



## RREV Pilot - Limestone Outdoor Learning Program

Limestone Community School - Limestone, ME

### Section 1: Define the Need

#### A. Describe your innovation.

##### Introduction to Limestone

From the sprawling campus of Limestone Community School, expansive views of the rolling patchwork of potatoes and timber that is Northern Aroostook stretch out on all sides. For a town as small as Limestone, the school and its campus seem inordinately large, a reminder of the days when the building hosted a class A high school and Limestone was home to Loring Air Force Base.

Today, Limestone grapples with many of the same challenges facing rural communities across the state and across the country. If you ask around town you'll hear the same themes again and again. Loring Air Force base closed almost 30 years ago. Since then, the population has decreased by more than half, businesses have shuttered, and many face poverty. Despite these struggles, it quickly becomes obvious that the people of Limestone are resilient, resourceful, and take pride in their place and history.

Globally, socioeconomic hardships were exacerbated by the COVID-19 pandemic, and Limestone was no different. In the design of the outdoor program, there were numerous conversations with the students and local residents to identify what they saw as the major challenges facing the students of Limestone. Several themes emerged over and over: attendance, student/parent engagement, low test scores, and social-emotional well being. There is ample evidence that bringing the classroom outside helps address many of these issues. Logging, agriculture, and outdoor recreation are the major industries in Aroostook County. The outdoors seeps into all aspects of everyday life here, and the kids are primed for learning in an outdoor setting.

Like the rest of The County, the campus of LCS is spacious with abundant natural resources and potential. We are taking advantage of these spaces and resources to build an outdoor program. One that makes them want to come to school, feel happy at school, feel engaged at school, and lays the foundational skills for lifelong learning and engagement with the outdoors and their community.



##### Our Innovation

In response to a concerning lack of student engagement, we will develop an outdoor education program that is accessible to all middle level students as part of their regular school day.



We will spend much of our time working on relevant, place-based projects. Our curriculum’s hyper-local focus will help our students find meaning in their learning.

We know this will work because we’ve already tried it. In the 2021 - 2022 school year, we built an outdoor program that the students loved. See videos here:

-  Limestone Outdoor Learning - Limestone Outdoor Learning Program - RREV Grant Pilot (edited)
-  Student Reflections on a Year of Outdoor Learning

We will build on our existing idea and collect better data on engagement to make our program even more impactful. The teachers, administrators, and families have seen increased student engagement in the 2021-22 school year. We acknowledge that our “gut” isn’t the best measure, we have a need for a more accurate way of measuring engagement. With our pilot, we are going to use a validated tool for measuring student social emotional development: PEAR’s *Holistic Student Assessment (HSA)*.

### **Consequences of Not Doing Something**

If we do nothing, or maintain the status quo, we are bound to create a generation of disengaged students. The disengaged students we pass on to high school may continue that same path and have struggles in school, lack of social-emotional development, and no early interventions to bond them to their learning community. Right now we are at a turning point. Our school can be a place for our next generation to embrace what makes Limestone special. This program will provide students an opportunity to innovate in their backyard and see themselves as relevant and connected to their community, now and in the future. We have the opportunity to bond our students to their homes, give them agency as learners, and help them find meaning. Undoubtedly these things will create a climate where good learning can happen and improve our school.

### **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.*

Limestone Community School (LCS) is a small pre-kindergarten through eighth grade school in rural Aroostook County, Maine. The latest Maine Department of Education data (2019-2020) shows that LCS has around 140 students.

All of our middle level students, in grades 5-8 (up to 55 students), will be targeted by our innovation as part of the regular education experience. However, it is our belief that all students in the entire school (Pre-K to 8) will ultimately be impacted and supported by the Outdoor Learning Program.

During the 2021 - 2022 school year all of the middle level students experienced more outdoor learning than ever before (see [survey results](#)). Our survey results and student interviews support the idea that outdoor



learning is “fun” for kids. We believe that our community of learners needs to feel important, have fun in school, and have some authentic choice. With voice and choice comes engagement, and we determined that student social emotional development, especially student engagement in school, is a problem in Limestone Community School.

