RREV's Innovative Pilot Template

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

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

Section 1: Define the Need

A. Describe the need for your innovation.

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

The underlying need for our innovation is to meet the needs of our students by providing research-based effective and engaging educational opportunities to increase learning. Two of our elementary schools have been identified as Tier III schools: Deer Isle-Stonington Elementary School with percentages of only 50% of our students meeting the standards in Reading and 42% in Math, and Sedgwick Elementary School with only 42% of students meeting the standards in Reading and 28% in Math. At Deer Isle-Stonington High School, our latest SAT test data shows proficiencies of only 39% in English Language Arts, and 35% in Math.

In 2018, the Deer Isle-Stonington Schools engaged in a **Strategic Planning Process** for School Improvement; recognizing the importance of place-based, student-centered learning, produced these goals for instructional practices:

LONG TERM GOAL   1A
By 2023 all CSD students will experience multiple learning opportunities each year that are active, hands-on, creative and student-centered.

LONG TERM GOAL 5B
By 2023 partnerships between families, the community and the CSD guide and support learning for students both within the school and out in the community.
Strategic Plan Action Step: Engage community members, staff members and students in developing a plan for increasing the number and quality of school/community partnerships that support meaningful real-world student learning.

Mickie Flores, INV 510 Team Member and Middle School Science Teacher, has been implementing some place-based education for the Deer Isle-Stonington middle school students for a number of years. She created the Nature Trail on campus grounds through a partnership with the Island Heritage Trust which is used as an outdoor classroom. DISES

Science scores on standardized testing are higher than those for Reading and Math, with an average of 55.5% meeting the standards over the past four years.

Beyond our own experience, we look to EL Education (Expeditionary Learning) as a model for our planning of place-based education. Their studies show that using their model, students' test scores increase 47% in Reading in less than four years, and 37% in Math in less than four years. Students in EL schools outperform their peers in all races and subgroups, including Special Education and low-income students.

While the Strategic Plan has given us goals of improving our instructional practices in these ways by 2023, we have not made the progress necessary to meet those goals. COVID-19 has hijacked us to a new goal of surviving, rather than thriving. However, in the midst of the change to Remote and Hybrid Learning, some creative teachers like Ms. Flores have found innovative ways to still incorporate place-based learning, no matter where the students are. Our partner, Island Heritage Trust, has hosted virtual investigative/exploratory visits to the many nature preserves on our island for students in the classroom and at home. Ms. Flores developed inquiry-based lessons for students to complete in their own homes and backyards. And the Nature Trail is used by all grades as an outdoor classroom and additional learning tools such as bird feeders have been used both outside on campus and at students' homes. It was entirely possible to find numerous ways to take learning outside the classroom even during COVID-19 restrictions.

It is our intention to embed place-based learning (based on EL Education's model and principles, adapted to each of our district's unique needs), in our district-wide curriculum and standards. We have been putting a lot of effort into foundational skills such as literacy and numeracy, but in order for our students to fully realize their academic potential, we must provide active context for the use of these skills and their expansion across the curriculum. Then, and only then, will these skills truly be embedded in a way that is forever useful for our future community members. We have no time to lose. Every year that goes by with students becoming disengaged from and disinterested in learning, we lose that potential, never to regain it.

The biggest challenge to any new learning program is to get the staff on board; if this doesn't happen, the change doesn't happen. Attempts made in the past to implement project-based learning and other student-centered instructional practices have not been well-designed, comprehensive, or supported enough over time to permanent change. Given that our teachers are reeling and exhausted from all the recent changes due to COVID-19, on top of years of curriculum changes and PD that didn't "take" or didn't work well enough to increase student learning, we knew that this project would need to be designed to make the change process as simple and least time-consuming as possible.

There are small pieces of place-based education happening in most of our classrooms in most of our grade-levels. We know that many of our teachers understand the underlying value of this type of education. But we needed to know more.

Our Insight Mining gave us the following information about what teachers liked about place-based education:

- Fosters students' independence and drives their unique interests
- Supports student-led inquiry and practice

- Learning can spiral outward, connecting to all of the content areas and learning standards as the year progresses
- Increases student awareness of the various communities around them
- Provides a path to individuality and success
- Gives students a more meaningful and relevant experience when their learning is tied to their own environment
- Students become experts in their own area (where they live)
- Work and the school day become more meaningful for both the students and the teachers
- Knowledge gained is knowledge that you will store because you live there
- Builds broader connections between students and the actual world around them, especially in social studies and physical sciences. As well, a great deal of art is inspired by place and community.
- Also increases the students' ability to inspire and build "thick air" to maintain and expand a natural sense of curiosity and wonder in ways that get shut down in the traditional classroom.

