

# **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.

Union #103 and Moosabec CSD are made up of three schools; Jonesport Elementary, Beals Elementary, and Jonesport Beals High School. Historically, these three schools have operated autonomously, with very few district-wide initiatives across schools. The Learning Lab, Nature Trail, and Innovation Station will be the three main projects made feasible by this award that will allow us the opportunity to come together as one school community. This award provides an opportunity for all three schools to "Spark Innovations in Teaching and Learning" while also honoring the unique cultures and practices within each of the schools.

To "spark innovation" across all three schools, a core design team comprised of representatives from each school will support innovative practices for students and teachers, designing several shared professional development trainings, to provide students with the opportunities to convene across schools to practice innovative ways to learn. Award funds will also support specific professional development at each school focused on the specific spaces outlined in this grant. Those targeted professional development events will be open to all teachers across the district who are interested in that particular topic - Maker Spaces/STEAM, Outdoor Learning or Aquaponics/Food Systems.

If we are successful with "Sparking Innovation" within the district, the students will benefit from real world, hands-on opportunities. Teachers and students will benefit from thinking and approaching education in new ways. These spaces will provide freedom and flexibility to explore education in new and unique ways. From this we spark new mindsets and prioritize the community.

# BES Learning Lab & Nature Trail

The two elementary schools have had limited opportunities for students to come together. Over the past several years, the schools have worked together in very limited ways. Some examples of shared activities between the two elementary schools are attending Camp Kieve together, one shared author visit, sports teams where students have been on the same team in baseball and softball, a Veterans Day program, and at one time, a combined EdGE after school program.

Each school and community cherish their independence and identity. Beals Elementary and Jonesport Elementary both realize that what works in one school may not work in the other. Both schools recognize that our students that are close in age don't often know each other. More opportunities need to be made where students can become familiar with peers their age from the other school that would make them comfortable with each other. Afterall, students from both elementary schools will be attending the same high school.

Each elementary school has its own strengths in terms of academics and learning opportunities. Sharing of resources will not only allow for access to new learning avenues and venues, but also for students to start building relationships before they meet each other for the first time in their freshman year in high school. The combining of resources will also allow the teachers from each school to form relationships that will benefit their students. Teachers can work together to plan and execute shared learning activities for their classrooms.

Beals Elementary Learning Lab - This would be a multipurpose classroom for Science, Art, and other hands-on activities.

Beals Elementary Nature Trail - This is a community nature path that encompasses the outer boundaries of the school property, connecting the community and school.

For the past several years, Beals Elementary School's students have been involved in many hands-on experiences within the school, as well as collaborating with local groups such as our local public library and Island Readers and Writers. As the mindset of how to educate our students has changed from a traditional approach to one involving more hands-on activities, experiential learning, and enrichment activities, so does the space necessary to educate them using this new methodology.

Students in Pre-K through 8<sup>th</sup> are involved in numerous author, illustrator, and artist visits throughout the year. Space is limited for such group activities and most events and projects fall to the ELA/Art room. Any projects started in this room must be carefully moved and stored in various locations since the room serves as a multipurpose room.

Since the beginning of school this year, Beals students have been working on projects and activities towards a visit by author and illustrator, Steve Costanza. Steve, who lives on the island of North Haven, Maine wrote and illustrated the children's book, *The Story of Ragtime: The Scott Joplin Story*. His visit is through a partnership of the school and Island Readers and Writers (IRW).

Ms. Fish, our upper grade Art and ELA teacher often ties art activities to literature. Several projects were created for Steve Costanza's visit to our school, such as a 3-D model of the city of Texarkana, model trains, and large pictures and paintings. These were based on pictures in Costanza's book.

Our students were frustrated when they could not work on the projects when they had the chance. This is because the projects had to be moved from one place to another so Ms. Fish could use her classroom for ELA classes. She also had to do classroom art in the same space.

We also do not have a school Science Lab. Mrs. T; our upper grade Science and Math Teacher is in the room next to Ms. Fish. She often does Science labs with her students. These labs must be set up then broken down so her room is ready for her other classes the next day. This is frustrating for her students especially if labs have the goal to show a scientific principle over a period of time. Our Pre-K to Grade 4 teachers also do hands on projects that must be completed in their classrooms. Whether it is Science, Art, or another subject these projects must be put away after use.

Over the course of a school year, Beals Elementary has a couple of IRW author visits, an art show for 7<sup>th</sup> and 8<sup>th</sup> graders with our local town library, and possibly a Science or Curriculum Fair. We also have an after-school program that uses our current ELA and Art room for activities and projects. A Learning Lab would help us to better complete projects and hands-on learning activities. Our current ELA and Art Room is used pretty much constantly all day. We hope to create the Learning Lab and continue to use it as a room for art and other uses

as described above. We would have our upper-grade ELA and Social Studies classes taught in another classroom. Our principal also teaches upper-grade history and uses his current classroom for two periods a day. The remaining periods his classroom is available would be used for ELA classes.

When students are excited and engaged in learning and creating projects, we want to ensure they do not lose momentum. We envision a collaborative and multi-modal space in which teachers, students, and staff can come together and create new innovative projects. We envision a space where students from any school in our community can come together and learn together. We envision a space where our students can give back to their community through innovative projects and art. By converting this room into a Learning Lab, students will have access to an adequate environment that will ensure they are approaching their learning in new, collaborative, and innovative ways.

