

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.

Since 2019, we have seen an increase in disengagement in learning, an increase in the social-emotional health concern of our students, and a setback in creating students that are eco-literate. In the last few years, we have dipped our toe into the work of nature-based learning to try and address these problems. The pandemic, however, has exacerbated all three of these problems, making classroom management a new challenge for even veteran teachers, thus affecting the confidence of our teachers to step outdoors and teach in a nature-based pedagogy and setting.

Need 1: Disengagement

In 2019, our staff recognized that student engagement was changing. Students seemed to be more passive in their learning, less curious about the world around them, and less willing to challenge themselves. Our school has a population of 300 4th and 5th-grade students. We have seven 4th-grade teachers, eight 5th-grade teachers and three special education teachers, as well as interventionists, allied art teachers, and educational technicians. In our faculty of 50, the majority were seeking advice and support on how to engage our learners. Many teachers tried to incorporate Genius Hours to ignite passions in our students. In our readers and writer's workshops, we made voice and choice a foundational principle so that students would be engaged. We did extensive professional development on understanding and teaching students to develop one's growth mindset. But the pandemic brought periods of quarantine and inconsistent attendance which affected student confidence and connection to the school. After having anywhere from 3 months to 12 months of online learning from March 2020 to June 2021, students did not have the same stamina or understanding of what being a successful student should look like.

Teacher reports and concerns only increased when all students returned to in-person learning. Not only were students not expressing the same levels of curiosity to learn, but many were also having a hard time managing their behaviors. The MTSS team saw an increase in teachers asking to talk to the team about their students' inappropriate behaviors such as an inability to attend to instruction, no stamina or perseverance, and lack of understanding of when to be social and when to work. Thirty-eight percent of the student referrals included these types of concerns. We had so many of these conversations that the MTSS team developed a behavior

matrix to use across the school with our students so that expectations were clear no matter where a student was or which educator they were with.

Need 2: Social Emotional Health and Development

The next need that this funding will improve is the social-emotional development of our students. The pandemic has had a huge impact on the social and emotional health of our students, but it has also affected our students' social skills. One fourth-grade teacher reported having a student tell her, "I am just not sure that I want to be here. I just want to go back home." The teacher went on to describe just how anxious her student presented. Another 4th-grade student reported that they didn't want to stay for anything after school because they just want to be home where they are comfortable. In one fifth-grade class, more than half of the class was identified and receiving services for specific social-emotional health disorders. One child demonstrated anxiety requiring the services of the school counselor twice each day, expressing concerns about "safety" and "doing things the right way." Two students experienced absenteeism which negatively impacted their learning (44 days, 35 days). Students had to relearn both basic social and school norms such as: waiting their turn to speak, appropriate school language, how to enter a classroom, waiting their turn in line, appropriate voice volume, and communicating their needs verbally or in written form. Rather than reminders in September, children were still relearning these skills through December. One student stated, "I can't stop blurting" while another shared, "I can't stop talking." Children were observed physically inching away from others, self-isolating within the classroom, using a multitude of fidgets and stuffies to get through the day. Without a self-soothing object such as a stuffie or fidget, students' eyes continually moved, darting from place to place, often standing and fidgeting in their seats, and had less work completion. One parent reported that their child felt uncomfortable using the bathrooms at school which resulted in stomach issues at home and greater absenteeism. Another student refused to engage in school, sitting at their desk for upwards of 40 minutes without responding in any way or with their head down.

Listening to our school social worker and school counselor, the district funded more social work access for students this year and it is still not enough. We have welcomed a Sweetser school-based social worker into our elementary schools because parents are reaching out and asking where they can get mental health support for their children. Whether it be anxiety, depression, attention challenges, needing support with friendship problems, and stick-with-it-ness, teachers are asking for tools and strategies to support their struggling students. Last year we had several professional development sessions with Anne Stires on SEL and the Nature Connection to give teachers these tools, but we have only touched the tip of the iceberg. The needs are so great that we need to keep professional development for teachers growing in order to give our students the tools they need to be aware and improve their social-emotional health and social skills.