When we asked them what they disliked, these were their responses:

- Does not readily fit in the current mold of educational instruction
- Like all "new" things in education, most educators view it as "one more thing" and believe it is an extra piece to try and fit into the traditional day
- Requires most classroom teachers to have "free-rein" over what they can deliver for academic instruction, rather than a rigid curriculum handed to them. It also requires a little more trust from administration.
- The way education is currently set up does not easily support place-based learning
- For some content areas or some units within content areas, it is not always easy to design lessons and achieve proficiency in alternative settings.
- Logistics can be a barrier such as transportation
- Inside the traditional school system we don't make a lot of time for coordination, planning, and relationship building necessary to create these experiences. Because of a lack of time and school resources appropriated for these necessary elements, teachers forget how much is available out there and how valuable it is. Teachers are protective of literacy and numeracy class-time and those specified curricula are seen as priorities; school success is measured by student scores in those areas.

When we asked them what would be a WOW enough that they would be willing to completely change their behavior for it, they responded:

- Access to a greenhouse/school garden
- Access to a pond/vernal pool
- Full support from district administration
- Broader support from all school staff
- Family/community involvement
- Put funds into the campus surrounding the school to bring place-based learning closer, such as an aquarium for marine biology; a gardening and agricultural program

- Train staff to utilize the existing three vans so that transportation is less of an issue.
- School needs to throw time at it so that it is built into the programming and not last on the list after math and reading - integrated into it.
- The WOW comes when it is done well; the adults are getting as much out of it as the students in terms of satisfaction and inspiration. Teachers connect with students in a more collegial way, slightly unexpected things happen and you have to work off-script and get comfortable with the collaboration of other adults to support you. It models joyful collaboration between adults to learn.

In our Future Mining exercise, one megashift we identified had direct application to this project.

MegaShift: Live-streaming and outdoor learning tools become a mainstay of public education

Consequences: Students don't need to go outside the classroom to have experiences that seem like they are outside the classroom. Or in school to have an experience in the classroom.

Opportunities: Everything we take for granted about "place" is turned upside down. Nothing about "place" in education is where it used to be, and it can be wherever it needs to be for the learner and the teacher or community organization.

Since we have instructions from the community and school board to implement place-based learning, we know our biggest problem will not be with administration, although we do have to ensure that building administrators allow the time and commitment needed to move us forward. An example of the broad support we already have for the basis of this project is evident in the advertisement for a new high school principal:

"We need to both engage and re-engage our students with their learning in the 21st Century by making improved connections within both our local community and the world at-large through a more integrated, hands-on curriculum. We need to embed proven instructional strategies in day-to-day planning and learning so as to increase long-term student learning and success through real-world experiences and project-based learning opportunities."

Besides administrative support for place-based education, the most often mentioned challenge was staff support (aka "teacher buy-in"). We needed to further explore what obstacles to implementing place-based education needed to be removed in order to be able to get that buy-in. What will be the problem (s) for the teachers that we need to address to get them to commit to place-based education?

More information from staff:

To further define the problem, we created a staff survey to identify what they saw as the biggest and most frequent problems encountered in trying to implement place-based learning. We used the issues identified by our first interviews: freedom to implement; not having time to fit in planning, coordination, and implementation; focus on specific math and reading curriculum; not having multiple ways to achieve proficiency; not having outdoor resources or resources to leave the campus.

Of these issues, **time and resources** were rated the highest both as the biggest and most frequent problems.

To address these biggest problems, we looked at a two-pronged approach.

       Minimize the time it takes to plan and coordinate.

       Provide resources to take students outside the classroom.

Our biggest innovation meets the first problem entirely, and also includes resources for the second as well. We imagined a customized relational database created by an experienced place-based education coach; this would allow teachers to learn to plan individual or integrated place-based education units in the time they already have available in staff meetings and PLCs. As it turns out, the RREV grant is creating their own version of this for all districts to use and share. The teachers would be involved in integrating and implementing place-based education with our PBE Integration Specialist using the new Engine database, and then have everything they need to create and implement their own further integrated place-based education with a few clicks of the mouse. We also imagine the time dedicated to creating place-based lessons for immediate impact on students as an administrator-supported systemic change. The systemic and mindset change about how we "do" education is a major union-wide initiative that will provide with time built-in for the teachers to work on their own place-based education plans during regularly scheduled staff meetings and PLC time, as we have done in the past with other major instructional/SEL changes.

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.

250 word count.

All our students will derive benefit from this systemic change to place-based education; however, the groups of students who will benefit the most will be those students from lower socio-economic groups, students consistently not achieving proficiency (who inevitably become those at-risk of dropping out), and students receiving special services (with disabilities or 504 plans).

This year's Free and Reduced Lunch numbers are at 48% across the district, but we believe these are low. Many parents did not return their forms this year as everyone is receiving food free because of the COVID-19 guidelines. In 2019-2020 the count was 44% for Brooklin;

57.48% for Deer Isle-Stonington High School; 58% for Sedgwick, and 63% for Deer Isle-Stonington Elementary School.

The percentage of students in our schools who receive Special Services through IEPs or 504 plans is 28%. And as previously stated, two of our elementary schools have been identified as Tier III schools: Deer Isle-Stonington Elementary School with percentages of only 50% of our students meeting the standards in Reading and 42% in Math, and Sedgwick Elementary School with only 42% of students meeting the standards in Reading and 28% in Math. Place-based education as implemented by EL Education puts their low-income students at 8-12 pts, and their Special Education students at 9-10 points in meeting proficiencies above these subgroups scores in other public schools. (See Appendix A – ELED brochure.)

