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 your innovation.

Consider what evidence supports the need for an innovation, and the evidence that suggests your innovation will improve the current situation.

Need for Innovation

Maine Indian Education schools, prior to COVID, had long traditions of school-based cultural celebrations. Because we have not been physically gathering as a community, our students have not since experienced in school a gathering that connects them to their culture and community, such as cross-generational drumming and dancing. Students have described something missing as a result of this disruption in their lives in surveys and in conversations with their families and educators. Through this innovation, we have the opportunity to ensure every student engages in Wabanaki knowledge and tradition as a part of their daily practice in school.

Additional student survey data indicates many feel disconnected from their learning in school and yearn for immersive practical and cultural learning experiences. For example, students indicated they would like to learn about financial literacy, work with an archaeologist, dance, and speak with elders using their language.

School was described as imprisoning by some students. They indicated the unhappiness felt within the physical confines of school. Current and former students shared that they wished school would help them prepare for their futures. Former students regretted not learning more about their language, culture and history. Current students asked for more immersive Wabanaki cultural and language experiences.

Our team recognized place-based learning and student engagement in daily cultural practices as innovative approaches to address student, staff, and community concerns regarding students' disconnect from their schools and culture.

Innovation:
The framework for our responsive programming includes an increased focus on Wabanaki culture, language, and practices as well as creating a structure in which students can make learning choices based on their areas of interest, explore and engage with real-world experiences, and engage with mentors within the tribal communities and beyond. This is the message that has been shared with a broad group of stakeholders including all students in grades 6-8, all staff from Indian Island School, Indian Township School, and Sipayik Elementary School, parents/guardians, and community members:

Students in grades 6-8 will engage in immersive project-based experiences with emphasis on cultural and real-world learning. Learning experiences will be structured into eight-week periods with one full school day every two weeks dedicated to programming. Students will have voice and choice regarding learning pathways. Throughout the school year, the program will also engage students in experiences with language and culture (20-30 minutes) daily. Examples of learning pathways, determined by student interviews and survey data, are language immersion, financial literacy, Traditional Ecological Knowledge (TEK), and Wabanaki history.

* Structure for the eight-week periods (one full day every other week, with a total of four of these experiences during the school year):

1st day- students engage in learning in a field/from an expert of their choice;
2nd day- students experience hands on learning and determine their field project
3rd day- students complete self-designed project;
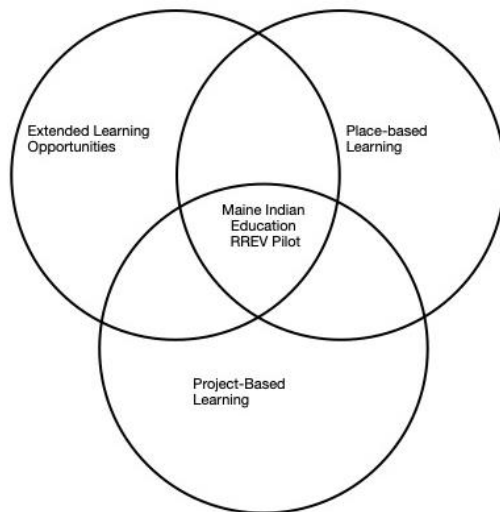*4th day- students engage the community around their project.*

Figure 1. Maine Indian Education RREV Pilot representation of student experiences

The increased presence of culture and place-based experiences supports a shift from western-traditional structures to a more holistic approach to teaching and learning and honors the collaboration, community-based learning, and the worldview of the tribal nations we serve. We are eager to engage with Maine's Department of Education as its focus shifts to supporting schools in implementing project-based learning, resulting in a more integrated learning experience for all of our students across the three schools.

How innovation will improve current situation

When students feel more connected to their culture and learning in school, they will increase their engagement in school, experience more positive feelings around schooling and their future options, and develop a deeper investment in their own growth and future outcomes. The students and community will experience a renewed sense of hope inspired by cultural connectedness and a more expansive view of what is possible.

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 Els, 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.