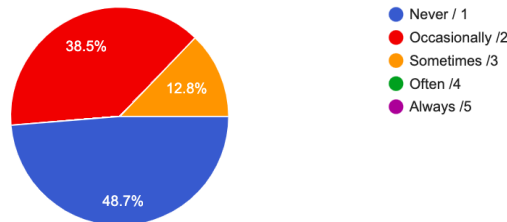
**School Climate Improvement and Attendance Increase with Outdoor Learning - Spring 2022 Surveys**

Anecdotally, we have heard from staff and community members that, as a result of the increase in project-based outdoor learning, the climate of the school has improved with the middle level seeing the greatest improvement. Teachers and administrators are reporting that they see “greater attendance” and “happier students”. Still, when asked, many staff members of LCS have independently stated that student “engagement” is one of our biggest problems as a learning community.

We asked our students about how often they learned outside in their regular classes. Our survey results were overwhelming. Zero percent of students surveyed remembered getting outside “often” before our program, but 69.2% of students responded that they “often” learned outside during regular class time in 2021-22. This is significant because our kids love getting outside.

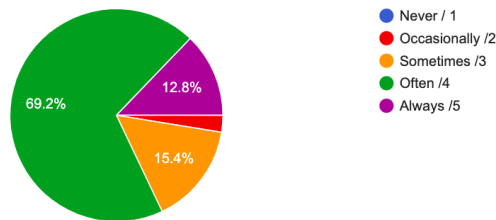
In previous years (before this school year), how often did you learn outside during regular class time?

39 responses



This school year (2021 - 2022), how often did you learn outside during regular class time?

39 responses

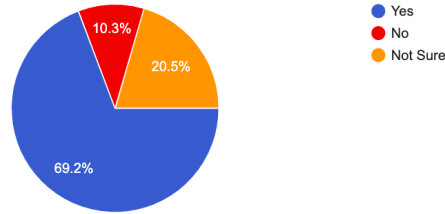




Many students (69.2%) reported that they were more likely to get outside even when they are at home

In your free time (outside of school), are you and your family more likely to get outside after this school year?

39 responses



Beyond student engagement, many teachers report a lack of parent/family participation and engagement. Since starting our pre-pilot year of outdoor learning, our middle level team has received a great amount of support from families and community members. Families love to see that their kids are happy. Parents are reporting that their kids like going to school, and some have reported that their children now love going outside when they're home.

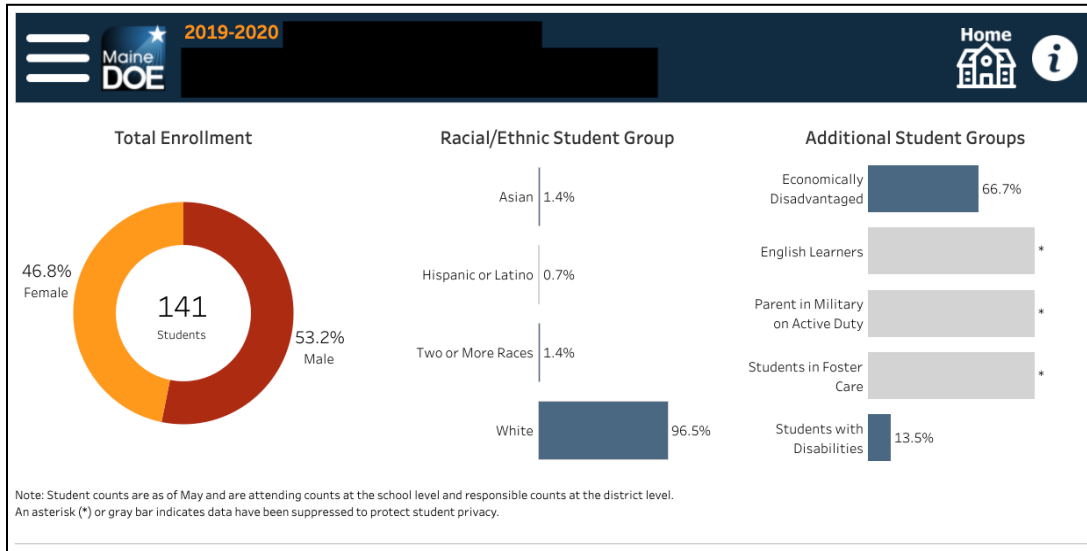
Looking back at the past several school years, Limestone has a higher percentage of “chronically absent/truant” students than the state average. We believe that chronic absenteeism and truancy are a symptom of student engagement. Again, our biggest problem we face is engagement. We believe that engagement can be quantified and tracked using a panel of data collected on each student. We hope to see a decrease in our school’s percentage of students “chronically absent/truant” in response to our innovation.