All our students are in rural locales - we are not close to what constitutes "urban" areas in Maine such as Bangor, Lewiston-Auburn, or Greater Portland. Because we are far from the concentrated resources of such areas, we need to utilize what we have access to, both in our region and virtually around the globe. It is important that our students understand and know about the larger world outside Deer Isle and the Blue Hill Peninsula so that they grasp a wider view of what their careers could look like and the kind of lifestyles they could lead in the future, and are confident in their ability to leave our area and thrive if they choose to.

Section 2: Describe the Innovation

A. Describe the goals of your innovation.

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

250 word count.

Our goal for our innovation - Classrooms in the Community - is to exponentially increase the amount of engaging, relevant, place-based education embedded in our curriculum across the district in order to:

- significantly boost student learning proficiencies across all subgroups of students;
- create a global, integrated base of knowledge for our staff, students, and parents;
- expand aspirations and awareness of continuous learning opportunities for our students and communities.
- Better prepare our students for a world rapidly changing through technology and innovation by teaching and nurturing the practices of auto-didactical learning, research & exploration, and teamwork.

In order to achieve these goals, we will be examining and changing many of our practices as we work with our Place-Based Education Integration Specialist and staff to implement integrated place-based experiences and curriculum. Teachers themselves will be able to identify practices and structures that remain obstacles to integrated place-based learning and work with administrators to make the changesnecessary to move the pilot forward.

We will be working with key community partners:
Island Heritage Trust - *Island Heritage Trust* is a community-based, non-profit land trust contributing to the well-being of the island community by conserving its distinctive landscape and natural resources, maintaining public access to valued trails, shoreline and islands, and by providing educational programming for all ages. https://www.islandheritagetrust.org/. They are our partner in the current Nature Trail and will be involved in planning and creating our new ADA Accessible trail and outdoor classroom. They also have 12 preserves on Deer Isle that we will utilize in our outdoor learning.

OceansWide- OceansWide's programs give students a unique, hands-on experience with guidance from educators, research scientists, archeologists, and historians. With an opportunity to get a first hand look into the past, present, and future of the Gulf of Maine, they help young people become aware of the treasures they stand to inherit and the importance of protecting them. https://www.oceanswide.org/. We will work with OceansWide to get our students on their boats, both physically and virtually, to explore the oceans that surround us.

We will engage many other partners, but these two are major partners with accessible and engaging resources and programming that we have initially identified as being relevant and central to our educational re-design for our peninsula/island students and communities. We are working with them to provide experiences that are both onsite and virtual to enable us to start with familiar, local venues (our land and boats) and expand the horizons and conceptual understandings of our students as they see how both our local treasures and challenges translate to global treasures and challenges.

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.Meeting with all Building Administrators	To coordinate efforts and finalize commitment to PBE (Place-based education).	P	June 30, 2021	Supt. and Lynne Witham
2.Hiring of PBE Integration Teacher Specialist	To implement integrated PBE learning experiences	P	September 30, 2021	Supt. , Lynne Witham, Building Administrators
3. Introduction of Place-based Education/RRVE pilot for Staff Members	Reinforce buy-in with staff and demonstrate systemic commitment during New Teacher Academy and August PD days.	P	August 26, 2021	Lynne Witham, Building Administrators
4. Teacher/Specialist planning begins during regular staff meetings and PLCs.	To allow the PBE Teacher to work with classroom teachers to plan the PBE learning that is integrated with classroom curriculum..	I - this will be ongoing, so as we are creating more plans, we will be implementing what has already been planned. This will be a significant part of our staff planning time for two years.	June 30, 2023	Building Administrators, PBE Teacher, Classroom Teachers
5. Teacher/Specialist implements PBE across the district and grade levels.	Provides direct PBE instruction to students.	I - ongoing for two years (initially)	June 30, 2023	Building Administrators, PBE Teacher/Specialist

6. Repair and Completion of Greenhouses and purchase of supplies	Provide year-round indoor/outdoor classrooms for PBE.	I	December 30, 2021	Supt., Building Administrators, Dave Pelletier (facilities manager)
7. Purchase of van	Provide affordable, sustainable transportation to local PBE partners.	I	Sept. 30, 2021	Supt. (TBD)
8. Construction of ADA Nature Trail, ADA Outdoor Classroom	Provide accessible outdoor learning spaces.	I	December 30, 2021	Supt., Lynne Witham, Martha Bell (IHT), Dave Pelletier (facilities manager)
9. Documentation	To track progress of project towards meeting metrics	I	June 30th, 2022 and June 30, 2023	Building Administrators and Lynne Witham

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

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

Following up on our initial exploration of teacher-perceived obstacles to Classrooms in the Community, we created this Yellow Card to test out our innovation designed to eradicate the issues of time and resources. This is focused on the creation of the database, which, along with coaching and time to create curriculum, is what we identified as how we would attack this problem.