The Learning Lab would be a multi-use workspace where students and teachers imagine, theorize, create, and explore their content curriculum through hands-on learning projects. Not only will this space be used for interdisciplinary, exploratory, experiential learning in the core academic content areas, but it will also be used as a place students and teachers build community, enhance a sense of pride and ownership for their school community, and their learning, and to advance and teach necessary social and life skills. From 3-D printers to professional development, this space will allow everyone the opportunity to create and learn.

In addition to providing innovation within Beals Elementary, we also want to reinvent our outdoor space. Beals Elementary's playground is used year-round by families from Beals and Jonesport. To add to this popular community space, we want to add a nature path in order to continue to meet the needs of families in the area. Many parents have vocalized interest in having a safe space within the community to be able to walk in the morning before/after student drop off or even after school. Students have also vocalized interest in having a place during PE and other classes to explore outside on a dedicated path. We want to meet their needs and foresee many parents walking early in the morning before school drop off, hosting cross country meets in the fall, and even community walking days dedicated to fundraising events.

The trail will be open to all community members and will display student projects, changed at various times of the year. The trail will include park benches and tables that will become an outdoor learning space, where students can make observations and have meaningful class discussions in all content areas. It will supply a much-needed space for students to listen to and observe nature and use their observations to write creatively. It is also a place for students to practice mindfulness, as well as an area to support their physical health.

# JES/JBHS Innovation Station

Residing in a low socio-economic area, food security is always an issue. When Covid came to town, food insecurity became an even larger issue for a great many more families in the communities, not just families with students in the local public schools. Families lost employment. Families lost access to food at local grocery stores due to closures. This fishing community was deeply impacted by the shutdown of restaurants, grocery stores, and other places that buy our locally caught lobsters. Families turned to gardening to help take control over their lack of access to food. Small and large gardens began popping up around the area. Thanks to the internet, people were able to learn some basic gardening skills and have successful gardens. This harsh reality still lingers today as families are struggling more than ever to feed themselves and meet their basic needs.

Breakfast and lunches served at Maine public schools are free for all students. Last year at Jonesport Elementary School (JES) we had about 100 students enrolled. Of those students, on average 15-20 students would eat breakfast in the morning. This year we have 98 students enrolled, and have on average, 65-70 students eating breakfast. 85% of the student population returned their free and reduced lunch forms. JES works with Good Sheperd Food Bank as well as Maine Seacoast Mission Food Pantry to provide high quality food to all students' families. Sometimes there is an abundance of great food, other times, there is a lack of quality food to meet everyone's needs. Traditionally food from food banks are cheap brands, and low-quality items that people wouldn't regularly purchase in the store. What they are given, are items that most families don't eat, or don't know how to prepare to eat. Although the system in place is well meaning, sometimes it falls short. Just because a family cannot afford to buy food, doesn't mean they want creamed corn or dried pinto beans. Families like to have high quality fruits, veggies, meats, snacks, and even junk food like all other families.

Families that started gardening in response to a lack of access to food due to store closures have been successful at growing and harvesting reliable crops. The struggle lies in food preservation and preparation. Most families do not know how to can food, both plant, and meat, in a safe manner. Many families do not know where to start and have no one to go to for assistance in the process. Therefore, a huge chunk of the harvest goes to waste, even if it is shared with others.

Through the building of a larger greenhouse, expansion of the aquaculture and aquaponics system, in conjunction with the kitchen renovation, we will be better equipped to not only teach students, and staff, crop cultivation, but we will also be able to provide education for community members on how to prepare food.

Students will learn about native crops through the further development of the outdoor education curriculum and classroom, as well as the greenhouse. As students learn to identify flora and fauna around them, they will gain a greater sense of being stewards of the land. As students plant, grow, tend, and harvest crops, they will have the opportunity to prepare what they have grown in the renovated kitchen. The current kitchen is unsafe for younger and smaller students to work in, and has limited reliable stovetop and sink access. The renovations will allow multiple students and adults to be working at once in the space. The kitchen will also be a space where food prep classes can be held for the community. Nothing is more empowering to a student than showing adults in their lives how to do something. Cooking classes can be both student and adult led. Guests can be invited in to share a specialty recipe. Families will be able to try new things within a supportive environment, and hopefully bring the newly leaned skill home.

To expand the number of people we can reach, students could start a YouTube channel where they create cooking, food prep, and gardening segments. It is anticipated that there will be a demand for specific programming to meet local needs. Once that has been identified, videos can be tailored to meet those specific community needs.

As the native garden grows and matures over time, it will be able to provide more consistent, sustainable food for the community at large. With fruits, veggies, and berries ready to harvest during the first of the school year, students, and families, will be able to start canning for the winter. From pressing apples for cider, cooking applesauce, or canning for potlucks, the ideas are endless.

Through the growing of food, and learning about proper and safe food preparation, students and their families, and community members will go from food insecurity to food confidence and security.

