

RREV's Innovative Pilot Template

As part of the **Innovative Mindset and Pilot Development** courses being offered through several of Maine's institutions of higher education, the RREV project uses a consistent template for the creation of all future pilots. Because every pilot created and tested with RREV funds WILL BE published in EnGiNE, we want all of Maine's educators to have the assurance of consistency.

This template provides an outline of the components required of an Innovative Pilot. The information in this template will serve as the basis for requests for school/district level project funding.

Section 1: Define the Need

A. Describe the need for your innovation.

Consider what evidence supports the need for an innovation, and the evidence that suggests your innovation will improve the current situation. at least 200 word count.

Oxbow Outdoors (On the Mt. Blue Campus)

We need an interdisciplinary outdoor education program that supports student wellness and achievement. Student emotional and social well-being is directly correlated to opportunities outside of indoor learning and flat textureless screens. Data mining, multiple PDSA cycles, and student responses informed our research that indoor sedentary learning mediated by screens ranked as the largest and most frequent problem. The problem is also a lack of student engagement and physical/mental wellness. There are also many socio-economic barriers for students when it comes to participating in and accessing outdoor learning, leadership, and experiences. Our current system of traditional learning, traditional assessment, reliance on digital technology, has left many students wanting outdoor and experiential learning. If we do not solve this problem we run the risk of neglecting the health and wellness of our students. Constrained to the concrete block walls of our institutions, locked into screens, they will not have the opportunity to grow and engage in the more dimensional and rich outdoor landscape. Covid has exacerbated the reliance on screens for learning over the past year worsening an already alarming trend. The purpose of the new system is to implement an interdisciplinary outdoor education program that supports student holistic growth.

Holistic education is a "comprehensive approach to teaching where educators seek to address the emotional, social, ethical, and academic needs of students in an integrated learning format".

This pilot will improve the current situation by:

Expanding student-centered learning opportunities in a variety of outdoor settings.

Increasing student engagement, motivation, and voice.

Providing flexible time frames based on students' needs.

Collaborating with students to develop and monitor learning plans.

Implementing a challenging, meaningful, proficiency-based education system that transcends from the classroom into the community and the world.



B. Identify which students would be impacted, targeted, or supported by the innovation.

Review the evidence – quantitative and qualitative data and research – that indicates this group of students is considered the most vulnerable and would benefit from the described innovation.

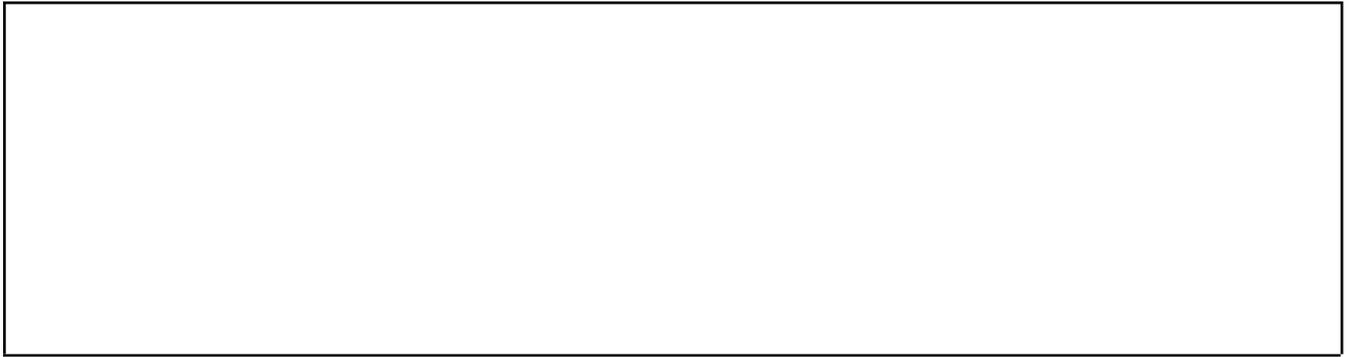
Data you can use to inform your innovation, rationale, and targeted student population include the performance of various groups of students (e.g., students in rural locales, students from low socio-economic conditions, students with disabilities, students who are EIs, students at risk for dropping out, student who are homeless) with regard to academic achievement, graduation rates, social emotional and mental wellness, economic data, and/or workforce participation.