Yellow Card	IDEA
Innovation Name: *NAME that is suggestive of the benefit the innovation delivers*	Classrooms in the Community: No Stress Planning
News Headline: *In a sentence – what makes your innovation MEANINGFULLY UNIQUE?*	Announcing the amazing new resource that streamlines place-based unit planning and easily connects your classroom to the community!
Customer: *WHO are you trying to convince?*	Teachers/staff

Customer Problem: *WHAT problem does this idea address?*	You are frustrated trying to plan learning that takes place outside your classroom. It takes way too much time to unearth resources that you don't have in your classroom, and figuring out what learning in another place would look like and what standards it would meet. Making these unit plans from scratch can take 3 hours or more!
Benefit Promise: *WHAT is your specific or numeric promise to SOLVE the problem?*	Using our simple system to connect your units to learning in the community will be 3 times faster than before. With this simple approach to place-based learning, your frustration will be gone, both you and your students will have more fun, and more learning happens!
Proof: *HOW is it that you can deliver on this Promise? What are you proposing to do differently?*	Classrooms in the Community can happen without added stress for you! You have reported that it has taken you from 3-20 hours in the past to plan a great place-based unit to get your students out of the classroom to learn our standards in real life ways. After completing our streamlined planning process once, you will see that it is at least 3 times faster than before. This is a customized database with everything you need to do your planning as quick as a wink! You will easily find the resources you need: places, standards, sample unit and lesson plans all at your fingertips and on your computer. You will be able to search by standard, topic, (environmental science, fractions, etc.) or place (Island Heritage Trust, Woodlawn Museum), so whatever idea you start with will be linked to other existing resources. You will use staff meeting time to work on your own or with grade level colleagues to plan integrated learning, connected to standards, happen easily in our new classrooms in the community. No extra time taken out of your already too busy days!
Price/Cost: *Rough estimate of price or cost (actual # or % change) for # of units.*	No more time than you already spend on planning! We put in all the extra time before you even start. Cost to the school district is a one-time cost that is grant-funded. ($250,000) We will provide you with a coach, a customized database, transportation, and wonderful community partners, both in-person and virtual!

Value: *This is great value to customers/stakeholders because...*	You will be able to boost the amount of time you and your students spend enjoying place-based learning without any extra effort on your part! Learning from outside the classroom will boost our test scores and both students and staff will love it. It is part of our Strategic Plan for a very good reason: research proves that meaningful, active learning outside the classroom increases student learning by 50%. We will boost our students proficiency levels by 37-47% in less than 4 years!

Our PDSA rapid cycles showed that our yellow card (focused on teacher buy-in for a new system of planning PBE) promise and proof was enough to achieve above a 7.0 score with teachers in our biggest schools, Deer Isle-Stonington Elementary School and Deer Isle-Stonington High School. 7 is a score that is significantly positive enough (on a scale of 1-11) to move the innovation forward. Lower average scores and qualitative feedback from our two smaller schools indicate that staff in Sedgwick need more details to understand the change to place-based education, and staff in Brooklin may believe they are currently doing enough place-based education. Students in Brooklin tend to come from higher-income families and student proficiency scores there are higher than our other schools.

The Student Outcomes include participating in more place-based educational experiences, completing more proficiencies through place-based education, and increasing the percentage of our students who meet or exceed the proficiency standards across all sub-groups, but particularly focusing on our students with IEPs and 504 plans (28% of our students), and those from low socio-economic households.

Teachers report at minimum 1 place-based event per year is currently planned at each grade level. With the PBE Teacher implementing events across the district, and with teachers able to access the ENGINE database for additional planning, we expect a growth of 2 additional events per grade level per year over the next 3 years. Baseline is 13 events. At the end of the 1st year, this should be 39 events; at the end of the second year, 65 events; and at the end of 3 years, 91 events.

Teachers report at minimum 2 proficiencies met per student in 1 place-based event per grade level per year as currently implemented. We expect similar growth per year over the next 3 years. Baseline is 26 proficiencies (K-12 = 13 grade levels) At the end of one year, this would be 78 proficiencies met by PBE; at the end of two years this would be 130 proficiencies, and at the end of three years this would be 182 proficiencies met by place-based education units a year district-wide K-12.

Currently, our students show an average of 43% who achieve the level of "Meet the Standards" across the curriculum areas. Research shows that place based education results in 37%-47% increases in student assessments of the standards in less than 4 years.. We

believe that after 3 years of our implementation plan, our students will show an increase in their mastery of learning and we will improve our "Meets the Standards" average to over 50%.