The Innovation Station would be a functional, tangible space for all ages and content areas to learn and explore outside of the traditional classroom. With a student-centered focus, teachers would be able to facilitate cross-curricular learning where technology can be organically integrated, student choice incorporated, and ensure exploratory applications of meaningful every-day concepts that will set our students up for success in the real world. Hands-on activities, inviting local experts as guest speakers, and involving the community in our innovation would open a new world of possibilities to sustain our schools, students, staff, and community.

The proposed spaces include an outside classroom, four-season greenhouse, renovated kitchen, and functional shop/makerspace. The greenhouse is home to aquaponics tanks that house independent, sustainable ecosystems of fish and plants. In addition to plants and fish, the greenhouse has a large communal table and shelving along the walls. Students and teachers make observations, have meaningful classroom discussions, document their processes and store materials and various projects. Students create a business plan to sell produce grown in the greenhouse at a school-based farmers market to the community. The growth that takes place in the greenhouse is not just that of the plants and fish. Lessons on science, math, ELA, geography, history, social studies, economics, social justice, stewardship, responsibility, collaboration, risk taking, and experiencing success through failures are also taught here.

A fully equipped and renovated kitchen with stainless steel worktables for food safe preparation, a refrigerator/freezer, food preparation sink, and two oven/stove tops can accommodate a class of students cooking together. One of the major benefits of the kitchen is for practical life and social skills instruction. Creating and sharing a meal together allows space for humane conversations which build a stronger, more compassionate and understanding learning community.

Our students are not the only ones who are learning. Teachers can take abstract lessons from their classroom into the Innovative Lab to show concrete and practical applications. Teachers are supported to share their expertise and stretch their repertoire of teaching strategies to match the ever-evolving learning styles and needs of students. The lab provides a space for specific professional development opportunities supported by experts from the community. The possibilities for incorporating core-content instruction into this space are endless. The real benefits of the Innovative Lab come from the innovative, interdisciplinary, project-based opportunities for students and teachers to work together to apply skills taught in the classroom. These Innovative Lab spaces will enhance a sense of community across the entire school, fostering academic, social, and career enhancing partnerships with our local community members and families. Our hope is to engage youth as agents of change, offering a platform for student voice that teaches problem solving and design processes.

The outdoor classroom would allow students to not only learn about their surroundings, but also learn within it. Students will have an outdoor classroom where they can explore, investigate, and experiment. The outdoor class space will include the planting and harvesting of native plants and fruit bearing trees. Students will incorporate their learning of plants and fruit bearing trees in recipes developed in the renovated kitchen. Students, along with staff and families, will learn how to preserve fruits, bake, as well as any medical use of plants harvested. The outdoor classroom space will not be confined to one singular location, but will encompass naturally forested areas, as well as a maintained field section. Community members will be able to come to this space during non-school hours to harvest fruit or plants for themselves and their families. Students can share their knowledge with their families when they come to visit.

Learning time potentially runs the risk of being wasted in traditional classrooms due to how often teachers have to repeat themselves or try to re-explain simple concepts. Even the most attentive students might find themselves having trouble retaining the content they are taught. Being outdoors can negate this problem by taking advantage of simple psychology. We have seen students benefit from outdoor learning. From taking our children out during reading time to set up a cozy spot in the sun, to exploring the local bog for cranberries, or even when elementary students explore outside for bugs during science class, students are excited to be at school and want to be here. It's time we provide them with a chance to continue to explore the land around them. When students learn about things through hands-on experiences, it creates stronger memories and forces them to apply what they learn to real, physical situations. Ten minutes outside with bugs during science replaced a thirty-minute online module—this time is priceless. Students who recently constructed low impact, makeshift benches to form a temporary learning space near the woodsy trail at the Jonesport Elementary school utilized problem solving skills in the moment. This creative, problem-solving

activity changed the way in which students approached the problem compared to a typical paper-pencil assignment. Hands on and engaged, students voiced how exciting it was to figure out the solution real time.

When students get a chance to interact with the world around them, it opens up many more doors for them to hone those skills and develop that region of their brain. Even something as simple as ordinary playing or movement can let them employ creative strategies to improve learning. We have seen consistent evidence of this as our students participate in Leadership programs through EdGE at the Maine Seacoast Mission, Outdoor School with Maine Outdoor School, and STEM exploration at the Downeast Institute (DEI). The number of behaviors drop to zero. Students who attend these programs are fully engaged for the entire day as evident by a reduction in typical behavioral/inattention issues. There is also a marked increase in attendance on these days. Students that usually miss a day or two a week, in some cases more, will be on time for school, and will come on days their class goes to EdGE, DEI, or has Outdoor School. They are more talkative, engaged, and energized on these days.

The increased presence of community and place-based experiences supports student achievement and improves environmental, social, and economic vitality. We are eager to help students learn to take care of the world by understanding where they live and taking action in their own backyards and communities. Ultimately, place-based learning and student engagement in daily cultural practices provide innovative approaches to address student, staff, and community concerns regarding students disconnect from their schools and community. A K-12 CTE-geared program would engage more students and enrich their education while helping them develop the skills and habits of mind to find meaningful employment after high school or college graduation. In addition, these students will be able to find work in their local community, strengthening the economic resilience of the town of Jonesport and Beals.

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.