250 word count.

The predominant crisis this new program seeks to address is the social emotional and mental wellness of students on our campus. A recent long-term survey study by San Diego State University and professor of psychology Jean M. Twenge and colleagues examined screen usage by learners. The survey asked students “how often they spent time on their phones, tablets and computers, as well as questions about their in-the-flesh social interactions and their overall happiness.” The sample was a nationally representative survey of more than a million U.S. 8th-, 10th-, and 12th-graders. The Twenge et. al. study noted that "By far the largest change in teens' lives between 2012 and 2016 was the increase in the amount of time they spent on digital media, and the subsequent decline in in-person social activities and sleep," she said. "The advent of the smartphone is the most plausible explanation for the sudden decrease in teens' psychological well-being."

A survey of our students shows that screen-mediated sedentary learning as the largest and most frequent problem. From a sample of the student population (62 of 741, a composite of seniors, juniors, and freshmen (only one sophomore)) there is no question that social and emotional well-being is a major concern, especially for thirty percent of the student population. Over ninety percent of students believe that we spend too much time on screens and being sedentary. It is widely recognized by our students, over eighty percent, that learning happens indoors on a typical school day. Recognizing the bimodal distribution of responses indicates it is clearly a problem for twenty percent of the students and slightly a problem for forty percent of the student sample. There are plenty of studies and scientific research correlating screen time and mental health. There is a recognized need for non-screen-based outdoor opportunities that support social and emotional well-being.

All students on our campus grades 9-12 as well as vertical mentoring at the district level in grades 3-8 would be targeted for experiential opportunities in the Oxbow Outdoors program. As many as 500 students indirectly as well as 40 directly as program participants. Access to the outdoors and outdoor experiences requires infrastructure, transportation, and access to equipment. The current data shows that for the the upcoming 2021-22 school year over 53% of our students are considered disadvantaged. The graduation rate is 7.5% less than the statewide average. The MB Campus graduation rate is 80.77% compared to the state 87.49% in 2019. Our economically disadvantaged population graduates at a rate of 68.75% almost 20% below the state average and 10% percent less than the economically disadvantaged rate for the state.



Section 2: Describe the Innovation

A. Describe the goals of your innovation.

Consider how your innovation will meet the needs of the identified target student population(s) and how you plan to achieve your goals. Additionally, consider any changes in policy, practice or structures you expect as a result of the innovation.

250 word count.

Using the PEAR (Partnerships in Education and Resilience) we will use metrics to gauge student wellness, resilience, and engagement. We will provide an integrated/interdisciplinary and engaging experience for students to earn both high school and college credit. Students will also have opportunities for multiple certifications offered in outdoor fields. Students will exercise voice and choice and will learn to plan for and execute outdoor trips. Students of all socio-economic backgrounds will have access to outdoor experiences, and outdoor equipment. We are a unique district that has gifts of "place" and quick access to them that should be shared/appreciated by all of our students. A new non-traditional space (Yurt) adjacent to a bio-pond within fifty to seventy five yards of the existing brick and mortar school will give students both ownership in the building and planning process and access to sustained curriculum and equipment. Access to the facility will be pathways and trails that are ADA compliant and wheelchair accessible. The structure will be on low level decking with ramp for universal access.

Partnerships and collaborative ventures will be sought with UMF Outdoor Recreation Program, Titcomb Mountain, Sugarloaf, Saddleback, High Peaks Alliance, Maine Guides, AMC, Wilderness First Responder, Maine Huts and Trails, Teens to Trails, and Maine Trail Finder to provide students the opportunity to learn from experience. We have a unique staff of individuals including Maine Guides in each core subject area as well as CTE instructors on campus willing to share their own expertise both on campus and on trips in the outdoors. We have experienced people, partners, the place, and the region to make this venture successful. We will use our uniquely situated place in the confluence of woods, waters, and the mountains of Maine to benefit student and community futures. Our promise is the introduction of the Oxbow Outdoor Program to not reduce or pull from existing CTE programs, but rather expand the CTE student population by 10% by targeting another demographic of students. Students in this program will not only be seeking their own future pathways but will also provide rewarding outdoor experiences for other students on our campus.