As we review data that describe conditions that directly impact the lives of our students, it is clear our students need to be empowered as learners, as Wabanaki people, and as dynamic innovators in pursuit of meaningful and fulfilling lives. It is critical that students feel a sense of belonging, see themselves as stakeholders in the educational process, and experience Wabanaki culture, language, and traditions as a foundational thread throughout their educational journey.

All students in grades 6-8 attending Maine Indian Education schools will participate in the pilot program. Increased engagement and attendance in school, increased connection to their language, community and culture, and opportunities to forge their own meaningful paths of learning will help these students gain the power and purpose necessary to make hopeful investments in their futures.

Student engagement has presented many challenges, before, during, and after the pandemic. **Attendance** has been an area of focus since the beginning of the 2019-2020 school year. Maine Indian Education has been working with Count ME In and has engaged attendance teams at each school to monitor students' school participation and to provide support whenever possible. The attendance rates have improved but continue to be an area of concern. The rates are as follows:

Middle School Attendance Rates (Grades 6-8)	2018-2019	2019-2020	2020-2021	2021-2022 (to date)
Indian Township School	Not Available	Not Available	Not Available	Not Available
Indian Island School	93%	92%	94%	91%
Sipayik Elementary School	91%	93%	71%	83%

Maine Indian Education's schools have free and reduced meal rates ranging from 76% to 100% and other economic indicators attest to the **pervasiveness of poverty in our communities**.

	Passamaquoddy Tribe at Indian Township	Passamaquoddy Tribe at Pleasant Point	Penobscot Nation	Maine
Median Household Income	$25,952	$26,429	$32,955	$57,918
Unemployment rates	9.7%	12.9%	5%	4.3%

Loss of language and the enormous peripheral cultural losses that accompany the loss of language are pressing concerns for our communities. According to the Endangered Languages Project (https://www.endangeredlanguages.com/lang/1748), there are fewer than 100 fluent native language speakers between the two Passamaquoddy reservations at Indian Township and Pleasant Point. There is no entry concerning Penobscot native language speakers, but the community consensus is that the number of Penobscot language speakers is significantly less.

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.

Maine Indian Education's RREV pilot will:
- Provide educational opportunities that reflect the hopes and values of the students and community;
- Inspire optimism and innovation among the school, students and communities;
- Build connections between students and their culture, community, and school;
- Help students find purpose, meaning, and direction on their educational journey;
- Increase student engagement in self-directed, hands-on, active learning experiences;
- Provide students with opportunities to learn stewardship of land, water, and natural resources through cultural knowledge, mentorships, and project-based learning;
- Impact structural changes that honor cultural knowledge and experiences.

Impact on practice:
- Place-based learning is central to student learning;
- Students' cultural identities and interests drive instructional decisions;
- Move from "a mile wide, inch deep" western tradition of education toward Traditional Ecological Knowledge (TEK) way of learning;
- Learning opportunities are authentically interdisciplinary.

Impact on structure:
- School structures are aligned with traditional Wabanaki structures;
- Student learning is honored through community engagement and celebration, rather than western-traditional grading practices;
- Place-based learning knocks down classroom walls and embraces additional spaces for learning as part of students' experience in school;
- Units of study are no longer confined by western traditional programs and content areas.

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
1.	Assemble a design team with representation across MIE roles and communities	Gather an effective working team.	P	January 19, 2022	Beth Clifford