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.NWEA test scores and Fountas & Pinnell Reading Assessments	B, I, S	3 times a year	Building Administrators
2.Numbers of PBE events per grade level per year	B, I, S	June 30th each year	Teachers and Building Administrators
3.Numbers of proficiencies met per grade level through PBE events	B, I, S	June 30th each year	Teachers and Building Administrators
4.Interviews or surveys with Teachers – measuring their perceptions of student engagement, student proficiency improvement, successes, and challenges.	I, S	Two or three times a year, at trimester or semester end	Building administrators
5.Interviews or surveys with parents - measuring their satisfaction with the school curriculum, perceptions of their student's engagement, proficiency improvement, successes, and challenges.	I, S	Two or three times a year, at trimester or semester end	Building Administrators
6.Interviews or surveys with students – measuring their satisfaction with their learning experiences, perceptions of their academic progress, successes, and challenges.	I, S	Two or three times a year, at trimester or semester end	Building Administrators
7.Interviews or surveys with PBE community partners – measuring their perceptions of their satisfaction with	S	At the end of each collaborative PBE event	Remote Learning Coordinator

the partnership experience, successes, and challenges.			
8.Exit tickets with students – asking What did they get? What was confusing? What worked for them? What didn't? What did they learn? What more do they want to know? What suggestions do they have?	I	At the end of each PBE event	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**. *250 word count.*

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

Our project builds capacity for PBE over 3 years by starting out slowly and gaining steam with the lessons as we grow the change in instructional practices. Over the first year, we expect each grade level to expand to three PBE events per year, and then grow that over the next two years as we add PBE events implemented by the PBE Teacher/Specialist and encourage classroom teachers to collaborate and plan their own with ENGINE during regular designated staff meeting time and PLCs.

Through our Professional Development at the beginning of the initial implementation year and activities built into staff meetings and PLC time and parent/teacher interviews/surveys throughout our implementation phase we will change all mindsets through showing the value and impact of PBE. We will build the number of PBE events throughout the district to over 182 per year by the end of the implementation phase. Systemically, this endeavor will also build-in integrated learning across content areas and active, hands-on learning opportunities that many of our students and parents prefer.

Financial sustainability, once we have the project in place, is possible to build into the regular budgets at our schools without a major increase. To sustain the project beyond the funding, we need only $102,842.75 per year district-wide (although the PBE Teacher/Specialist pay may increase each year is the same staff member stays and the pay increases with experience):

Fuel and maintenance for vans: $17,118.75
Replacement cost for vans spread over 10 years: $15, 724
Staff salary: $70,000

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

Summary of PDSA cycles (including prototyping PDSA cycles)
Our first cycle was using our teacher yellow card and a brochure prototype of our database features with teachers at Deer Isle-Stonington High School. We hoped to achieve a score of

7.0 or above, as that represents a significantly positive measure on a scale of 1-11. We had 8 respondents. The results are much better than expected. There was only one real nay-sayer in the group, who responded with 0s and 1s. The meaningful uniqueness scores were above 7 for the yellow card and the prototype. Even the like/dislike feedback was largely very positive, with only a few reservations expressed. To have slightly more than half the teachers in the school express positive feelings about a significant change in the kind of instruction they would be planning is far more enthusiasm than expected. The impact score was below 7 (6.5), so there clearly needs to be some work done during this project to focus on getting across the impact on students and the importance of this work and why we are going to do it.

We also ran a cycle with a flowchart of what a functional prototype might look like; we did this at DIS Elementary School as we had already surveyed other pieces of this there in the past. The flowchart got some negative feedback in the like/dislike section, so we decided it wasn't the best prototype to expose any more teachers to. As the professional development/planning process for PBE moves forward simultaneously in the pilot with the development of the database, we will prepare increasingly functional prototypes to test out with the PBE planning so that we accurately reflect the teachers' needs and wants in the final database product.

The scores were all above 7 at this school, with 13 responses, so we decided to run further cycles using the brochure at our smaller elementary schools in Brooklin and Sedgwick to test the waters there. We would not have time to create a reasonable functional prototype now, but we will make plans to do this in the pilot project as we are developing the software. It will be a great tool for fine-tuning the database product to be sure it is what will work well for our teachers, and in turn, for our educational practices and provide a positive impact for our students. There was considerable enthusiasm for our prototype and place-based education. In the like/dislike section, there were some concerns raised, about what the money would be spent on (which we didn't detail in the yellow card), administrative support, and the time factor in order to fit in math, reading, and MTSS. Also, Student behavior while out and about in the community was a concern. We will need to address these specific concerns in the pilot project as we move forward. The math, reading, and MTSS issues will hopefully be solved when we can provide integrated learning of these core standards directly in the Place-Based Education so that it is and and/and not an either/or project. We do have the administrative support at DISES, but that will need to be made apparent and transparent, as well as how it is different from previous efforts that fizzled out. Student behavior in different settings will need to be a part of the planned learning, the same way we embed SEL learning and Responsive Classroom expectations/language.

We did not meet our standard of success either at Sedgwick or at Brooklin in those elementary schools with the same brochure as DISHS.

Only 3 out of 10 teachers at Sedgwick completed our rapid test. This speaks to teacher burn out as much as it might also mean that teachers are not interested in the latest new thing. The MU score was lower for the brochure than for the yellow card, so this is a school where

they need more detail which was offered in the yellow card and not the brochure. Both qualitative responses indicated that teachers need to know more about it before they jump in. The administrator in this school is a big proponent of project-based learning, and we will need to make sure that she makes it clear that they will have the capacity and support to implement more place-based education. There will need to be some more information

given and gained from staff at the Sedgwick School to ensure they know what they need to know, and about their specific needs and concerns to implement this project there.