“Percentage of Students Chronically Absent/Truant” MDOE Data (2018 - 2021)	Limestone	Maine
<b>2018</b>	No Data	<b>16.56%</b> 13.79% Elementary 23.20% Secondary
<b>2019</b>	No Data	<b>16.77%</b> 13.44% Elementary 23.95% Secondary
<b>2020</b>	<b>21.26%</b>	<b>18.27%</b> 15.17% Elementary 24.90% Secondary
<b>2021</b>	<b>28.06%</b>	<b>21.02%</b> 18.87% Elementary 25.49% Secondary

PEAR’s Holistic Student Assessment will place our students into different tiers of need. Students that are part of Tier III will have special accommodations made to address their areas of greatest concern. The Limestone RREV team will work with PEAR consultants and the Limestone Community School Leadership team to identify students and design interventions. The students in Tier I and Tier II will also benefit from regular experience in the Outdoor Learning Program.



### School Demographics



Our school is located in one of the poorest towns in the state, with 66.7% of our students being categorized as “economically disadvantaged”. We believe that this pilot is a chance to provide programming for students that the community couldn’t fund without RREV.

We hope to provide access to outdoor learning experiences for our students. We’ve found that the access of an entire class can be limited if a critical mass of students don’t have the proper equipment. With our RREV award, we will provide a level playing field when learning outdoors with students.



## Section 2: Describe the Innovation

### A. Describe the goals of your innovation.

**Our goals:**

We will...

- Observe significant social emotional development in students targeted by the innovation (proved by HSA).
- Create an engagement profile for each student, which will include attendance, participation in extracurricular and cocurricular activities, grades, and conduct.
- Compare data before and after our innovation, to see improvement in student engagement.
- Build and pilot seasonal, place-based units of study.
- Build and maintain a school farm and garden.
- Revitalize our school nature and recreation trail.
- Create a multi-purpose building for outdoor learning.
- Create storage spaces for gear and equipment.
- Provide access to year-round outdoor recreation opportunities for all students grades 5-8.

### 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/People Responsible
<b>Administrative Approval</b> and Support of Outdoor Learning Program.	Getting approval to develop an outdoor program from scratch.	P	Fall 2021	Ben Lothrop William Dobbins
<b>Building Stakeholder Awareness</b> of Outdoor Learning opportunities in Limestone.	Build a group of teachers that are interested in outdoor learning, so that we can work to restructure what school looks like in Limestone.	P	Fall 2021	Hogan Marquis Caroline Reed
<b>Finding Resources</b> and applying for small grants. <ul style="list-style-type: none"> <li>● Friends of Acadia</li> <li>● Maine Environmental Education Association</li> <li>● WAVES/Teens to Trails</li> <li>● Local businesses</li> </ul>	Grants for outdoor apparel, donations of apparel and tools, and outdoor classrooms enabled our Outdoor Learning Program to have a budget. Our budget has enabled us to support some local scouts in the construction of outdoor learning spaces and maintenance of our trails. We also were able to invest some funds in our fledgling	P	Fall 2021	Hogan Marquis Caroline Reed



	greenhouse and maple tapping and syrup making equipment.			
<b>Getting Outside</b> regularly with kids in all seasons.	We needed to show that we are able to get outside in all seasons/ weather conditions. We have proven that the students enjoy getting outside when they are well-equipped and have interesting projects to work on.	P	Fall 2021 - Present	Hogan Marquis Caroline Reed
<b>Sharing Our Work</b> to colleagues and finding more stakeholders	We held a workshop to discuss outdoor learning opportunities, plans, and dreams for the future. We met with all LCS teachers.  <b>Concrete steps taken:</b> -Greenhouse/Garden committee created. -Collaboration with all grades in the Maple Syrup Unit.  -RREV Innovative Pilot Process explored	P	Winter/Spring 2022	Ben Lothrop Hogan Marquis Caroline Reed LCS Teachers
<b>RREV Informational Meeting</b>  Meeting with Martin Mackey to learn more about RREV.	Our team saw materials from the MEEA about RREV, and we set up a meeting with Martin to discuss the process. We told him about our existing program, and he suggested that we go big and do a RREV Pilot for \$250,000.	P	April 2022	Martin Mackey Hogan Marquis
<b>Administrative Approval</b>  Getting support to go ahead with the grant writing journey.	The principal and superintendent expressed strong support for the Outdoor Learning Program and asked Hogan Marquis to take the courses.	P	April 2022	William Dobbins Ben Lothrop Hogan Marquis
<b>UNE Course</b> - 1 month Outdoor Education RREV course with Paul Haberstroh.	Weekly meetings with RREV Outdoor Education cohort to learn about RREV, design thinking, and grant writing.	P	May 2022	Ben Lothrop Hogan Marquis
<b>Meeting with Maintenance</b> to develop the grant budget.	The team discussed estimates for the cost of retrofitting the	P	May 2022	Ike Heffron DJ St. Pierre