### Need for students to be more connected/ district-wide

When a new 9<sup>th</sup> grade class walks through the doors of Jonesport-Beals High School, it is a combination of students from the Jonesport and Beals Elementary School students. Many of the students coming from Beals and Jonesport Elementary don't know or have never interacted with some of their new peers. Despite the high school's name, Jonesport-Beals High School, many of the students have never previously interacted with each other in elementary school. Not only will this grant spark innovation, but it will also spark connection across schools - between teachers and students. Bringing our three schools together with innovative and engaging spaces not only provides a new space for learning, but also fills the void for greater community pride thus creating a smoother transition for future generations.

# BES Learning Lab & Nature Trail

Beals Elementary is a school of approximately 40 students located on Beals Island with students in grades Pre-K to 8<sup>th</sup>. Jonesport Elementary is located in Jonesport, Maine. It has approximately 100 students in grades Pre-K to 8<sup>th</sup>. Students from both Beals Elementary and Jonesport Elementary attend Jonesport-Beals High School for grades 9<sup>th</sup> to 12<sup>th</sup>. Current Jonesport-Beas High School enrollment is at about 70 students. All schools are part of a school union. Each elementary school has their own school board run by their town. The high school has a school board that has members from both the towns of Beals and Jonesport.

The students at Beals Elementary School come from disadvantaged homes. 62% of our students are eligible for free and reduced lunches. Opportunities for our students are limited. Employment is also an issue for local families. Most are employed in ocean-based work, which is not only difficult but also limited to seasonal employment. Some find employment in surrounding towns, but travel is not always easy.

As we have changed the way we work with our students, they have been very vocal about the fact that we don't have adequate spaces for them to work. By creating a Learning Lab, we will create an alternative space, programming and opportunities for ALL students to enthusiastically engage and be involved on a daily basis. The Learning Lab will also carve out a niche for our gifted and talented students, providing sophisticated real-world opportunities to explore academic subjects in depth and hone collaboration and critical thinking skills.

It has been well documented that successful middle schools provide safe places for all students to explore their interests, develop their world views and identities, and engage in challenging and vigorous academic learning (see the Association for Middle Level Education's The Successful Middle School by Bishop & Harrison. However, before rigorous academic learning can occur, students must experience a respectful, inclusive, and affirmative learning environment guided by trusted adult advocates. A successful school also engages families and community as valued partners. We believe that the alternate approach the Learning Lab inherently holds will offer experiential opportunities for all students.

### JES/JBHS Innovation Station

In reviewing data that defines our schools and community, it is evident that our students need to be empowered as learners and as innovators in pursuit of meaningful and fulfilling lives. It is critical that students stay curious, forge their own paths in their learning, and can see their education as applicable to the real world.

Students attending Jonesport Elementary School show an average daily attendance of 89.43% with 9.65% of students reaching the chronically absent benchmark. At Jonesport-Beals High School, maintaining and increasing attendance is a primary concern we face daily. As educators, we want students to feel engaged in their school and community. Through increased engagement, students can feel empowered, curious, and motivated to return to school daily and achieve success. If we can provide our students with a space in which they are able to engage and explore their education in new ways, we can increase student engagement and attendance. In addition to attendance, a portion of our community struggles with elements of poverty.

The results from the 2020 Census Bureau's American Community Survey indicate that the median household of Jonesport households was \$51,471 with 18.1% of the population living below the poverty line–10% higher than Washington County and nearly double that of the state of Maine. In the last four years, an average of 40.5% of students at Jonesport-Beals High School received Free and Reduced Lunches. Opportunities for success are often viewed as lofty goals by some students when they begin to apply monetary values to said success. They begin to cut themselves short from opportunities and we hope to change that fixed mindset. By presenting diverse lessons and opportunities to students through innovation, we have a chance at revealing the many paths they can pursue post-graduation.

Of the students in Jonesport, Maine, 90.1% of students graduate high school or seek higher education posthigh school. Additionally, only 23.8% seek a bachelor's degree or higher. In terms of retainment, 13.9% of the population has moved since the previous year. This is 25% higher than the rate in Washington County overall. From this data alone, we see a need for student engagement and ways in which students can give back to the community. The students see it too, even without the above-mentioned data.

### 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.

### **District-wide**

Ask any teacher why we teach, and it comes down to the students. Ensuring our students are supported and inspired is critical in seeing them grow and succeed. Through this grant, teachers in our district will be able to explore new pedagogical approaches and create and share new experiences that will directly impact the ways in which we approach our students and their learning. These innovative stations will provide students with the creative and collaborative spaces they can flourish.

### BES Learning Lab & Nature trail

Beals Elementary School's Learning Lab is designed to promote best practices. It will provide opportunities for students and teachers to explore learning, making it fun and relevant. This project is a gateway to enhance current programming and expand opportunities for experiential learning for all students while also enriching learning experiences within the walls of the building, as well as outside on the nature trail.

The specific project goals are to:

- 1. Create an educational space where students and teachers find joy in learning together.
- 2. Create educational connections across the curriculum, within the community, and with the world beyond our local area.
- 3. Expand experiential and hands-on learning to increase student and teacher engagement in learning.
- 4. Support student social/emotional skill development and teacher social/emotional wellness

All teachers and students will be impacted by this innovation and the spaces it creates. This is an incredible opportunity for our staff and students to explore different ways of learning, as well as our community members having a place to walk safely. We are hopeful that the practices and strategies teachers learn, and the learning that the students experience will lead to further conversations and investigations into best practices for our students. This project has the potential to challenge us as educators to focus lessons and units around academic investigation, community connection, and social/emotional growth.