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B. Describe activities included in your plan for each stage – preparation (P) or implementation (I) – of your innovation.

- **Preparation** includes building stakeholder awareness, establishing routines and processes, and coordination of logistics.
- **Implementation** includes planned implementation activities, as well as professional development for the educators participating in the innovation.

Activity	Purpose	Stage (P or I)	Date of Completion	Person Responsible
Preparation 1.Meet with CTE Director	PDSA Cycle. Data Mining on potential student demographics (increase by more than 10%).	P	2/2021	Travis Tierney/Jake Bogar
2.Meet with Principal and Curriculum Coordinator	PDSA Cycle. Data Mining.	P	2/2021	Travis Tierney/Jake Bogar
3. Interview Midcoast Outdoor Leadership Program Director	PDSA Cycle. Data Mining.	P	2/2021	Travis Tierney/Jake Bogar
4. Meet with mentor Ryder Scott, State Director of 4-H Camps and Learning Centers	PDSA Cycle. Data Mining.	P	3/2021	Travis Tierney/Jake Bogar
5.Meet with Dept. Coordinator	Reduce the Death Threat of disrupting the current schedule	P	3/2021	Travis Tierney/Jake Bogar

	Altering of future schedule. and students served.			
6. Meet with Guidance Dept. Director about new courses and HS credit	Reduce Death Threat of new course introduction.	I	3/2021	Travis Tierney/Jake Bogar
7. Brief all Stakeholders including Superintendent.	Implementation Schedule and Possible Award/Funding Schedule.	I	3/2021	Travis Tierney/Jake Bogar
8. Entry of program description for	Reduce Death Threat by having students sign up. Student Sign-Up	I	3/2021	Travis Tierney/Jake Bogar
9. Initiate WFR and ACA Canoe certifications for instructor	Allow for Certified Instruction.	P	6/2021	Travis Tierney/Jake Bogar
10. Recruit support staff of Maine Guides. One from each department of the school. Science/Math/Social Studies/English	Supporting and integrating experienced staff reps to support future roles within the program.	P	6-8/2021	Travis Tierney/Jake Bogar
11. Contact and	Prep integrated	P	3-8/2021	Travis Tierney/Jake

vested interest from community partners.	partners to invest time and support in the program.			Bogar
12. Board presentation and approval of the high school pilot.	Acknowledging local control and garnering support	P	4-6/2021	Travis Tierney/Jake Bogar
13. First Pilot Course put in Course Book for 2021-22 School Year	Two sections of Oxbow in the Coursebook for both Fall and Spring Semesters.	I	4/20/2021	Travis Tierney

Section 3: Define Innovation Outcomes & Measure to Assess Outcomes

- A. Identify the outcomes (*i.e., student outcomes, changes in instructional practices, changes in student practice*) that you expect to see as a result of your innovation. *350 word count.*

Consider both short-term and long-term outcomes, at different points in the time (e.g., at 6 months, 12 months, 2 years and 3+ years).

6 Months - Three sections of heterogeneous groupings of sophomore, junior, and senior students taking the Oxbow Outdoors Pilot on one school day. Transition to ½ time Oxbow Teacher and ½ time English Teacher. The instructor will begin working on certifications for CTE and outdoor leadership. Preparation and site work for non-traditional outdoor space and storage of equipment. Students will be taking part in the planning and building of non-traditional space during the first school year. Many PDSA cycles will be run with them to inform us of student needs as well as voice and choice in the future of the program. An outdoor curriculum will be piloted with both CIP Standards and Literacy Standards. Students will be enrolled in PEAR (Partnerships in Education and Resilience) which will help us gather data on holistic education goals. The curriculum will also support the students in working towards, and achieving, the Maine Guiding Principles. Curriculum will also be informed by the Maine Learning Results.

