some elements of this coordination that are still being refined, there is hope that as the pilot



becomes more established, the process of coordination will be more streamlined and that the benefits of the *Oxbow* pilot, such as the facilities and materials provided by the grant, could be used by students in the more general student body. One administrator said, "I do think there's a significant amount of resources that will be coming to our campus and how wonderful for other people to be able to access that equipment."

Community outcomes

In conversations with *Oxbow* staff, it is clear that the pilot was designed specifically with the needs and opportunities of the community in mind. Pilot staff described their hopes of expanding the *Oxbow* pilot into a stepping-off point for students interested in careers related to the outdoors, such as wilderness guiding, rafting and boating, or participating in the ski industry. As the program transitions to an option within the technical school, these aspects of the pilot will ideally start to impact the broader community. However, it is too early to assess these outcomes at the end of the pilot year.

Future plans

The largest shift in the coming years, particularly related to the ending of the grant funding provided by the RREV program, is the transitioning of the supervision of *Oxbow* from the high school to the technical school with which it shares a campus. This will provide a more consistent source of funding as CTE schools generally have more opportunities for program-specific funding from government sources. It will also allow for an additional degree of flexibility in designing the course where academic requirements are not as strict. In practice, this transition will allow more students to participate in the program from more schools across the district. Students will continue to earn credit within their CTE program but also for college credit, and the F-CTC administration will take on fiscal responsibility for hiring and paying instructors as well as the maintenance and upkeep of materials and facilities related to the program.

There are still questions about the eventual size of the course and number of courses taught concurrently each year as well as who will be teaching once the transition is made, but those details will be addressed in the coming months. Also in the coming year, pilot staff anticipate progress on securing and constructing the yurt that was a part of the initial grant proposal. As staff undertake a renewed effort in the coming months to purchase and build needed facilities, they hope to be able to secure the materials as well as the necessary infrastructure (including power and Wi-Fi connectivity) within the next year. Pilot staff are also looking to find ways to resolve challenges that have arisen in scheduling field trips and overnight events that have been difficult due to COVID-19 restrictions. As restrictions are lifted, pilot staff hope to be able to provide the field activities that were initially planned as a part of the grant design.

Lessons learned

A tight labor market for teachers, especially in rural areas, may limit the scale and reach of innovative programs. As noted, the *Oxbow* course instructor was already an ELA teacher at Mt. Blue, and school leadership did not think it would be feasible to find another person capable of filling this role given their general challenges with finding ELA teachers. Since innovative programs by nature require a unique skillset and attitude, they can be hindered in areas with staffing challenges.



Program models that draw connections between more than one subject can pose administrative challenges related to teacher credentials and course credits. A

distinguishing feature of the *Oxbow Outdoor Pilot* program is the way it draws connections between ELA and other content areas, particularly outdoor skills. Even though this innovation promises to reinforce learning across diverse content areas, it poses administrative challenges. For example, students currently receive credit only for an ELA course, but there is no formal recognition of the other skills they learn during the course. The blend of content areas can also pose a challenge for teacher recruitment because schools would need to find either a teacher who can competently instruct across disciplines or recruit multiple teachers for a single course which, as noted above, is challenging in a tight labor market.

Outdoor activities can give students new perspectives on ELA concepts. While the *Oxbow* program is still in the early stages, the pilot team has already observed a positive student response. One teacher remarked that students have been "super engaged," and characterized the outdoor activities as a "hook" that helps him get students interested in ELA concepts. Additionally, the social emotional learning (SEL) component of the outdoor learning model is another outcome they anticipate tracking once they begin receiving data from PEAR.

A charismatic and popular teacher can be a vital asset, especially when a new program is beginning, but these attributes are not easily replicable or scalable. In speaking with student participants in *Oxbow*, it is also clear that a large number of student participants registered for the course initially because of the reputation of its lead teacher. Many of the students had participated in the instructors' previous courses, generally freshman English, and felt drawn to the course initially because they knew the instructor and enjoyed his courses. This presents both a strength of the program as well as a challenge because, on the one hand, students enjoy an additional course with a quality instructor with whom they already have a strong relationship. On the other hand, a program built on a single instructor poses challenges with long-term model scalability and replication.

The pilot year is an opportunity to establish systems and structures independent of physical infrastructure, which may take longer to build than expected. The delays in building the yurt meant that the full program envisioned in the pilot plan has not yet been implemented. *Oxbow* used this year to refine the classroom components of its program, such as the Wilderness First Aid course and certification test; strengthen coordination with other organizations, such as University of Maine and their Early College Program; and engage in outdoor activities such as canoeing, fire-starting, and tent-pitching that do not require physical facilities.