	greenhouse to include electricity and water.			Hogan Marquis Steve Johndro
<b>Acquiring quotes</b> for side-by-sides/UTVs.	Side-by-side quotes were requested from different dealers: <ul style="list-style-type: none"> <li>• Mike's and Sons of Presque Isle*</li> <li>• County Tractor of Houlton</li> <li>• Harry's Motorsports of Presque Isle</li> <li>• Chandler Farms of Mapleton</li> </ul> <p>*The best price was quoted by Mike's and Sons of Presque Isle. Approximately \$17,000 for a two-row Yanmar UTV with a dump bed.</p>	P	May 2022 - Fall 2022	Chris Kilcollins Hogan Marquis
<b>Outdoor Art Classes</b>  Meeting with Pre-K - 8 Art teacher.	The group discussed opportunities for Outdoor Art. We talked about the barriers to getting kids outside (money, gear), and the benefits of planning integrated units. We left the meeting with a plan to create a field guide of our surrounding community, with illustrations of flora/fauna created in Art class and the science content researched in Science class.	P	May 2022	April Flinta Hogan Marquis Caroline Reed
<b>UMaine Systems of Innovation for Educators Course</b> at the Foster Center for Student Innovation at the University of Maine in Orono.	Limestone Community School's RREV Pilot Grantwriting Team attended a two day workshop run by Jason Bolton (UM), Renee Kelly (UM), and Nick Runco (MDOE/EMMC).	P	June 2-3, 2022	Ben Lothrop Hogan Marquis Caroline Reed
<b>Meeting with Jason Bolton</b> to discuss the Limestone Outdoor Learning Program Pilot draft.	Jason suggested looking into PEAR to find a tool to measure student engagement.	P	June 8, 2022	Jason Bolton Hogan Marquis Caroline Reed
<b>Phone call with Limestone Chamber of Commerce/ Limestone Development Foundation and School Board representative</b>	Michelle reached out to discuss an idea for community gardens, hoping to partner with the school to work with Limestone's aging population.	P	June 8, 2022	Michelle Albert Hogan Marquis
<b>Meeting with Don Carpenter of PEAR</b> and Trekkers to discuss the Limestone Outdoor Learning Program's need for a data	Don discussed the Holistic Student Assessment (HSA), a tool to measure social emotional development in students. This tool measures	P	June 10, 2022	Don Carpenter Hogan Marquis





collection/analysis tool for measuring student engagement.	engagement and more; providing data on a variety of social emotional development. If used as a pre-test, student development across a variety of domains can be measured. Don recommended using the HSA-RSC to collect post-intervention data.			
<b>Meeting with Kevin McAfee,</b> Limestone Community School Social Worker	Kevin discussed the lack of connection to the school and student engagement as one of the biggest problems facing the school. Hogan and Caroline shared PEAR's HSA with Kevin and discussed a broader school-wide social emotional development plan. With data from the HSA Kevin, the Outdoor Learning Program Team, and all teachers will be able to have a profile of each student. The profiles can be used to identify students that are in need of support and intervention. We talked about the need for a tool like this, and less reliance on our "gut".	P	June 14th, 2022	Hogan Marquis Kevin McAfee Caroline Reed
<b>Meeting with larger team</b> to discuss draft budget, HSA, and more		P	June 15th, 2022	Kevin McAfee Chris Kilcollins Ben Lothrop Hogan Marquis Caroline Reed
<b>Leadership Team Meeting</b>	The HSA was discussed as a tool to help our teachers, administrators, social worker, Title I staff, and special education director get a clearer picture of each child in the school.	P	June 16th, 2022	Connie Anderson Libby Durepo April Flinta Hogan Marquis Kevin McAfee Ben Lothrop Carrie Reed Jessica Sirois
<b>Meeting with Shea Cushman</b> instructor of Outdoor Pursuits I and II, college-level outdoor education courses offered at	Shea discussed her work guiding trips with college students, organizing units of	P	June 21st, 2022	Shea Cushman Hogan Marquis