Need 3: Building a Student Community that is Eco-Literate

Students are telling us what they want: they want to be outside. This want coincides with our growing need to create an eco-literate school community. This past year, we created Woodland and Wonder as an initial response to this need. Woodland and Wonder is an allied art designed so that all of our students would experience outdoor learning. Students received 3 lessons in the first semester and 3 in the second. Our curriculum taught students observation skills, expanded their understanding of ecology through games, and provided hiking experiences. Based on a student survey taken after completing the final rotation of Woodland and Wonder, students shared the following:

" You should definitely continue woodland and wonder because it makes all of us realize what outside can do to our moods. How the ecosystem works, like the food chain. Also, that outside is beautiful and how much nature helps us. So yes I do think you should continue Woodland and Wonder!"

“When you learn outside it helps calm you and helps you learn better.”

“Teachers probably want kids to get exercise and have fun while learning, and they probably figure that playing outside and getting exercise while learning is what will keep kids excited to go to school.”

“I think it affects me as a person about how much I care about nature woodland and wonder has gotten me to ask questions and observed about nature more”

“In some ways learning outside affects me because I'm learning so much more with a clear mind and that I love that I can spend time with friends while learning.”

“Because it kinda helps u reconnect with the world”

These student quotes show us the need to make eco-literacy an important part of our curriculum.

“Ecoliteracy is founded on a new integration of emotional, social, and ecological intelligence—forms of intelligence popularized by Daniel Goleman. While social and emotional intelligence extend students’ abilities to see from another’s perspective, empathize, and show concern, ecological intelligence applies these capacities to **an understanding of natural systems and melds cognitive skills with empathy for all of life**” (Goleman, Bennett, Barlow, “5 Ways to Develop Ecoliteracy,” Greater Good Magazine).

Ecoliteracy is a multi-impact intervention that will address our students’ disengagement and SEL concerns, as well as make them good stewards of our planet.

We believe that this RREV pilot project will provide all of our students with a deeper connection to the school. Increasing nature-based learning will engage our students, support their social-emotional development, and make them eco-literate citizens of the community.

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, students who are homeless) with regard to academic achievement, graduation rates, social-emotional and mental wellness, economic data, and/or workforce participation.

This innovation will reach all students at Marshwood Great Works School. In addition, our vision considers access and potential barriers. It recognizes that outdoor education and experiential learning can help level the playing field for our at-risk students and target groups.

Students Experiencing School Disengagement:

MGWS is filled with students whose school careers have been characterized by disruption. Next year, our fourth-grade students will not have experienced a “normal year” since kindergarten and our fifth-grade students since first grade. This has adversely affected their perception of school as an integral and routine part of their lives. It has impacted their sense of themselves as part of an extended community beyond family. Evidence of this problem is reflected in their inconsistent attendance, the Panorama Student Survey, as well as informal teacher reports.

Our attendance data is reflecting a concerning trend. According to district data, the class of 2030 missed a total of 755 days of school during their third-grade year. The same cohort missed 876 days as 4th graders and 1,230 days as fifth graders. According to district data, the class of 2031 demonstrates a similar trend. As second graders they missed a total of 634 days, as third graders, they missed 756 days, and as fourth graders they missed 1,017 days. The average cohort size is 156 students. While we know the pandemic contributed to the increase in absenteeism, missed days make it difficult to establish relationships with peers and teachers and engage with units of study. When we take a closer look at which students are experiencing high rates of absenteeism, we notice that the students that are chronically absent (14 % of our student population) are frequently the students that can't afford to miss school. These students require intervention services, special education services, 504 supports, and/or face challenges associated with lower socioeconomic status.

This year students participated in the Spring 2022 Panorama Student Survey. Based on the results, 41% of the 163 that participated felt only somewhat, a little, or not understood by a person at their school. We believe that not being understood or not feeling a sense of belonging makes coming and facing the challenges of school daunting. Research shows that children, no matter what their age, ethnic background, or where they live, want to feel like they belong and that what they do at school matters.

Students Struggling with their Social-Emotional Development:

The students of MGWS were in school when the pandemic first impacted them in 2020. They had begun to foster relationships with each other and engage in activities beyond the school day. The loss of these connections was abrupt and emotionally impactful. Their return to school, though less isolating, was characterized by a continuation of separateness and limited contact. As a result, their capacity to use their pragmatic language skills to engage, resolve conflicts, and develop and maintain friendships is underdeveloped. This is reflected in increased guidance referrals, referrals for pragmatic language deficits, friendship/lunch group requests, as well as observational teacher data.