12 Months - The first cohort of students will be enrolled in the half-time CTE pilot program. Each of the first time cohort experiences will be considered PDSA cycles to refine and inform future instructional practices. The Non-traditional space will have been built and students will be accessing wilderness outdoors with transportation provided. PEAR evaluations as needed for metrics to gauge student wellness, resilience, and engagement. More engaged community and outdoor partnerships will have been fostered and students will be networking with those organizations and businesses. Students will be mentoring other students in the district and the program will provide the structure and the activities to make that happen.

2 years - Full-time program has been realized and in effect. Two cohorts will be involved and they each will attend every other day on a block schedule. Certification programs for Wilderness First Responder courses, Canoe Certifications, and Maine Guide Class will be instituted.

3+ years - Oxbow Outdoors CTE program constantly being refined and adapted to meet student needs.

- B. Describe your plan for collecting and reviewing data to assess your innovation outcomes.
Potential data to collect includes qualitative and quantitative data (e.g., surveys, interviews, focus groups, observations, exit tickets, and on-demand assessment(s) that can be considered.

Data Type	Baseline (B)- Interim (I) Summative (S)	Frequency of Data Collection	Person(s) Responsible for Collection and Data Quality
1.The PEAR Institute Holistic Metric Assessments (HSA)	Baseline (B)- Fall Interim (I)- Spring	Beginning/End Year Total duration of PEAR Holistic Metrics Assessments is three years	PEAR Program/Program Team
2.Pre/Post Pilot Student Interviews	Baseline (B)- Fall Interim (I)- Spring	Beginning/End Year	Program Team
3. Exit Tickets on Pilot Experience	Interim (I) - Spring Quarterly	During School Year	Program Team
4. Student academic achievement. (grades and standards)	Baseline (B)- Fall Interim (I)- Spring	Review historical achievement in the fall. Ongoing review throughout the year with bi-quarterly checks	Program Team/Classroom Teachers/ Guidance
4. Data Analysis focused on student growth (academic & social emotional)	Summative (S) - Spring Aggregating	Yearly in the Spring	Program Team
Star 360 Literacy Assessment	Baseline (B)- Fall Interim (I)- Spring	Beginning/End Year Option to test throughout the year.	Program Team

- C. Describe how you will **scale and sustain** your innovation, including necessary policy changes, changes in mindsets, capacity-building activities, and **long-term financial sustainability**. *250 word count.*

Consider the systems changes that this innovation will require and promote.

First year funding will be focused on piloting classes with students, building outdoor non-traditional infrastructure, training and certification. Students in the pilot classes and the CTE center and high school will be involved in the design and building of the outdoor space that will be the home base of the Oxbow Outdoor program. Students will earn high school English credit and the opportunity to obtain college credit in subsequent years. District and school (HS and CTE center) insurance will be reviewed and options for additional insurance will be investigated, if necessary, to reduce the risk to the school district for outdoor activities engaged in by the pilot participants.

The program will provide yearly training and workshops for community members and school colleagues. Volunteers and champions of the Oxbow Outdoors will participate in the training and have the opportunity to have some certification costs covered. To inspire and scale out future program mentor/mentee relationships on site and off site experience will be planned and hosted by Oxbow Outdoors students. Bringing in outdoor industry experts and business owners to showcase their ability to make a living doing something related to the outdoors will be implemented. Partnerships and internships will be sought within the outdoor industry for students. Partnerships and collaborative ventures will be sought with UMF Outdoor Recreation Program, Titcomb Mountain, Sugarloaf, Saddleback, High Peaks Alliance, Maine Guides, AMC, Wilderness First Responder, Maine Huts and Trails, Teens to Trails, and Maine Trail Finder. Other organizations will be approached as they reveal opportunities for students with the intent of scaling up frequency and duration of experiences as the program grows from a pilot to half time to a full time CTE program.

Long-term financial sustainability will be provided by transitioning the Oxbow Outdoors pilot into a half-time and then full-time CTE Outdoor Recreation and Leadership program at the Foster Career and Technical Education Center. Working with the new program approval consultant at the state of Maine and the CTE director, a new program application will be sought in June of 2021 for the 2022 school year.