2.	Participate in EMCC design thinking class, design and describe MIE's RREV program using MIE RREV Pilot Template	Learn about design thinking and iterative processes; establish a productive team dynamic; apply learning to construct project proposal.	P	March 18, 2022	Ann Cannizzaro, Zachary Cling, Sarah Woog, Luke Esty-Kendall, and Beth Clifford (Pilot Project Development Team)
3.	Engage stakeholders to assess needs and define project goals.	Learn about student and communities' values, cultural identities, hopes, needs, and perceptions of school.	P	March 17, 2022	Pilot Project Development Team
4.	Engage potential community partners.	Explore place-based learning opportunities.	P	March 30, 2022	Gulf of Maine Research Institute (GMRI), Wabanaki Youth in Science (WaYS), Bowdoin College (Dr. Hadley Horsh)
5.	Build and adjust prototype informed by stakeholder feedback	Develop a prototype that perpetuates a systemic shift in Maine Indian Education from western-tradition-informed structures and practices to structures and practices informed by a Wabanaki worldview.	P	March 30, 2022	Pilot Project Development Team
6.	Develop on-site language and culture daily routine	Ensure students are connected daily to cultural practices.	P	August 1, 2022	Site coordinators
7.	Hire Instructional leader and site coordinators	Create a system to deliver on project goals.	I	June 30, 2022	Pilot Project Development Team hires Instructional leader. Instructional leader, building administrator, and representatives from the Pilot Project Development Team hire site-based coordinators
8.	Instructional leader meets at least monthly with district administration.	Institutionalize a feedback loop with district leadership.	I	July 31, 2022 and ongoing	Curriculum Coordinator
9.	Instructional leader meets at least monthly with MIE's RREV design team and RREV coach.	Institutionalize a feedback loop with design team and RREV leadership.	I	July 31, 2022 and ongoing	Curriculum Coordinator
10.	Engage communities in celebration to launch	Set project tone and invite students, families, and community in.	I	August 30, 2022	Instructional leader and site coordinators

	project (middle school welcome project)				
11.	Create a system of student supports to help meet student goals.	Provide support necessary for student engagement, growth, and project completion.	I	August 15, 2022	Instructional leader and site coordinators
12.	Assess student interests and engage partner organizations to meet programmatic needs.	Ensure offerings are determined by student interests and students have access to place-based learning.	I	September 7, 2022	Site coordinators
13.	Determine and disseminate quarterly offerings to students and families.	Engage students and families in decision making.	I	September 14, November 16, February 1, April 5	Site coordinators
14.	Establish daily language and culture routine at each school.	Ensure students are connected daily to cultural practices.	I	September 16, 2022	Site coordinators
15.	Design and deliver project-based learning professional development.	Provide tools for teachers to transform their practices.	I	June 21, 2023	Curriculum Coordinator and principals
16.	Host quarterly celebrations of student projects/learning.	Support community investment in project and student connections to school.	I	Nov 10, Jan 26, March 30, June 15	Instructional leader and site coordinators

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.

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).

By January of 2023:
- 100% of students in grades 6-8 will have participated in two place-based, extended learning opportunities;
- Attendance data will show an increase in levels of student engagement;
- Survey data will show an increase in student interest in grades 6-8;
- Journal responses indicate students are increasingly connected to their culture and learning.

By June of 2023:

- 100% of students in grades 6-8 will have participated in four place-based, extended learning opportunities;
- 100% of teachers in grades K-8 will plan project-based learning units of study;
- 100% of students in grades 6-8 experience increased feelings of connectedness to school, Wabanaki culture, and community as indicated by survey data;
- The attendance rate for the last quarter of SY 2022/23 of students whose attendance rates were below 85% during the last quarter of SY 2021/22 school year will increase by at least ½ (100-SY 2021/22 attendance rate).

By June of 2024:
- 100% of teachers in grades K-8 use project-based learning in their classrooms;
- 100% of teachers participate in place-based learning professional development;
- 100% of teachers participate in learning around Traditional Ecological Knowledge (TEK);
- 100% of students in grades 6-8 feel connected to school as indicated by survey data;
- 100% of students in grades 6-8 have attendance rates greater than 85% for SY 2023/24.

By June of 2025:
- 100% of teachers use place-based learning instructional practices;
- 100% of teachers incorporate Traditional Ecological Knowledge (TEK) into their instructional content and practices.

By June of 2027:
- 100% of students in grades 6-8 have attendance rates greater than 92% for SY 2023/24;
- School schedules and structures reflect school-wide implementation of project-based learning;
- A prevalence of qualitative evidence indicates school structures and practices are informed by a Wabanaki worldview;
- Placed-based learning is a ubiquitous instructional practice in all Maine Indian Education schools.