We did not get the score we wanted at Brooklin, either. At the Brooklin School, 5 of the 6 teachers responded. 1 teacher of those 5 was not at all interested. Brooklin is the smallest of our elementary schools with 57 students. They also offer a year-round middle level boat-building program with their community partner, Wooden Boat. Teachers use an integrated curriculum and are more involved with project and

place-based education than our other two schools. It is certainly easier to make this happen in an integrated way with fewer students and combined grade levels. Again, we will want to give more information and gain more information from Brooklin teachers on what specific needs they have that we will want to meet with this project. There are definitely different thoughts from different teachers according to the qualitative feedback. One expressed that their community was small and they didn't need to have an application like this; other teachers thought it was a fresh idea, were unclear on exactly what the project would be, and wanted to make sure differentiation in the lessons was available. All points we will need to address by giving more information and making sure we develop the software to meet all their stated needs. We would use an August PD day to hold small focus groups with each school staff to give teachers more information and gain more insight into their school's and individual teachers' responses to our PBE pilot. Smaller groups and a restorative practice go-round of thoughts would help us to hear all voices, and not just those of the most strident.

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

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

Fermi estimation

Our project budget includes:

- Purchasing one more van for the school district to go with the three vans that we currently own, and the two that the Union will be purchasing for the 2021-2022 school year. This will provide 4 vans to be located at the Deer Isle-Stonington schools and 2 vans shared by Brooklin and Sedgwick (although all vans will be available to schedule for any one of the schools for larger groups of students). These will enable us to transport an entire grade level or more from our schools to a learning experience off-campus with Teacher/Ed Tech drivers instead of the $4.00+ per mile cost associated with our contracted busing services.

- A Place-Based-Education Integration Specialist to implement, integrate, and model place-based education curriculum/units/plans with students;

- Expansions and additions to our on-campus learning venues outside the classroom including greenhouses, expanded accessible nature trails and outdoor classroom,

- Collaborating with OceansWide https://www.oceanswide.org/ to implement place-based experiences both live-streamed and onsite on the ocean/boats.

- Funds for purchasing technology and equipment for PBE learning experiences. We have already identified drones and metal detectors as equipment for PBE involving explorations of the geography, history, and geology of our local area.

Costs – to be transferred to budget template:

1 more van for transport for teachers/students
(School Union is purchasing two more): $39,000

Place-Based Education Integration Specialist to implement new programming with students for two years: $136,000

Costs associated with recent expansion of current nature trail. (Part of the trail follows an old woods road that belongs to Barter Lumber Company): $7,500

ADA boardwalk and outdoor classroom for
DISES/DISHS Nature Trail: $30,000

Technology\Equipment:
Drones: $1,700
Metal Detectors: $960
Funds for additional tech/equipment identified by PBE Integration Specialist in planning:
$10,000

Supplies and repairs for greenhouses in Deer Isle and Sedgwick :
$14,407

Initial Programming onboard vessels with
OceansWide – 10 days with instructor and
vessel $9750

Total: $249,317

Appendix A follows:

Education
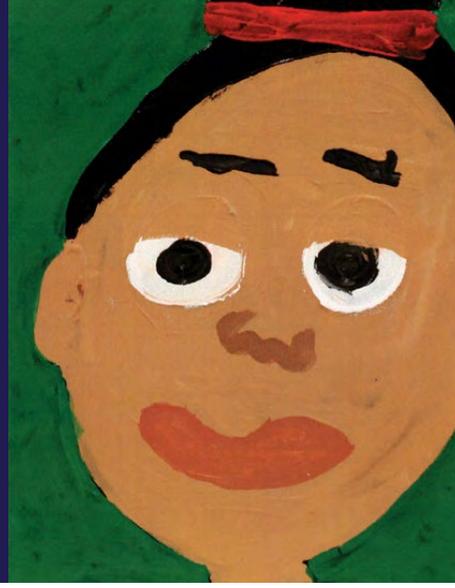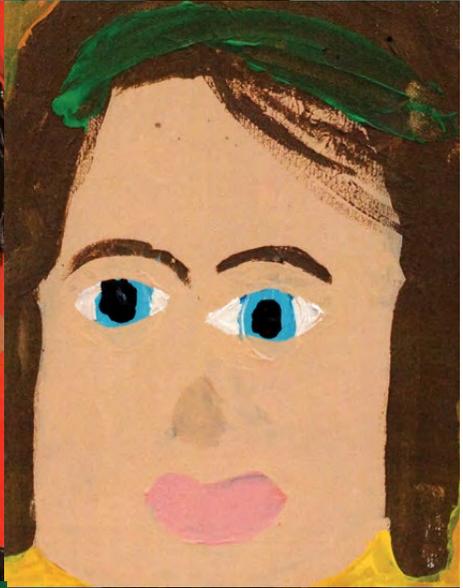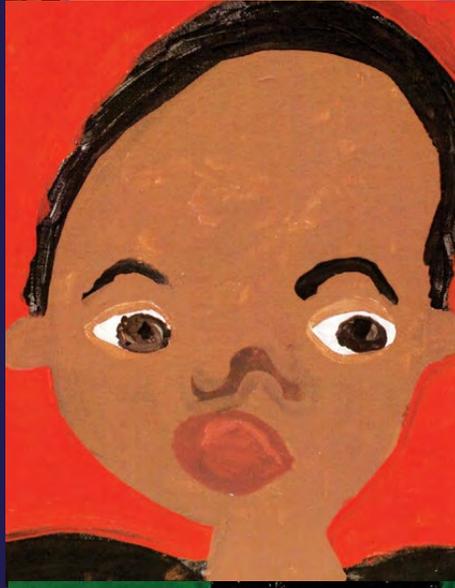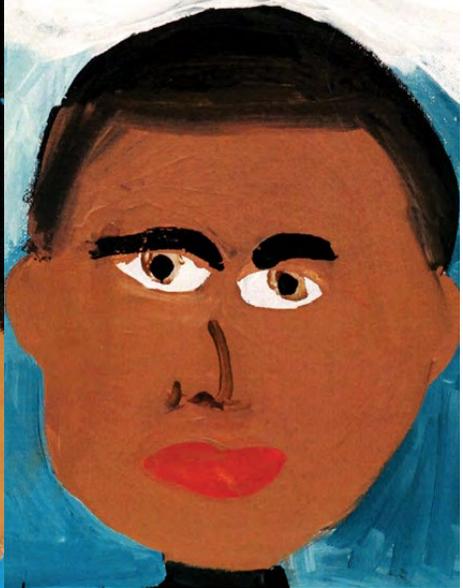
Our Design Principles

Since our inception more than 20 years ago, student character has been embedded in our design principles and work in schools to transform teaching, learning and the culture of schools.

These principles animate our research-based model for transforming teaching, learning, and the culture of schools.

1. The Primacy of Self-Discovery

2. The Having of Wonderful Ideas

3. The Responsibility for Learning

4. Empathy and Caring

5. Success and Failure

6. Collaboration and Competition

7. Diversity and Inclusion

8. The Natural World

9. Solitude and Reflection

10. Service and Compassion

*Cover illustration by preschool students
at Conservatory Lab Charter School.*

Learning
with rigor and joy

A new vision for education—and the tools and resources that get us there. That is the promise of EL Education.

Since its founding as Expeditionary Learning over 20 years ago, EL Education has been empowering teachers and challenging students to meet the highest standards and beyond. Research by Mathematica Policy Research found that EL Education students were over **10 months ahead in math** and **7 months ahead in reading** after 3 years.

Our definition of achievement includes mastery of complex academic content and rigorous preparation for college, but it doesn't end there. At EL Education, pride in the creation of complex, authentic work, and meaningful contributions to a better world are part and parcel of our **three dimensions of student achievement:**

» **Mastery of knowledge and skills**

» **Positive character**

» **High quality work**

Illustration by 6th grade students at Santa Fe School for the Arts & Sciences

Remarkable results unfold every day in diverse EL Education schools across the country, from large urban areas to isolated rural districts. We are transforming education for over 50,000 students with resources and professional learning built on powerful practices, refined in close partnership with educators over our decades-long journey.

Delivering
results

High expectations lead to achievement for all students

Our results encompass high academic achievement and college readiness as well as pride in the mastery of complex, authentic work, and the passion and capacity to contribute to a better world.

Test scores are only the beginning of our story. For EL Education, building character has always been central to education. Through meaningful experiences that empower students in their communities, positioning them as contributors, our students not only gain important academic skills, but also the capacity—and the passion—to be leaders, creators, and innovators.

Data from 2014-2015. All highly implementing schools in the EL Education network are included in these analyses.

**Study by Mathematica Policy Research. View the full study online here: https://goo.gl/JMTTro*

More time in the EL Education network is linked to higher student performance*

Percent of EL education schools outperforming the other schools in their district on state reading and math tests, by number of years in our network.

47%
<4 years

37%
<4 years

88%
4+ years

68%
4+ years

95%
10+ years

80%
10+ years

Reading tests

Math tests
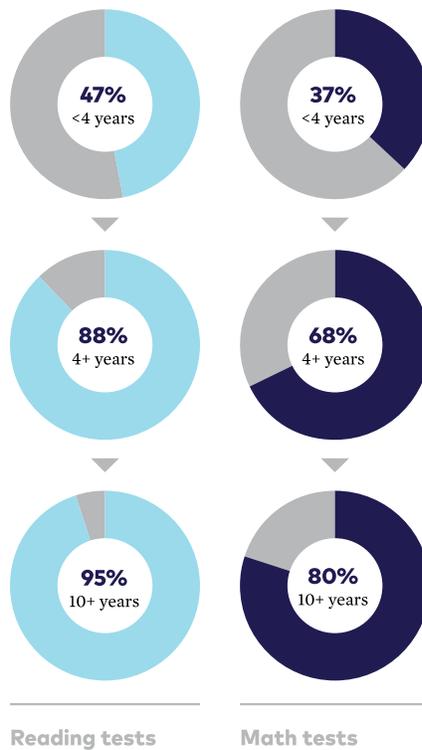
After three years, EL Education students are:**