Our school community at MGWS is fortunate to have a .6 social worker available to support the social-emotional health of our students. At the beginning of the 2021-22 school year, she had a caseload of 14 students. As the year progressed, she added a therapy group called *Worry Warriors* and ended her year with a caseload of 22 students. Based on her report, it was not only the number of students but the intense needs that they presented that is more indicative of the rising challenges at MGWS. Eleven students on her current caseload present with ongoing familial conflict and stressors such as poverty, unemployment, abuse, neglect, and traumatic loss. Our innovation will provide space, as well as learning experiences to support the social-emotional well-being of these vulnerable learners.

Seventeen percent of our student population at MGWS receives special education services. For the 2022-23 school year, 39% are coded with deficits associated with anxiety or attention (21/54 students). Opportunities for nature-based learning will better support these members of our learning community. We have seen many of these students not only feel more comfortable being outside, but their confidence has blossomed. Outdoor learning gives students that may struggle academically an opportunity to be a leader in their class and excel.

Throughout the 2021-22 school year, the MTSS team met with teachers to discuss the needs of twenty-one students. These students exhibited SEL challenges, academic deficits, and school disengagement. While this was the first year transitioning to the MTSS model, these numbers are almost double what we have traditionally seen while implementing the older RTI model of support. Secondary to the rise in behavioral challenges, the MTSS team also developed a [matrix](#) to support students in developing a clear understanding of what it looks like to be a student at MGWS. Members of the MTSS team gave input into this pilot project to ensure that components of this innovation could be included as support on student MTSS plans.

Our school counselor, Kate Potvin, noted, "I have observed that with an increase in awareness of the importance of mental health, more students and families are seeking support. In a classroom that utilizes the Responsive Classroom model of the morning meeting and our outdoor classroom spaces daily, the students I saw regularly reported liking the consistent, expected routine and looked forward to going outside as a group daily to connect. [Science tells us](#) that we all benefit almost immediately from going outside; blood pressure, heart rate, and cortisol levels are all decreased just by being outside. Taking a walk or even taking some space outside are coping skills I teach our students to try out and keep in their coping skills toolbox."

Students' Lack of Eco-Literacy Knowledge:

Eco-literacy is the ability to understand the organization of natural systems and the processes that maintain the healthy functioning of living systems and sustain life on Earth. Much of this learning usually happens during science instruction. During online learning, students could not access many of our science units. In addition, science-based field trips were canceled even when students returned to in-person learning. These interruptions impacted our students' development in the area of eco-literacy. When our students were asked why learning outdoors is important and if we should continue Woodland and Wonder these were some of their responses:

Because when you are outside you can pay attention to nature and it is easier to learn about nature when you are in nature

So we can have new experiences and be outside in the fresh air instead of being inside on our computers all day.

Because we haven't really been able to do a lot of stuff with our class because of covid.

it makes me love bugs more

it makes me feel like I pressed a reset button

Though these responses reflect the sincerity of young children, they also reflect a degree of simplicity regarding the benefits of nature-based learning and the importance of understanding the environment. There is substantial room for growth in creating local eco-literate citizens who are able to discuss and act to address evolving environmental challenges.

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.

Our goals are to increase student engagement, teach students skills to manage their social-emotional health and give them experiences that positively impact their SEL, empower teachers to feel more confident and prepared to facilitate nature-based learning, and improve our students' and school community's understanding of eco-literacy.

Stakeholders across the school community helped design the projects that are part of the RREV innovation pilot. Grade-level teams have voiced their desire to grow certain programs and pilot other new projects. The stakeholders included the 4th and 5th-grade level teams, the special education teachers and ed techs, club advisors, community partners, and school administration. We are excited and motivated to work together to

begin an Outdoor Learning Committee with all stakeholders represented, that will facilitate and support these projects throughout this school year and beyond.

Goals Targeting Student Engagement:

1. During the 2021-22 school year the class of 2031 missed 1,017 days of school. Through our innovation targeting school engagement our goal is to reduce the number of days missed to 850 for the 2022-23 school year.
2. During the 2021-22 school year the class of 2032 missed 1,045 days of school. Through our innovation targeting school engagement our goal is to reduce the number of days missed to 850 for the 2022-23 school year.