- D. Describe the feasibility study you engaged in during the development of your innovative pilot plan, including which aspects of the plan for the pilot were reviewed, which stakeholders were engaged, feedback received and revisions made to the plan as a result of the feedback. *150 word count.*

Summary of PDSA cycles (including prototyping PDSA cycles)

Meeting with the CTE director in early February helped us understand the logistics of creating a full-time program. Certification requirements needed and the timeline of a new CTE program implementation over an eighteen-month period. Also, the possibilities of the Foster CTE Center supporting the program after the pilot was discussed.

Meeting with the Curriculum Coordinator and high school Principal in mid-February. Had an informational meeting with them about the RREV program and possible opportunities for new program and outdoor space on MB Campus. Fielded questions about the timeline of class and possible award for the 21-22 school year.

On a phone call with Joe Haney, CTE consultant for the State of Maine responsible for new program approvals, he shared how the approval process works, current trends, and the timeline. Revised plan to start a full CTE program in year two of the pilot instead of year one.

Meeting with ELA Dept. Coordinator. Informational meeting about RREV program and class. Talked about future ramifications for the dept. Schedule and student numbers were discussed for the upcoming year.

Interview with Seth Walcott Midcoast Director of Outdoor Leadership Feedback received was possible death threats including the space to run the program. He was currently housed in something far too small and not conducive to the equipment he was using daily. Access was difficult. Talked about transportation. He also allocated a certain number of dollars to outside experts for certifications. We understood the importance of creating outdoor space in which to run a program would be helpful in quelling concerns over available space. New outdoor space creation took on heightened importance after this conversation.

Four mentoring sessions and one separate interview with Ryder Scott. Asked questions about implementation, scheduling, staffing of Telstar Academy and history/relationship of 4H and Cooperative Extension. Offered help in dual enrollment and students acquiring college credits.

Student Survey Regarding mental wellness, sedentary, and indoor learning.

Feedback and data indicated strong need/want for escape from screens and outdoor learning opportunities. Anxiety, depression and a decline of mental well being during Covid were strongly acknowledged in data.

Prototype Feedback from RREV classmates and cohort.

Feedback was positive and included excitement at what was being offered to students on the MB campus.

Prototype Brochure for Program Feedback from Students. Feedback was positive and also included possible units of study to be used that were not previously considered. Students expressed an interest to sign up and be a part of the program.

Meeting With Principal and ELA Dept. Coordinator.

Future scheduling and staffing were discussed.

How we could transition from current class offerings to the future program offerings.

Possible solutions to changing of staffing in English Dept.

Section 4: Identify Key Expenses

- A. Identify the key expenses associated with the preparation, implementation, and ongoing refinement of your pilot. 150 word count.

Expenses could include staff time, materials, professional development activities, facilities, and other related expenses. This section does not need to include specific costs, but rather list out the different costs that should be considered to implement the innovation.

Initial Facilities Preparation (site work, electrification, plumbing, drainage, deck, walkways, pole barn and parking , Non- Traditional Space (Yurt) and program implementation): 110K

Outdoor Gear for the program could include canoes, paddle boards, pfd's, paddles, tents, backpacks, stoves, water filtration systems and safety/medical supplies: 20K

Transportation Van with a 14 passenger capacity and trailer: 50K

Professional Development For Instructor(s) include trainings, workshops, manuals, certification programs: 10K

Professional organizations for training and certifications: 10K

Student assessments including PEAR Assessments: 1K

Materials for PBL and mentoring with younger students:1K

Half-time instructor, year 1: 35K

CIP Standards, Curriculum Resources, Mentors, and Consultants: 10K

The ongoing refinement of the program would include feedback from the future CTE program Advisory Committee. Are there other opportunities that Oxbow might present and offer students next year? The year after? Passions and interests of students change from year to year. Decisions will be made on those interests from year to year. Remaining flexible to those needs is paramount while maintaining structure and standards.