The Learning Lab will benefit all students. Students will have opportunities to try out new ideas, skills, and ways of thinking that were not open to them before. Despite being a community of 380 people, we are looking forward to opportunities to open our doors to JES and JBHS to collaborate and continue to build relationships and bring innovation to our students. The Learning Lab will also give students a chance to be exposed to the world beyond our island community by trying new things that they might have not been exposed to.

# JES/JBHS Innovation Station

The Innovation Station RREV pilot will...

- 1. Provide educational opportunities that reflect the hopes and values of the students and community;
- 2. Inspire optimism and innovation among the school, students and communities;
- 3. Build connections between students and their culture, community, and school;
- 4. Help students find purpose, meaning, and direction on their educational journey;
- 5. Increase student engagement in self-directed, hands-on, active learning experiences;

- 6. Provide students with opportunities to learn stewardship of land, water, and natural resources through experiments, mentorships, and project-based learning;
- 7. Impact structural changes that honor place-based and student-centered learning

Impact on practice:

- 1. Place-based learning is central to student learning;
- 2. Students' cultural identities and interests drive instructional decisions;
- 3. Move towards an incorporation of an ecological knowledge way of teaching and learning;
- 4. Learning opportunities are authentically interdisciplinary.

Impact on structure:

- 1. School structures are aligned with Place-based learning;
- 2. Student learning is honored through community engagement and celebration;
- 3. Place-based learning knocks down classroom walls and embraces additional spaces for learning as part of students' experience in school;
- 4. Units of study are no longer confined to mono-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.	Grant team/representatives provide elevator pitch to teachers for feedback	Inform & Feedback	P & I	09/01/2022	Becky & Robin will create infographic and Google Form
2.	PD for teachers, to include training and PD in aquaponics, school gardens, experiential learning, and logistical planning for construction and use of Innovation Station to benefit students and meet students' needs.	PD, curriculum development, logistical planning	P & I	Ongoing	BES, JBHS & JES principals, Aquaponics/culture teacher
3.	To set up Beals Learning Lab according to our vision and plan and to get the Beals Walking Path constructed.	Engineer, Construct, and Equip New Learning Spaces	P& I	06/30/2023	Principal, Superintendent, Beals School Committee, and School Staff
4.	Students and Teachers use Beals Learning Lab and Nature trail for teaching, learning, and exploring.		I	06/30/2023	Principal and School Staff Members
5.	Develop Standard Operating Procedure for	Use of Space Guidelines	P & I	11-1-22 Preliminary	Principal

	Beals Learning Lab and Walking Path			3-15-23 - Revision 1 6-30-23 Final	
6.	Arrange professional development activities for teachers relating to STEAM, Innovative Arts, and other activities.	Professional Development for Teachers to use the Learning Lab.	P & I	06/30/2023	BES, JBHS & JES principals School Staff Members
7.	Meet with superintendent and facilities director	Inform and awareness	Р	August 2022	BES, JBHS & JES principals, Aquaponics/culture Teacher, Superintendent
8.	Present grant project to JES and CSD school board meeting	Stakeholder awareness	Р	August 2022	BES, JBHS & JES principals, Robin, Becky
9.	Introduce full project to elementary and high school staff	Stakeholder awareness & feedback	Р	August/ September 2022	BES, JBHS & JES principals, Becky, Robin
10.	Meet with advisory team of tradespeople: contractor, HVAC, plumbing, electrical, solar, greenhouse, aquaponics	Engineer space/interaction of systems	Ρ	August/ September 2022	JES Principal, Aquaponics/culture teacher, Superintendent, Facility Director
11.	PD for teachers, to include training and PD in aquaponics, school gardens, experiential learning, and logistical planning for construction and use of Innovation Station	PD, curriculum development, logistical planning	Ρ&Ι	Ongoing	BES, JBHS & JES principals, Aquaponics/culture teacher
12.	Site work for Innovation station, kitchen, and shop including provision of utilities at needed	Prepare for construction	Ρ	November 2022- June 2023	Facility director, BES, JBHS & JES principals
13.	Construct and erect greenhouse; renovate kitchen and shop	Construction of facility	I	April 2023- Junes 2023	Facilities director, BES, JBHS & JES principals, Aquaponics/culture teacher
14.	Outdoor School for staff PD	Professional Development	1	Summer 2023	JES Principal, Outdoor School leader Hazel
15.	Design and installation of aquaponics system with the assistance of students.	Construction of facility, hands-on learning and problem solving	I	Summer 2023	Aquaponics/culture teacher, JBHS Principal, students
16.	Finish work on Innovation Station such as landscaping, interior decor, accessibility, etc.	Construction of facility	1	Summer 2023	Facilities director, JBHS & JES Principal
17.	Celebration! School and community grant opening of Innovation Station	Celebration and stakeholder awareness	P	September 2023	BES, JBHS & JES principals, Superintendent, Grant Writers
18	Students create art and benches for Beals Nature Trail.	Community, Culture, Hands-on Learning	I	June 2023	BES Staff & Students