the University of Maine Presque Isle	study, and shared her syllabi with the Limestone RREV Team			
<b>Meeting with Jason Bolton</b> to discuss the Limestone Outdoor Learning Program Pilot draft.	Jason gave feedback on some sections of the grant proposal.	P	June 22nd, 2022	Jason Bolton Hogan Marquis Caroline Reed
<b>Presentation</b> at the University of Maine Educators Institute.	Caroline and Hogan lead a discussion/workshop for other Maine educators on the topic of “place-based” learning. <a href="#">Presentation here.</a>	P	June 23rd, 2022	Hogan Marquis Caroline Reed
<b>Planting</b> school garden	Focus on Pumpkins and a variety of other plants, student volunteers will help maintain garden, harvested vegetable crops distributed to volunteers, launch student-led farmstand Summer 2023	P	Summer 2022	Students Hogan Marquis Caroline Reed
<b>Building school farm committee</b>	LCS’s RREV team built a group of stakeholders to help establish a school farm and garden. The group consists of farmers, soil scientists, UMaine’s Cooperative extension, school board members, teachers, and parents.	P/I	Fall 2022	LCS RREV Team
<b>Harvesting</b> school garden		I	Fall 2022	Students Hogan Marquis Caroline Reed
<b>Mapping</b> school nature and recreation trail	Creating maps of the nature and recreation trail. We hope to start the process of revitalizing a defunct Outdoor Science Lab established in the 1980s. We will also use the trails for hiking, biking, and skiing.	I	Fall 2022	Students Hogan Marquis Caroline Reed
<b>Mountain biking</b>	We will go mountain biking on our school trails. Some trips will be part of the regular education experience, while others will be special trips.	I	Fall 2022	Students Biking Advisor
<b>Tippling</b> for holiday wreaths	Making holiday wreaths. We will collect supplies to make wreaths on our school grounds.	I	Late Fall 2022	Students Hogan Marquis Caroline Reed



<b>School farm and garden planning</b>	We will form a committee and plan our school farm.	I	Winter 2022-23	LCS RREV Team Garden/Farm Committee
<b>Cross country skiing</b>	We will bring students skiing in the trails behind LCS. Some trips will be part of the regular education experience, while others will be special trips.	I	Winter 2022-23	Students Skiing Advisor
<b>Canoe / Kayak safety training</b>	We will train students on water safety as part of physical education.	I	Winter 2022-23	Students Kelsey Churchill
<b>Starting seedlings and farm preparation</b>	We will start seedlings to plant in the spring. We will also finalize our farm plans.	I	Late Winter 2023	Garden/Farm Committee
<b>Maple Syrup Unit</b>	We will tap trees, collect sap, and boil sap to create syrup.	I	Winter/Spring 2023	Students Hogan Marquis Caroline Reed
<b>Planting</b>	We will prepare our soil and plant our seeds and seedlings.	I	Spring 2023	Students Hogan Marquis Caroline Reed
<b>Mountain Biking and Hiking</b>	We will go on mountain biking and hiking trips. Some trips will be part of the regular education experience, while others will be special trips.	I	Spring 2023	Students Hogan Marquis Caroline Reed



### 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.

**First Year Outcomes:**

After our pilot's first year, we will have...

- Created a student engagement profile for each student (5th - 8th).
- Seen improvement across the student engagement profiles' different domains.
  - Attendance, grades, participation in extracurricular/ cocurricular activities, and conduct.
- Collected baseline data of student social emotional development using PEAR's Holistic Student Assessment.
- Provided daily outdoor learning experiences in science for **all** students in grades 5-8.
- Provided access for students of all abilities to meaningfully interact with all outdoor learning spaces.
- Built and piloted three units of place-based outdoor science.

**Second Year Outcomes:**

After our pilot's second year, we will have...

- Seen continued improvement in student engagement and social emotional development.
- Used the same student engagement profile plan for each student in grades 5-8.
- Explored the use of the HSA or another social emotional development measure in the lower grades.
- Built another unit of place-based outdoor science.

