Innovativeness and responsiveness of learning model

The *Classrooms in the Community* program is responsive and innovative for three main reasons:

- 1. Outdoor learning responds to the area's specific culture. The pilot team commented that traditional classroom settings are not always well-attuned to the specific cultural context of SU76. A pilot team member explained that "fishing families are living in an 'oral culture' rather than a 'print culture'," so there is a discrepancy between what students are prepared to do in a print-cultured school. The outdoor
 - education component of the program is designed to make education more hands-on and experiential to fit this non-print culture. According to the director of after-school programs, "We have a vastly underserved group of students that really needs to use their bodies to activate their brains or to access their retention capabilities. . . . Moving stuff outdoors forces [teachers] in highly literate communities to change our language."
- 2. It provides clear connections between the curriculum and the lived experiences of students. Pilot team members noted many students' lives outside of the classroom revolve around the fishing industry. Since a large proportion of students will likely enter the fishing industry, there is often a disconnect between

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- Outdoor learning is tailored to the local culture
- Links lived experiences with the curriculum
- Teachers decide when and if to join the program
- what they learn in school and what they expect to do after graduation. One pilot team member said that if a student is expecting to make \$150,000 a year fishing right out of high school, it is difficult to help them understand the benefits of their education. *Classrooms in the Community* addresses this challenge by creating new place-based learning opportunities both on and off campus that center education around the specific context of their community and draw connections between core content and students' lived experiences and plans for the future.
- 3. Teachers can opt in to outdoor and place-based learning. The designers understood that staff buy-in is critical to successfully implementing this program. They also recognized that teacher capacity for new initiatives during the COVID-19 pandemic has been limited. Direct teacher participation in place-based learning was therefore voluntary rather than mandatory for the 2021–2022 school year. All students could still take part in these opportunities through specials and after-school programs, and specific teachers could expand those opportunities during their own class periods. Those who chose to opt in have additional support from the Director of Place-Based Learning in designing and implementing their curriculum. While SU76 eventually wants all teachers involved in place-based learning, allowing teachers to opt in is intended to reduce the burden on them and focus resources on teachers who are most engaged in the program. The pilot team anticipates that successful projects in the pilot year will inspire other teachers to participate in the future.



Implementation of learning model

School participation

Although the original plan was for *Classrooms in the Community* to be implemented in all four schools in SU76, the program has only taken place at Deer Isle – Stonington Elementary School and Sedgwick Elementary school. The point of contact for SU76 said the reason the pilot has not been implemented in Brooklin yet is because it is a small school that is already "infused in the community" through place-based learning so they did not see a need to implement the new program at this time. However, the point of contact mentioned that the school is beginning to have more conversations about the pilot and hopes that the school becomes more involved next year. Deer Isle – Stonington High School, on the other hand, hired a new principal and had significant staff shortages this year, so the point of contact mentioned that the principal was too focused on the day-to-day operations of the school to have the time or resources to devote to *Classrooms in the Community*.

Infrastructure and equipment

Construction on the maple swamp nature trail surrounding Deer Isle – Stonington elementary and high schools began over 18 years ago and has been regularly expanded as funding became available. The last stretch of the nature trail was completed in the fall of 2021 and includes a wheelchair-accessible entrance to the boardwalk. The RREV funds were also used to modify and buy supplies for the greenhouses at Sedgwick Elementary and Deer Isle – Stonington Elementary. RREV funds were also used for transportation and equipment costs, including the use of vans across the district and purchasing car seats for PreK students, boots for middle school students, and outdoor gear for students in grades K–3 to participate in "Forest Days."

Staff recruitment and training

SU76 intended to hire the Director of Place-Based Learning before the start of the school year but was not able to fill the role until October 2021. Consequently, this person has had less time than anticipated to develop the curriculum because the district did not incorporate co-planning time into teachers' schedules in the beginning of the year because the role was still vacant. As a result, the Director of Place-Based Learning, when eventually hired, had to find time themselves to plan around teachers' schedules, despite the requirement that they spend most of their time with students throughout the day. Additionally, the district has experienced a high rate of leadership turnover in the past few years, including multiple changes in superintendents and principals over the past 2 years. According to the Director of Place-Based Learning, this turnover hindered communication and planning among the teachers involved in the pilot and made them feel as though they were "planning on the go." In June 2022, the Director of Place-Based Learning left their role at the end of the school year, and the role is being filled by the 5th–8th-grade science teacher who was integral in developing the innovative model and writing the grant application.

SU76 has completed several training and orientation events focused on helping teachers develop outdoor and place-based learning opportunities for their students. A "Teach Me Outside" event was hosted in September 2021 by the Maine Mathematics and Science





The greenhouse at Sedgwick Elementary School.

Alliance.¹ This event taught staff about the logistical challenges of teaching outside and how to overcome them. Additionally, teachers in SU76 were given the opportunity to participate in professional development with the Rural Aspirations Project to develop a garden curriculum sequence and identify ways to incorporate outdoor/community education into their classroom curriculum. However, the Director of Place-Based learning said that they were unaware they could use RREV funds to offer teacher professional development, so funding for this opportunity was taken out of a separate budget.

Several staff members described mixed levels of staff engagement during the first year of implementation. More than one interviewee noted that staff are often skeptical about new initiatives because they often lead to additional workload or do not last more than 1–2 years. However, feedback on the pilot program has been very positive. For example, one teacher said he had never seen as much enthusiasm for a schoolwide initiative as he saw during trainings for *Classrooms in the Community*. This teacher said even some staff who are usually "stuck in their ways [were] extremely excited" about the new program because of its relevance to their students, which he found "really exciting." Pilot team members explained that some staff buy-in might be due to prior experience with outdoor learning during the 2020–2021 year because of COVID-19. This has increased teacher confidence in their ability to implement outdoor learning

¹ See MMSA.