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.	Student interest in school as measured by student interviews	B, I, S	Quarterly	School-based site coordinators
2.	Student engagement in school as measured by student attendance on program days vs. other school days	B, I, S	Quarterly	Instructional leader
3.	Student learning and cultural connectedness as indicated by reflective journal responses	B, I, S	Quarterly	School-based site coordinators

4.	Classroom use of project-based learning as indicated by teacher survey data	B, S	Annual	Instructional leader
5.	Students' feelings of connectedness to school, their culture, and community as indicated by survey data	B, S	Annual	Instructional leader School-based coordinators

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**.

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

Changes in mindsets:
- Educators support student access to TEK across all content areas.
- The Maine Indian Education community gains perspective by learning from a Wabanaki worldview.
- Students are partners in the design and assessment of learning;
- Current educators have the ability to transform school structures.

Capacity-building activities:
- Provide professional development in project-based learning;
- Make structural changes that support teacher collaboration and co-facilitation of learning;
- Make structural changes that support interdisciplinary instruction and learning;
- Make available a proliferation of opportunities for educators to learn from and about a Wabanaki worldview;
- Institutionalize relationships between the schools and community partners.

Long-term financial sustainability:
- Develop opportunities for collaboration with community agencies, departments, and entrepreneurs to partner in providing programming for students;
- Create a resource bank of place-based learning opportunities to be accessed in perpetuity;
- Assemble and make accessible as open resources all project products, i.e., ensure sustainability is not director-dependent.

D. Describe the feasibility review 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.

Empathy Interviews: Round 1
We conducted two rounds of data collection from critical stakeholders including current students, former students, Maine Indian Education school staff, administration, Wabanaki Language and Culture teachers, families and community members. Our first round of data collection included interviews, focus group conversations, and surveys. The purpose of the interviews was to assess students' connectedness to school,

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community and their culture, and to hear from all stakeholders, what content and practices would increase engagement and happiness in school and foster deeper connections to their culture and community.

We also worked to understand how cultural connectedness influences student well-being. Using pictures of Wabanaki people and ancestral territory, and also pictures of the Maine Indian Education schools, in surveys of former and current students, we unveiled visceral reactions to the pictures. We heard pride and longing in reaction to pictures associated with their cultural heritage, and these were commonly in direct opposition to the feelings expressed in reaction to pictures associated with the schools.

Our problem statement emerged: **How might we empower middle school students to pursue their paths and always put first their Wabanaki knowledge?** In the first round of data collection our team posited that, in order to increase student outcomes and help them find deeper meaning in school, our students need to experience school outside of western-tradition structures and content and access, in "school," the knowledge and traditions of their ancestors.

Project Design
After the team took time understanding the initial data, we worked to develop a program with two key student experiences: place-based learning and daily cultural ritual. The team designed the pilot around traditional Wabanaki structures of time, such as sunrise and the seasons. The skeletal program design and purpose was articulated by the team and included in surveys and documents to be shared again with stakeholders using interviews, focus group conversations, and surveys.

Empathy Interviews: Round 2
The feedback received was predominantly in the form of questions. Answering these questions informed the next iteration of the design phase, specifically identifying what the program looks like in practice, who is responsible for the various elements, what structures will support student engagement, potential community partners and content, and how to structure the time commitment, at least for the pilot phase, in a way that minimally disrupts the current school structure.

The feasibility of this project is highly reliant on the support of two groups of stakeholders in Maine Indian Education whose perspectives were vital to the design of the project. Throughout the iterative design process, in addition to the two rounds of data collection, MIE's District Leadership Team (administration) and language and culture teachers were continuously engaged for feedback and support. Their collaboration, input and support will be critical to the project's viability throughout.

Section 4: Identify Key Expenses

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

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.

Expenses:
Instructional leader salary $65,000
Benefits $55,028
Site coordinators $54,000

Instructional supplies $13,972
Instructional field trips $21,000
Professional learning opportunities $6,000
Program providers $30,000
Employee travel $5,000