Our goal is to build student engagement through confidence, team building, and a sense of belonging through nature-based education. Projects include:

- 4th Grade field trip and at-school ropes course and team building with classroom teachers
- Expansion of the 4th Grade Orienteering Unit with classroom teachers
- Cool A.I.D. (Academics in Disguise) will have an overnight at The Ecology School with Cool AID advisors
- Strong Girls will participate in low ropes course team building sessions after school with Strong Girl advisors
- Special education students will use the woodshop to build birdhouses and other structures for the school garden with the special education teachers and ed techs

Goals Targeting Social Emotional Development:

1. During the 2021-22 school year 41% of our student population indicated that they felt only somewhat, a little, or not understood by a person at their school. Through our innovation initiatives targeting social-emotional health, our goal is to reduce this number to 20% by June 2023.
2. During the 2021-22 school year 38% of the referrals cited concerns that extended beyond traditional academic areas to include an inability to attend to instruction, poor stamina or perseverance, and issues associated with social-emotional health. Through our innovation initiatives targeting social-emotional health and engagement, our goal is to reduce this number to 20% by June 2023.

Our goal is to strengthen the social-emotional health and well-being of our students and school community through nature-based learning and empower them with strategies to continue this work as they grow. Projects include:

- We will work with an artist in residency and an art teacher to establish a mural in our meditation garden in a quiet, underutilized corner of the schoolyard for all classrooms to use on a regular basis.
- Staff will work with Anne Stires to continue professional development and coaching cycles in SEL and The Nature Connection.

Goal Targeting Teachers' Skill and Confidence with Outdoor Teaching:

1. During the 2021-22 school year, 19% of teachers regularly use established spaces to support instruction. Through our innovation initiatives targeting teachers' skills and confidence with outdoor teaching, our goal is to increase this number to 40% by June of 2023.

Our goal is to affect teachers' confidence, skills, and accessibility through professional development and community partnerships. Projects include:

- Grade-level teams will work with Brenna Crothers, the Outreach and Education Coordinator at the [Great Works Regional Land Trust](#), and Meggie Harvey from the [Gulf of Maine Research Institute](#). These partnerships are designed to provide instruction to our students about climate change and support their development into becoming citizen scientists.
- Our innovation project is also designed to address functionality and accessibility for teachers and students. A sail cloth, sheds, composite picnic tables, and a slop sink will eliminate barriers to outdoor learning by improving material accessibility and ease with which teachers can facilitate collaborative opportunities.
- We will provide the clothing for a class to access the outdoors in all types of weather so they are comfortable and can learn.

Goal Targeting the Develop of an Eco-Literate Student Community:

1. During the last three academic years, opportunities to access science units and participate in field trips targeting ecology have been negatively affected. This has impacted our students' capacity to use subject-specific vocabulary to discuss the natural world. Through our innovation initiatives targeting the development of an eco-literate community, students will improve their ecological vocabulary knowledge as indicated on a pre/post-test during the 2022-23 school year.

Our goal is to build capacity and understanding in our students so that they are eco-literate. Projects include:

- Expand Woodland and Wonder, our outdoor learning special, to include field trips to the Great Works Regional Land Trust, and partner with them to expand the current curriculum. We will work with the transportation department to ensure we can get to these locations and work with teachers to make sure these field trips are a learning experience.
- Woodland and Wonder teachers and classroom teachers will use technology to engage our learnings as 21st-century scientists. The tech department will support these teachers to use game cameras and plant identification apps, as well as expand WIFI across all the outdoor classrooms to use computers when needed.
- Gardening club advisors and classroom teachers will design and care for our school garden and orchard, incorporating a rain collection system and working with [Biogreen360](#), a company currently taking compostable material from our district schools.

The RREV pilot has the potential to profoundly change the learning that occurs for students, staff, and the extended learning community at MGWS. As innovation planners, we have sought the advice of community partners, attended grade-level meetings, conferenced with individual parents and staff, and surveyed our students. We brainstormed ideas to ensure the vision represented our shared goal of promoting outdoor experiential learning. It is bold and considered.