**Third Year and Beyond:** We hope to have a clear picture of the strengths and challenges of each of our students, supported by real data. These profiles will allow us to create interventions to help students' social emotional growth.



**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.*

	<b>Data Type</b>	<b>Baseline (B) Interim (I) Summative (S)</b>	<b>Frequency of Data Collection</b>	<b>Person(s) Responsible for Collection and Data Quality</b>
	<b>Outdoor Gear Survey</b> to determine the need for adequate outfitting for comfort and safety.	B	Annual	Hogan Marquis Caroline Reed
	<b>Problem Surveys</b> with Students, Parents, Teachers, and other community members. Students in grades 4-8 filled out the surveys.	B	Late May and June 2022	Hogan Marquis Caroline Reed
	<b>Interviews</b> with students about Outdoor Learning Program. All students in grades 5-8 interviewed. Some of the interviews were recorded on video.  Did outdoor learning make the year better or worse?  Tell a story about an experience outside.  What could the program look like in the future? What would you like to see?	I / S	June 2022  Annual	Hogan Marquis Caroline Reed
	<b>Meetings</b> with elementary level teachers/ stakeholders to discuss problems of the school  *The most common problem reported by the group was student engagement, which confirmed a prediction of the grant team.	B	June 2022	Caroline Reed  Elementary Teachers
	<b>Attendance, conduct, and Behavior</b> - Historic attendance data and current attendance data	I	Daily	Classroom Teachers and IT Director, Chris Kilcollins
	<b>PEAR's Holistic Student Assessment (HSA)</b>	B	Fall (pre-data)	Ben Lothrop (Principal) / Hogan Marquis / Kevin McAfee / Caroline Reed / PEAR consultants
	<b>PEAR's Holistic Student Assessment - Retrospective Self-Change (HSA-RSC)</b>	S	Spring (post-data)	Ben Lothrop (Principal) / Hogan Marquis / Kevin McAfee / Caroline Reed / PEAR consultants



**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 systems changes that this innovation will require and promote.*

In order for an innovation like ours to scale and sustain, we will make the following changes to structures at school to foster our Outdoor Learning Program.

**Scheduling**

During the 2021-2022 school year, middle level students (5th - 8th) participated in a pre-pilot year of the Outdoor Learning Program. Our program flourished, but felt like our schedule was at odds with the outdoor program. We brought these concerns to our middle level team, “specials” teachers, and our administrators. Together we engineered a new block schedule to increase our time outside, provide more time for music/band, and solve some other problems. Now our schedule is built for project-based learning.

**Curriculum**

Our middle level science team is in the process of developing units of place-based science projects that we can lead all year. Every season will have rich outdoor learning projects that we can do in our backyard. Our science curriculum will focus on meaningful experiences, the Next Generation Science Standards practices, and citizen science.

We had great success in our *Maple Syrup Unit*, with many students listing the project as the most memorable and meaningful work of the year. Our middle level kids tapped trees on school property, asked permission to tap neighbors’ trees, lugged buckets of sap, tested for sugar content, built a sugar shack, boiled and bottled syrup, and then shared their newfound skills and knowledge with younger peers.

In addition to the seasonal, place-based science units, students will lead projects that are relevant to the needs and problems of the community and focused on improving the world around us.

**Practice**

Our science team is dedicated to teaching science in an authentic way. Our students have told us they enjoy hands-on learning, and value voice and choice in what they are doing. In the 2021-2022 school year, we participated in several student-chosen projects. Some were successful and some failed, but we learned a great deal. During the third and fourth quarter of the school year, Hogan Marquis and Caroline Reed led an activity that mixed a group of 5th graders and 8th graders together to rapidly brainstorm ideas for projects. This practice of collaborative, rapid brainstorming helped foster a sense of community, excitement, and agency among our students. For some, it may have been the first time they were ever put in the “driver’s seat”. This is the initial step to student-led learning and guiding kids to their own empowerment and meaning, both in their school and greater community. In essence, kids are natural problem solvers. Through the Outdoor Learning Program, we want to give them the platform and tools to help make their ideas (solutions) realities.

In Spring 2022, we replicated this same lesson, but with teachers in our building. Our entire teaching staff had to come up with ideas for outdoor projects. The most popular ideas were a community garden and mountain biking. We discovered that teachers have a desire to get outside, but don’t have the resources to build everything from scratch. Outdoor learning infrastructure for the entire school will give each teacher access, which will in turn give more students access to outdoor learning opportunities. This innovation will make the dreams of our colleagues and students real.