19	Students provide input and create landscape & design for outdoor learning spaces at JES/JBHS.	Problem-Solving, Hands-on Learning, Community, Culture	1	June 2023	JES & JBHS Students and Staff
20	Students share and lead hands-on learning outdoor activities.	Community, Culture, Student-Driven Learning & Ownership, Building Relationships	1	June 2023	BES, JES, JBHS students
21	Student-driven community days where students share their projects and development of outdoor space.	Community, Culture, Building Relationships, Building Mentorships, Student-Driven Learning & Ownership	I	June 2023	BES, JES, JBHS students
22	Students create products to share with the community including: sell fresh produce grown in the greenhouse; preserving food; create public relations media, etc.	Community, Culture, Student Ownership, Student Creativity, Student-Driven Learning, Building Relationships	I	June 2023	JES & JBHS students
23	Beals students and staff are introduced to 3-D printing with outside expert.	PD, Culture, Student Ownership, Student Creativity, Student-Driven Learning, Building Relationships	P and I	February and March 2023	BES Staff and Students
	Beals students and staff work with traveling artist to learn sculpture and ceramics.	PD, Culture, Student Ownership, Student Creativity, Student-Driven Learning, Building Relationships	P and I	May or June 2022	BES Staff and Students
	Beals students and staff are introduced to 3-D printing with outside expert.	PD, Culture, Student Ownership, Student Creativity, Student-Driven Learning, Building Relationships	P and I	April 2023	BES Staff and Students

#### 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).

#### District-wide

Goal #1: Share resources and inspiration across schools while honoring the culture and history of each school and staff.

Goal #2: Begin to create relationships between students and staff between schools to create a smoother transition to high school and more cohesion between the communities.

# BES Learning Lab & Nature trail

Goal #1: Expand experiential and hands-on learning to increase student engagement in learning. Outcomes:

- By June 2023, all students and teachers will have used the Learning Lab to expand student learning experiences
- 2+ years: teachers and students will more regularly teach and learn in the Learning Lab and long-term projects will be provided to students in grades PK-8. The walking path will be an educational tool for our teachers and students alike

Goal #2: Create educational connections across the curriculum and within the community. Outcomes:

- Fall, 2022 through June 2023 Brainstorming/discussions at staff meetings will be a way to support teachers' initial ideas and attempts at integrating the Learning Lab into their curricula. At least one local guest will share his/her expertise with one group of our students.
- 2+years: Discussions/brainstorming will continue at staff meetings, more opportunity for students to be exposed and learn from local artisans. Projects completed by the students will be on display along the walking path.

Goal #3: Create an educational space where students and teachers find joy in learning together. Outcomes:

- Year 1, BES celebrates the addition of the Learning Lab
- 2+ years: Ongoing student cross-curricular projects will be on display in the Learning Lab, as well as throughout the school and along the walking path.

Goal #4: Support student social/emotional skill development and teacher social/emotional wellness. Outcomes:

- Year 1, Many students from all grades use the Learning Lab and walking path for mindfulness and selfregulation activities; teachers not included on the PREV team realize the need and are excited for this addition to our school. They are excited by the possibilities for connecting their traditional content in applied experiential ways.
- 2+ years: Students apply the social/emotional skills they have learned through activities in the Learning Lab and walking path to the regular classroom, as well as other non-school settings. Teachers will continue to rely on their toolbox of social/emotional teaching strategies to respond to their students' ever-changing social/emotional and educational needs.

# JES/JBHS Innovation Station

By September of 2023:

- 100% of staff will have participated in professional development geared towards project-based learning
- Attendance data will show an increase in levels of student engagement;
- Survey data will show an increase in student interest
- Journal responses indicate students are increasingly connected to their culture and learning.

By June of 2024:

- 100% of students in grades PK-12 will have participated in two place-based, extended learning opportunities;
- 100% of teachers in grades PK-12 will plan project-based learning units of study;

- 100% of students in grades PK-12 experience increased feelings of connectedness to school 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.

# By June of 2025:

- 100% of teachers in grades PK-12 use project-based learning in their classrooms;
- 100% of teachers participate in place-based learning professional development;
- 100% of students in grades PK-12 feel connected to school as indicated by survey data;
- 100% of students in grades PK-12 have attendance rates greater than 85% for SY 2023/24.

# By June of 2026:

- 100% of teachers use place-based learning instructional practices;
- 100% of teachers incorporate more than one discipline into their instructional content and practices.

# By June of 2027:

- 100% of students in grades PK-12 have attendance rates greater than 92% for SY 2023/24;
- School schedules and structures reflect school-wide implementation of project-based learning;
- Placed-based learning is a ubiquitous instructional practice in all 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.	Shared Professional Development opportunities	B, I, S	Annual	Admin
2.	Educational opportunities where students from each school are mixed	B, I, S	Annual	Admin
3.	Student attendance	B, I, S	End of each trimester/ quarter	Teachers, admin, admin assistants
4.	Student experience/engagement (their connection to the learning lab)	S	Each trimester	Teachers
5.	Professional Development for teachers/learning from outside craftspeople for students	S	After each session	Teachers/ Admin
6.	Logbook of visitors using nature trail	S	monthly	Admin
7.	End of year culminating activity to share with community (project fair)	S	End of year	Teachers/ Students
8.	Student engagement in at least one lesson/activity as indicated by exit tickets, surveys, and anecdotal notes	S	End of the year	Teachers
	Students' feelings of connectedness to school, their culture, and community as indicated by exit tickets, surveys, anecdotal notes	B, I, S	Quarterly	School Staff
9.	Collection of lesson plans developed/implemented by teachers (The Vault)	S	End of the year	Teachers

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.