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.	Staff Survey	Identify Interest and Ideas to improve outdoor learning and PD opportunities	P/I	4/2022	Instructional Coach- Sara
2.	Student Survey	Students were surveyed for their opinion of Woodland and Wonder, as well as outdoor learning with classroom teachers	P/I	5/2022	Woodland and Wonder Teachers- Sara and Wendy
3.	Site Development	Assess the campus for locations for new gardens, orchards, rain barrels, sheds, and slop sink.	P	May 2022	Head Custodian Ed, Administration Jerry, and Outdoor Learning Committee
4.	Community Connections	Meet with Brenna Crothers to develop a plan to expand Woodland and Wonders with the Great Works Regional Land Trust, reach out to Project Adventure for ropes course design and contact Browne Center to develop a plan for ropes course and onsite programming for the 4th graders and work with Anne Stires to developing an outdoor learning coaching cycle for a cohort of teachers.	P/I	Ongoing 22-23	Instructional Coach, Team leaders, Administration, Woodland and Wonder Teachers, Teaching Cohort
4.	Secure Funding	RREV funds are needed to implement the plan.	P	Summer 2022	Pilot Design Team
5.	Create Outdoor Learning Committee	Facilitate planning and implementation of outdoor learning spaces.	I/P	August 2022	Jerry and Staff that Volunteer
6.	Muralist in Residency and design of Meditation/Rock Garden and Indigenous Artist in Residency	Collaboration with Muralist in residency and students to design and implement meditation garden and develop the artist in residency plan for basket weaving unit	P/I	Begin August and ongoing in first semester 2022	Angela the Art teacher, Jerry, Ed, Custodian, Outdoor Learning Committee
7.	Unit Design	Grade level teams work with the consultant and GWRLT/GMRI to develop or adapt curriculum units	P/I	Ongoing throughout the school year 2022/23	Sara and Mel, Instructional Coaches and Grade level teams
8.	Identify and purchase materials for outdoor classroom spaces	Materials and resources will be available to make access to outdoor learning spaces easy for classroom teachers to use for teaching.	I	Identify 05/22 Purchase 08/22	Outdoor Learning Committee
9.	Develop Timeline and lessons for Woodland and Wonder	Work with transportation, GWRLT, and classroom teachers to plan field trips	P/I	Plan 08/22 Trips will be ongoing	Sara and Wendy, Woodland and Wonder Teachers, Jerry, Heather at Transportation,

		to conservation land throughout the school year			Education and Outreach Coordinator from GWRLT and GMRI
10.	Identify and plant school garden, pollinator garden, and orchard	Work with teachers to develop planting teams and student caretakers (in class and gardening club) to design, plant, and care for all plantings.	P/I	Plan 08/22 Planting and care will be ongoing	Amy, Gardening Club advisors/teacher, Grade Level Teams
11.	Design Low Ropes Course Elements	Work with Project Adventure to design low ropes course elements for wooden playgrounds and train staff to utilize them.	P/I	Meet 09/22 and ongoing for installation and training	Outdoor Learning Committee and Jerry
12.	Develop a plan with Browne Center for team building and Ropes Course Trips	To develop team building days for all 4th-grade students both at MGWS and at the Browne Center	P/I	Planning 05/22 and trips begin in the fall	Jerry and 4th-grade team
13.	Cool AID trip to The Ecology School	To expose a group of at-risk students to an overnight experiential learning activity that will strengthen personal relationships and a positive connection to the school.	I	Plan 10/22 and trip in spring 23	Sara and Wendy, Cool AID Advisors
14.	Orienteering Project	To teach the 4th-grade students mapping skills and team building in local conservation areas	I	Fall 2022	4th Grade team
15.	Technology Innovations	To broaden our abilities to use technology in the outdoor classrooms and engage students with the game and bird box cameras.	I	09/2022	Christel and Garrett, Tech Department and Sara and Wendy, Woodland and Wonder teachers
16.	One Minute Check-in Assessment with School Counselor	Assesses students' sense of belonging	P	9/2022	Kate Potvin, School Counselor

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).