10 months ahead in math

7 months ahead in reading

Students in EL Education schools outperform peers*

Average amount EL Education schools outperform their local district in students reaching proficiency on English Language Arts (■) and Math (■) tests

All Students | +11 pts
All Students | +5 pts

Black | +11 pts
Black | +7 pts

English-language learners | +11 pts
English-language learners | +14 pts

Latina/o | +13 pts
Latina/o | +9 pts

Low income | +12 pts
Low income | +8 pts

Special Education | +10 pts
Special Education | +9 pts

White | +6 pts
White | +3 pts
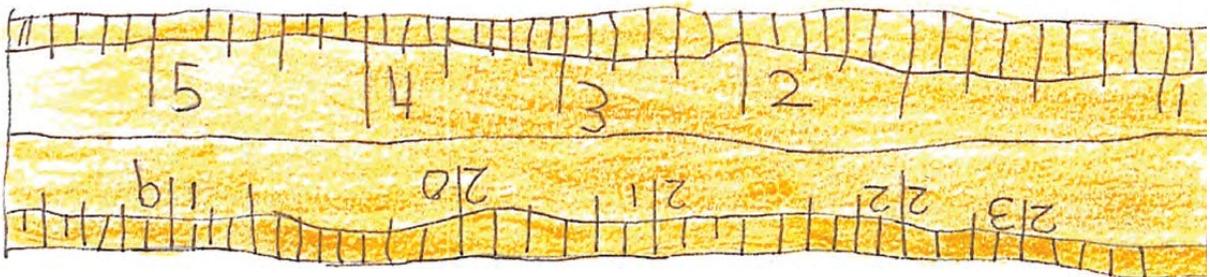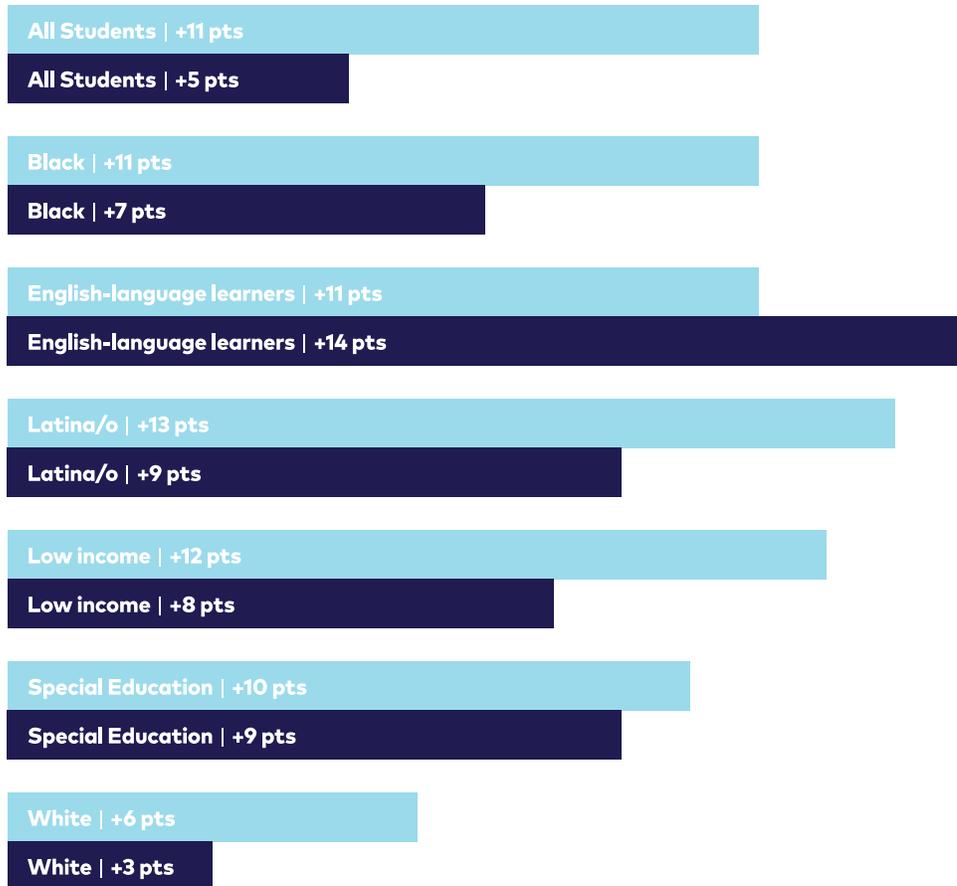
Illustrations by kindergarten students at Alice B. Beal Elementary