#### Innovation Station, Learning Lab, & Nature trail Changes in Mindset:

- Educators support access to the Innovation Station, Learning Lab, and Nature trail across all content areas.
- The Beals and Jonesport community gains perspective in supporting the benefits of the Innovation Station, Learning Lab, and Nature trail.
- Students are partners in the design and assessment of learning.
- Current educators have the ability to transform the learning process.

### **Capacity-Building Activities:**

- Make available a proliferation of opportunities for educators to learn from others including collaborating over content and participating in professional development and opportunities for students to work with outside professionals across the curriculum.
- Make structural changes that support teacher collaboration and co-facilitation of learning.
- Make structural changes that support interdisciplinary instruction and learning.
- Develop and build sustaining relationships between the schools and community members.

### Long-Term Financial Sustainability:

- Develop opportunities for collaboration with community experts, departments, and entrepreneurs to partner in providing programming for students.
- Create a resource bank (Innovation Vault) of place-based and project-based learning opportunities to be accessed in perpetuity.
- Continue to build yearly local school budget funds for maintenance of trail and continued PD and educational opportunities for our students.
- 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.

As part of our feasibility review, we wanted to start with student feedback. Corrie Hunkler was a crucial factor in ensuring we were obtaining student input for the community. Corrie was able to collect data from March 2022 and May 2022 from grades 5-12 in the Jonesport-Beals community. Students vocalized an interest in seeing stronger connections amongst community members and ways for people to be more involved in the community–including youth. In one profound statement, they vocalized that Jonesport needs "to empower youth to get involved and use their voices." Our students are hungry for opportunities to learn and give back to the community. They wish to see growth and diversity in culture, in employment, and in recreation. All students will have the opportunity to participate in the Innovation Station. Increased engagement and attendance in school, increased connection to their community, 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 future.

In planning for budgeting, the Beals Elementary principal reached out to a local contractor to obtain nature trail estimates. The Jonesport-Beals High School and Jonesport Elementary grant representatives met with another innovation school principal from BMS, Mr. Todd West. Through his council, we were able to ascertain a more concise list of needs for budget, professional development, and grant revision.

On September 1st, 2022, the RREV Grant team presented an elevator pitch of the innovation grant to both Union 103 and Moosabec CSD staff during professional development. After this presentation, staff were asked to provide immediate thoughts and feedback through a Google Form. Through careful review of this Google Form, we were able to incorporate staff feedback into the grant. Teachers and staff were receptive to the ideas and spaces in the grant. They liked the idea of outdoor learning, seeing foods go from growth to harvest to plate, as well as children having more opportunities for "hands on" and "self-directed" learning. Staff also noted how the nature trail and other spaces would bring the community together, including the three schools.

Staff members thought the scheduling might be difficult in using the new spaces and construction during the school year. One person suggested that volunteers might help set up the space. Some teachers were enthusiastic about using the new spaces and others were more cautious to see how it fit in with what they teach. Many appreciated the work that went into the grant, the possibility of the creation of the new learning spaces, and the opportunities they will provide.

Throughout August and September, the RREV Grant team was able to reach out to many community partners to garner interest and investment in our innovation. Each community partner was presented with a two-page summary of our grant and a Google Form. The Google Form's purposes were to gain overall support for our grant ideas, gain feedback about the grant, and to gauge staff's interest in participating with our schools. Through their immediate feedback, we learned all supported the ideas and concepts in the grant. We also received feedback on the spaces and ideas on how the spaces can be utilized. Community partners also suggested ways that their organization could be involved in the new spaces and could partner with us. Many organizations that participated in our survey also suggested ways that they can enhance our existing partnerships outside of the grant.

Community partner organizations that we asked for feedback were the Downeast Institute for Marine Research, Island Readers and Writers, Sunrise County Economic Council, Peabody Memorial Library in Jonesport, Maine Outdoor School, and EDGE. Below are some brief summaries of their responses:

The Downeast Institute for Marine Research run by the University of Maine at Machias has worked with all the schools in our district on both marine research projects and in experiential learning. Two of DEI's educational leaders gave feedback about our grant proposal. Both respondents were excited by our proposal and wish to continue working with our schools in providing hands-on scientific learning for our students. Two suggestions offered were a possible after school marine science club for interested students and student internships.

The group Island Readers and Writers works with our elementary schools. They bring authors and book illustrators on "author visits" to our schools. They also provide copies of the books to students and teachers. Their focus as an organization is creating "project-based literacy programs" for schools. Their survey response liked the three different spaces we will put together for experiential learning. They also liked the idea of younger students and other students working together in different spaces such as in the Innovation Station. This gives the older students a chance to serve in a "leadership role" and be a "role model" for younger students. The respondent also reminded that adults are not often separated by age in the world.