January 2023	June 2023	June 2024	June 2025 and Beyond
6 months	1 Year	2 Years	3+ years
<p>Grade 4 and Grade 5 will have developed at least one unit of instruction to be delivered in one of the outdoor spaces</p> <p>25 % of teachers regularly use established outdoor spaces to support instruction</p> <p>Contact with identified community partners will have occurred and student opportunities will be ongoing</p> <p>Instructional materials and supplies will be ordered.</p>	<p>Grade 4 and Grade 5 will have developed at least two units of instruction to be delivered in one of outdoor spaces</p> <p>40 % of teachers regularly use established outdoor spaces to support instruction</p> <p>4 community partner relationships will have expanded and 2 new community partner relationships will have been developed to support the enhance the ecoliteracy, social emotional development, and engagement</p> <p>Gardens established: meditation garden, pollinator garden, and raised gardens</p> <p>Mural completed</p> <p>Internet expansion project completed and technology related purchases made</p> <p>Students will have engaged in all of the planned single-opportunity experiences designed mitigate some of the impact of the Covid-19 pandemic (examples The Ecology School)</p>	<p>Units of instruction will continue to be developed and shared with new staff</p> <p>50 % of teachers regularly use established outdoor spaces to support instruction</p> <p>Community partnerships evolve to meet student and teacher needs</p> <p>During the year 100% of students will have integrated technology to support their engagement in science (examples: invasive species app/game cameras/other apps our expanded internet coverage enables)</p> <p>During the year 100% of classrooms have accessed the low ropes course to support relationship building</p> <p>During the year 100% of classrooms have accessed the meditation garden to support the social emotional health of students</p> <p>During the year 100% of classrooms have accessed the gardens to support their engagement and to</p>	<p>Comfort/Interest in providing outdoor learning experiences for students will be incorporated into interviews for new staff</p> <p>Daily opportunities to engage in outdoor learning will occur in 70% of classrooms</p> <p>Community partnerships evolve to meet student and teacher needs</p> <p>Student involvement in the ongoing maintenance of outdoor spaces fosters a strong stewardship in a cohort of MGWS students</p> <p>Low bush blueberries and apple trees continue to be cultivated/the fruit will be gathered and used to support student engagement and understanding of the food to table connection</p> <p>Students develop and understanding of outdoor spaces as a source of social-emotional support and request access as needed</p>

	<p>Students will have an opportunity to enhance their sense of belonging through team-building opportunities all year long</p> <p>Students will feel a deeper connection to nature and their sense of ecoliteracy</p> <p>Outdoor learning classroom will be enhanced to make utilizing the spaces easier for teachers</p>	<p>understand of the food to table connection</p> <p>Teachers use outdoor spaces and identified strategies as part of student MTSS plans</p>	
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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.	Woodland and Wonder Student Survey	baseline and summative survey at the beginning and end of each 3-week allied art experience	twice a year for each allied art cohort	Woodland and Wonder teachers (2 persons)
2.	Teacher PD Survey	interim: winter summative: end of year	two times per year	innovation planners (2 persons)
3.	Teacher observations associated with teacher evaluation system	baseline: fall interim: winter summative: spring	three times per year per teacher	administrator
4.	Attendance Data	baseline: June 2022 summative: June 2023	two times per year	administrative assistants (2 persons)
7.	MTSS referrals	N/A	ongoing	MTSS Team (7 persons)
8.	One Minute Check In Google Form for SEL and Belonging with School Counselor	baseline: fall summative: spring	two times per year	School Counselor

9.	PEARs Assessment, Holistic Student Assessment	baseline: fall summative: spring	2 times per year	Classroom teachers
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- 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.

This RREV innovation project is a considered innovation that builds upon existing ideas and infrastructure that began at MGWS in 2019. Student challenges apparent in qualitative and quantitative data substantiate our need to expand our use of outdoor, project-based learning as a means to reach and support our students. Additionally, the concerns and ideas of stakeholders guided our design to ensure that our learning community was invested in moving the project forward. The meetings with administrative personnel, the leadership team, staff, and grade levels were essential in creating a shared understanding and fostering ownership of components of the innovation. This is a learning community innovation with the broad support needed to ensure continued implementation.

Items included within the innovation design were organized specifically around the concept of sustainability. Infrastructure components and materials will be utilized immediately and into the foreseeable future. In addition, the knowledge gained from existing and new community partners will transcend this group of students and support teacher development. Curriculum units designed by teachers at each grade level will be shared and passed on as shifts in staff occur. These aspects of the innovation design ensure that the years that follow this innovation will see its continued benefit.

From a financial perspective, MGWS is fortunate enough to have district and community support for nature-based education and experiential learning. Thanks to presentations by Woodland and Wonder teachers, this approach has received positive support as well as financial backing from our school board. They are supportive of nature-based education as evidenced by initiatives at all schools within the district and recognize the benefit from an SEL perspective. MGWS is also fortunate to have the Marshwood Educational Foundation and PTO that has enrichment grant opportunities. Using data from outcomes associated with this innovation could lead to financial support for ongoing maintenance and funds for sustained partnerships. MGWS is also fortunate to already have budgeted stipends that are designed to promote engagement after school. This system supports the continuation of opportunities such as Cool A.I.D., Strong Girls, Gardening Club, and future outdoor learning club initiatives.

- 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.