### **Long-term Financial Sustainability**

The goal for this pilot year and the grant monies is to build the infrastructure needed to sustain our program long-term. The annual costs thereafter (social-emotional development surveys and training, staff stipends, materials for the farm/garden, funding for field trips, maintenance, etc.) have been discussed with the school's administration and have been deemed feasible. PEAR's HSA will become an annual expense.

### **Dollar Value Estimate to Sustain Program**

**\$15,000**

\$2000 - HSA Testing and Training

\$5000 - Stipends for Outing Club Advisors

\$5000 - Transportation

\$1500 - Fuel for Side-by-Side and Snowmobile

\$2500 - Greenhouse materials

\$0 - Volunteer labor - Trail maintenance, trail grooming, gardening, and other labor

**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.**

**We've engaged many stakeholders during the planning and development of our innovation.**

#### **Students**

For an innovation like ours to work, students need to love being outside. We started this journey wanting to get kids outside more, but didn't have data. We are heartened by survey data collected in May and June 2022. Overwhelmingly, our students have expressed that they want to get outside more. We hope that doing something they like will help them build resilience when they encounter challenges.

An example of resilience: In January 2022, 5th grade students undertook an ice shelter challenge in which they were to build a series of igloos. It was going well the first week and success seemed almost guaranteed. However, an unprecedented heat wave (40-50°F) struck our region the following week. Students wept right along with the ice blocks of their melting structures. Students were completely demotivated, and we had to foster many conversations about failure and resilience and the iterative process.

To preemptively equip students with social emotional skills needed to contend with failure, we will be developing lessons with our school social worker, Kevin McAfee. These lessons will be short but frequent and built into the school day.



### **Teachers**

Throughout the 2021 - 2022 school year, we talked to our colleagues and developed relationships. We found many small ways to partner middle schoolers from Limestone Community School and with elementary school students and teachers and high school students and teachers from Maine School of Science and Mathematics. We walked the nature trail, we made maple syrup, we collected materials for wreaths, we identified trees and insects, and we worked together in our school greenhouse.

During a professional development day, we discovered that our colleagues were excited to partner with us to expand on our newly created Outdoor Learning Program. Several teachers independently suggested starting a community garden, and several suggested developing opportunities for outdoor recreation. These findings gave us evidence that an outdoor learning program was desired at LCS. We saw that our colleagues had great enthusiasm and energy, but didn't have the resources to start a community garden, purchase bikes, or provide gear for our students to access outdoor recreation opportunities.

### **ADA**

For our innovation to truly be successful, we need it to be inclusive. All students, of all abilities, will be able to meaningfully participate in our innovation. For example, our trail will be retrofitted to provide year-round access to all students. We will take special care to make sections accessible to non-ambulatory students and differently abled students in the future. Our trail vehicle will be ready to serve multiple purposes, allowing us to bring all students to the woods, fields, and garden.

We will continue to work closely with our school's Special Education director (Libby Durepo) and teachers, Physical Education/ Adaptive Physical Education teacher (Kelsey Churchill), and Wellness advisor to ensure that our program helps all of our students learn and play outside.

We have reviewed and will implement appropriate recommendations made by [USDA's Accessibility Guidebook for Outdoor Recreation and Trails](#). We will consult with [Maine's Adapted PE Task Force](#) as necessary. We will plan for adequate and skilled staffing on projects and trips that include students in need of accommodations.

### **Parents / School Board / Community Experts**

Parents in our district have given our Outdoor Learning Program support since its inception in Fall 2021. We have built communications and public relations infrastructure on Facebook. We post pictures and videos, announcements, and lessons online. We have many "likes" in our group, but we have seen the support translate into real-world support.

When we reached out for donations of garden supplies in Spring 2022, we were met with donations of tools, wood, and ideas for our greenhouse and garden. In Fall 2022, we built a school farm and garden committee consisting of teachers, parents, school board members, local farmers, cooperative extension experts, and soil experts. This committee has shown us that our innovation has real support outside of our initial core group. Beyond the farm, we've seen support for our nature and recreational trail. The local ATV and snowmobile club has volunteered to clear and prepare the trail to make trail





grooming possible. The clubs have also expressed interest in partnering with students to mark local trails and teach them about how the local economy is impacted by recreation.