The respondent also liked the Beals Nature trail and how it will help students and teachers appreciate the natural world and give them "quiet time" to reflect. They also felt that the nature trail may help make the school and school space more "welcoming" to the community. They also liked that in the designing thinking for our grant that art and creativity were included in our design thinking. We included the A in the STEAM acronym.

IRW offered to help us create signs for the trail and local field guides for the community. Also using their books as "launchpads" for projects related to our new spaces. Also possibly using their "Explore More Book Guides" to give teachers, parents, and our students ideas to get outside and explore the world around them.

The Sunrise Economic Council responded to our survey and liked how the projects tied the schools together. The survey respondent leads their Small Business and Entrepreneurship Division. They are willing to share their business expertise and backgrounds with our students and staff to see the "possibilities" in our communities. They also run a summer camp for students in grades 6 to 12 where entrepreneurial workshops are offered. Some of these entrepreneurial resources may be able to be used in our new spaces. The respondent has a student in one of our schools.

Our local library, the Peabody Memorial Library in Jonesport responded to our survey for feedback. They were interested in the STEAM activities at Beals and might be able to offer us assistance with this. They felt this was a wonderful opportunity for students.

Maine Outdoor School gave us feedback also. Maine Outdoor School (MOS) is a local business that works with schools to offer local schools and community members opportunities for outdoor educational experiences and learning opportunities. The Maine Outdoor School is in Milbridge, ME. They have been partnered with Jonesport Elementary School (JES) for 3 years. MOS has stated that they are able to extend their current services with JES for the current school year to include more classrooms in the development of an outdoor classroom/school within JES, as well as provide professional development to staff. MOS has also stated they would work with staff to help create standards based outdoor education curriculum.

The EdGE program is run by the Maine Seacoast Mission in Cherryfield. The EdGE program provides "leadership training" via outdoor activities at their campus in Cherryfield. EdGE also provides funding and staff for after school programs in our two elementary schools during the school year. EdGE is willing to provide leadership building/team building opportunities to all grades PK-8. EdGE has been partnered with Jonesport Elementary school for 20 years. EdGE is available to come into the school to provide a minimum of 30-minute-long activities, twice a month (as staffing allows) in the school. The EdGE staff would also work with staff during the school days with students to share, model, and develop sustainable leadership/team building activities that can be used by the classroom teachers.

Lastly, our Superintendent was informed and presented with the grant application for his feedback in August before being presented to the Union 103 and Moosabec CSD school boards. The superintendent has facilitated positive interactions with the presentation of the grant to our local school boards.

We presented the Beals School Committee (Beals Elementary) and Jonesport School Committee (Jonesport Elementary School) our one-pager about the grants at the August school board meetings. The Beals School Committee supported the ideas of the nature trail and the Learning Lab at Beals Elementary as a consensus. No questions were asked, or opposition was stated. No specific feedback was given except for positive comments and support for the ideas in the grant application. The Jonesport School Committee also felt as a consensus, support for the ideas of the grant.

### 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.

The budget is broken down into three categories: professional development, award management, space, and equipment. A priority of this grant is to have teachers become more comfortable with innovative teaching. Professional development opportunities for teachers across all three schools will include outdoor education, robotics, agriculture and aquaponics. The goal of professional development is for all teachers to take advantage of the new spaces and equipment we will be creating, which is why we have set aside approximately \$28,000 for professional development. We will be using \$12,000 for curriculum materials and development for direct instruction. We also have set aside \$18,000 for grant management and consultation.

Our goal is not for just the high school teachers or the science teachers to use these spaces, but for teachers across all grades and disciplines to feel comfortable and confident using them as well. Approximately \$133,500 of the budget will be dedicated to building a large greenhouse and outdoor growing space. This space will be used to enhance the aquaponics and aquaculture systems as well as create a large space with natural lighting for classes of all ages to come and work on group projects and STEM activities. We also have plans to construct a pollinator garden and raised beds outside around the greenhouse. This space will be for all students to come learn about native plants and gardening.

Jonesport-Beals High School will be using approximately \$15,000 to renovate our already established kitchen, to make it more accessible to all students, and update the equipment. This space will be used for food science and to complete the farm-to-table circle. Students will be processing and cooking the foods that they have grown aquaponically and in the garden.

For Beals Elementary, most of the funds will be used to construct the nature trail and remodel and equip our renovated classroom into the proposed Learning Lab. Our nature trail would be graded and covered with pea stone, estimated at \$30,000. It also would be equipped with benches.

Our Learning Lab renovations would include a deeper sink in the room, cabinets and shelf space for the storage of projects and supplies. We would also purchase new larger tables and chairs that would make this space more comfortable and practical to use. Our new shelving and storage would also help to better organize existing equipment and supplies. This will cost approximately \$10,000.

In addition to attending professional development opportunities with Jonesport teachers, Beals would like to also host professional development, costing \$4500. We would focus on getting all staff and students familiar with 3-D printing, introducing robotics to students, and even ceramics and clay sculpting. The budget will allow us to achieve the goals we have established here in this grant, to reach all our students in Beals and Jonesport as well as their families and provide them with opportunities otherwise unobtainable.