Last winter, the Woodland and Wonder teachers presented to the RSU 35 School Board to explain the program and outdoor learning at MGWS. We explained what was currently happening, but also a desire to expand and grow in this area. The Board was extremely supportive and voiced that they would love to see how we can make outdoor learning more accessible to all of our students.

During the initial phase of our innovation, the pilot planning team engaged in an initial dipstick check with members of our administration and staff to ensure that general interest in pursuing the project was present. Gaining positive feedback from these members of our learning community, the pilot planning team began the work of engaging with significant stakeholders.

This portion of the planning was essential to inform the direction and goals of our project. Every teacher was initially informed of the RREV program at a staff meeting which was followed up by multiple meetings at each grade level. Team leaders, as well as teachers demonstrating a strong interest in outdoor learning, were also sought out individually. The discussions were designed to consider the challenges that our learners confront and how outdoor experiential learning could help us navigate these challenges. The discussions also considered current infrastructure, community partnerships, classroom initiatives, and clubs and how to best build upon them. The idea was to honor the stakeholder interest already present in the building to foster sustainability.

The design team then shifted its focus to obtaining student perspectives. A survey was developed, centered around the Woodland and Wonder experience, and distributed to classroom teachers. The feedback obtained provided the planning team with baseline information regarding outdoor learning at the classroom level. In addition, student feedback regarding the Woodland and Wonder allied art provided the team with a sense of how students managed outdoor learning and curriculum preferences.

The design team also sought out information from our current community partners that support our outdoor learning initiatives. These partners included the following: Brenna Crothers from the Great Works Regional Land Trust, Meggie Harvey of Gulf of Maine Research Institute, educational consultant Anne Stires, and Deb Humiston from Ultimate Treasure Hunt. The focus of these discussions was to gain information regarding how these relationships could be expanded to support our innovation objectives for students and staff.

The design team then sought out information from organizations that we hoped to establish new relationships with as part of our innovation. These new partners included the following: Jeff Frigon from the Browne Center, muralist Kenley Darling, Project Adventure, and The Ecology School. The focus of these discussions was to gain information regarding what opportunities our students and staff might obtain, scheduling options, and financial information. The pilot planning team integrated the feedback obtained from these stakeholders in order to ensure the feasibility of our innovation.

The RREV pilot innovation has rekindled our imaginations about what we envisioned our “MGWS Dream School” to look like. Even back in 2019, we knew what we wanted for our community of learners. Since then, there have been countless interruptions and challenges that have tested our resilience, stamina, and beliefs. The future, however, is what we are dreaming about now and MGWS is ready to refocus on connections-connections to each other, connections to learning, and connections to nature. This RREV initiative provides us with the opportunity to dream big and step closer to teaching and learning in our Dream School and beyond its walls.

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.

RREV Pilot

MGWS Connections

	Services	PD
Team Building Ropes Course Experiences for 4th Grade: Browne Center	12,000	
Orienteering 4th Grade Unit and Trip	4,000	
Cool AID Club to The Ecology School	5,000	
Ropes Course Elements for the wooded area Project Adventure	5,000	
Picnic Tables x4 composite/outdoor seating	1,200	
Expand wifi to outdoor classrooms	3,000	
Ipads for Outdoor learning \$330 each x 8	3,000	
Anne Stires working with Teachers SEL Nature connection and Academic unit design		8,000
Sail Cloth	500	
Transportation to Hikes	10,000	
Project Co-Managers for Outdoor Classroom		2 positions x 2000
Wood Shop Supplies for kids bird house etc building for Behavioral Support Team and Ken Hopkins, Sped Teacher	1,000	
Unit Design Stipend for Teachers		4 positions x 500
Citizen Scientist materials	1,000	
Stipend for Education and Outreach Coordinator GWRLT		8,000

Woodland and Wonder Supplies	490	
Sheds x 2	2 sheds x 5,500	
Rain Barrels and gutters \$110x8	1,000	
Solar Panels	1,000	
Raised Beds	800	
Orchard and Pollinator Garden	2,000	
Rock/Meditation Garden with Mural and artist residency	8,000	
Compost/top soil	1,000	
Game cam	300	
Slop sink and workstation	400	
Bird cam	110	
Garden Club funds- native plants, veggies, and tools	2,000	
Rain suits, \$20 x 24 and boots \$25 x 24	1,200	
GWRLT Vernal Pool Project and Stipend	3,000	
PEARs Assessment tool	2,400	