### Section 4: Identify Key Expenses

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

LEA/SAU Vendor Code: <i>*VC0000234859</i>			<a href="#">Maine School Finance Statute</a>	<a href="#">Financial Accounting 2021</a>
Function Codes	Object Codes	<b>Limestone Pilot Budget</b>	Service to Students	~ = 67%
		<b>Budget Categories</b> (using K-12 Instructional/Function and Object Codes)	Year 1	Year 2
		<b>1. Personnel Services - Salaries (1000)</b>		
1000	1010	Teacher salary		
1000	1020	Ed Tech salary		
1000	1500	Regular Stipend	\$ 26,000.00	
1000	1560	Teacher Leader Stipend		
		1. Personnel Totals	\$ 26,000.00	\$ -
		<b>2. Employee Benefits (2000)</b>		
1000	2000	Stipend payroll Medicare & MePERS federally-funded		
1000	2210	Teacher Medicare		
1000	2310	Teacher Maine State Retirement (MePERS) federally-funded		
1000	2220	Ed Tech (all) Medicare		
1000	2320	Ed Tech (I & II) MePERS		
1000	2320	Ed Tech III MePERS federally funded		
		2. Employee Benefits Totals	\$ -	\$ -
		<b>3. Purchased Professional &amp; Technical Services (3000)</b>		
2200	3200	Purchased Professional Services - <b>PEARS assessment</b>	\$ 2,500.00	
2200	3300	Employee Training and Development		
2210	3400	Other Professional Services		
2200	3500	Technical Services		
2542	3400	Planning, Research, Development, and Evaluation Services-Research		



		Services		
2544	3400	Planning, Research, Development, and Evaluation Services-Evaluation Services		
		3. Purchased Professional Services Totals	\$ 2,500.00	\$ -
		<b>4. Purchased Property Services (4000)</b>		
2230	4320	Technology Related Repairs and Maintenance		
1000	4330	Software Related Repairs and Maintenance		
1000	4430	Lease/Lease Purchase of Technology Equipment		
		4. Purchased Property Totals	\$ -	\$ -
		<b>5. Other Purchased Services (5000)</b>		
2200	5000	Other Purchased Services - <b>greenhouse retrofitting</b>	\$ 5,000.00	
1000	5350	Online Subscriptions		
2213	5800	Employee travel for school purposes		
2213	5810	Employee travel for Professional Development		
		5. Other Purchased Services Totals	\$ 5,000.00	\$ -
		<b>6. General Supplies (6000)</b>		
1000	6100	Instructional Supplies - <b>community garden supplies</b>	\$ 101,500.00	
1000	6400	Books		
1000	6500	Technology Related Supplies		
		6. Supplies Totals	\$ 101,500.00	\$ -
		<b>7. Property (7000)</b>		
2680	7000	Property (fixed asset) - <b>UTV, snowmobile and groomer</b>	\$ 50,000.00	
1000	7001	Property (supply asset) - <b>Farm supplies</b>	\$ 50,000.00	
1000	7340	Technology related hardware (fixed asset) - <b>weather station equip</b>	\$ 10,000.00	
1000	7341	Technology related hardware (supply asset)		
1000	7350	Technology related software (fixed asset)		
1000	7351	Technology related software (supply asset)		
2790	7360	Student Transportation Vehicles		
		7. Property Totals	\$ 110,000.00	\$ -
		<b>8. Miscellaneous and Debt Service</b>		
2700	8500	Costs for instructional field trip transportation (note: may use driver salary/benefit and fuel lines instead)	\$ 5,000.00	



1000	8000	Miscellaneous		
		8. Misc. Totals	\$ 5,000.00	\$ -
		<b>9. Other Items</b>		
		9. Other Totals	\$ -	\$ -
		<b>Total Instructional (Primarily Function codes 1000 - a few 2200)</b>		
		<b>Total Instructional</b>	<b>\$ 250,000.00</b>	<b>\$ -</b>
		<b>Total Non-Instructional Costs</b>		
		<b>Grand Total (Total Direct + Total Indirect)</b>	<b>\$ 250,000.00</b>	
		CAP for non-direct instructional expenses - 33% of overall budget		\$ 82,500.00
		Note: <b>ALL</b> materials/technology/supplies purchased with these funds <b>MUST</b> remain property of the school/district at the end of the award period.		