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and demonstrated its benefits firsthand. Notwithstanding the overall positive reaction to the pilot program, several interviewees reported that a minority of staff are not interested in pursuing outdoor or place-based learning. According to the Director of Place-Based Learning, the teachers who were not interested felt like the program was something "extra" on their plate and indicated there were "too many new things" being introduced at once, which often led to confusion regarding the goals of the program and who to contact with concerns.

Curriculum

The RREV implementation in the fall 2021 semester mostly focused on staff training, building community partnerships, and improving outdoor infrastructure. However, some teachers immediately started implementing outdoor classes. One science teacher (grades 4–7) said she took students out several times a week to conduct science lessons, including observing bird activity, comparing ocean salinity before and after rain, identifying organisms, and observing and reflecting on the environment. Another teacher from Sedgwick Elementary School also regularly took students outside in the fall. Her lessons have included studying, growing, and raising worms and an introduction to composting. Both teachers said they were assisted by the Director of Place-Based Learning in developing these lessons, however they noted that the director's "time was limited" so they were often unaware when the director would be visiting their school each week to help with planning.

In spring 2022, the schools were able to better use the community partnerships and infrastructure developed in the fall. Examples of some activities that took place in the spring included K–7th-graders learning about lobster and sustaining healthy ocean ecosystems through a representative from OceansWide, 7th-graders building catapults outside using concepts learned in math class, and 4th-graders investigating how to make healthy compost through meetings with experts, observations, and experiments. Sedgwick Elementary also worked with Downeast Audubon and the Gulf of Maine Research Institute to build a vernal pool on their nature trail where students could learn about various plants and habitats. At Deer Isle – Stonington Elementary, students used the nature trail and outdoor classroom for activities such as observing plant species and learning about patterns in nature. For example, students in 3rd and 4th grade worked in partnership with Island Readers and Writers and author Kim Ridley to create a field guide for difference species found on the nature trail.

Community partnerships and engagement

SU76 has secured two major partnerships to support the *Classrooms in the Community* program:

• Island Heritage Trust is a land trust on Deer Isle that includes extensive natural resources and several learning spaces. Deer Isle – Stonington has often worked with the trust to provide space for field trips and afterschool programs, but the Classrooms in the Community program provides for a more structured partnership and additional field trips and afterschool activities. Blue Hill Heritage Trust covers Sedgwick and Brooklin elementary schools. The educator at Blue Hill Heritage Trust had been on extended leave in the fall so they were not involved with the schools, however the Director of Place-Based Learning said that they became more involved during the spring and have plans in place for a much more involved start next year.



OceansWide is a Maine-based education organization that focuses on teaching students about the ocean through hands-on experiences. The organization began its relationship with Deer Isle – Stonington through the Maine Mathematics and Science Alliance. As part of the Classrooms in the Community project, Deer Isle – Stonington will partner with OceansWide to create an Ocean Sustainability Project for students. It will teach students about the ocean ecosystem and health through hands-on activities for all grade levels. These activities include teaching students how to pilot remotely operated vehicles (ROVs) in the water, scuba diving for the older students, art projects using recovered "ghost traps" (forgotten fish traps that litter the ocean floor), and bringing in fishermen and other community members to teach students about the ocean. The goal is to make this a long-term project so students will engage with it throughout their entire education, from kindergarten through 12th grade.

RREV coaching

The Director of Place-Based Learning and the RREV coach meet on a weekly basis. During these meetings, the RREV coach provides advice about program implementation, such as finding resources about incorporating outside activities into history and math classes. However, the RREV coach described some confusion about her role, especially to what extent she should provide specific feedback on classroom activities or serve as a broader strategic advisor. For example, she mentioned that the school was interested in creating a website for teachers to share resources, but it was unclear to her whether she should help develop the website or advise the school to wait until they could use EnGiNE for this purpose. The Director of Place-Based Learning, who met with the RREV coach on a weekly basis, said that the RREV coach was integral in sharing resources for Outdoors Week and providing feedback on their role. Specifically, the Director of Place-Based Learning mentioned that the best part of the RREV coach was "hav[ing] a peer" in the process, especially amid the administrative turnover and lack of planning time that they had to navigate throughout the first year of the program.

Outcomes

Students displayed higher levels of engagement and socio-emotional well-being when learning outdoors. Students in SU76 expressed high levels of satisfaction with outdoor learning, describing it in the focus groups as "calming," "interactive," "useful," and "more fun." These students said that being outside helps them focus more on their tasks, as well as learn life skills such as cooperation and teamwork. For example, one 7th-grade student said their class is using math and science concepts to design catapults that they will use to launch watermelons in their field, and credited outdoor learning with teaching them how to work together as a team since they were asked to carry out cooperative tasks that would not have been possible in an enclosed space inside. Teachers have also noticed that students respond better to outdoor learning. One teacher described socio-emotional well-being as "still really rough" as a result of the pandemic, but has found that outdoor learning keeps students "active and focused." Additionally, the teacher noted that being outdoors allows students to "express themselves," whether it is writing in their nature journal or just sitting quietly to observe the environment around them.

Students incorporated their lived experiences with what they are learning in school. Since SU76 has a strong fishing culture and close-knit heritage, one goal of *Classrooms in the*



Community is to incorporate students' lived experiences into their educational experience. Through the community partnerships with OceansWide and Island Heritage Trust, students are able to partake in activities such as SCUBA diving, piloting underwater ROVs, and other ocean preservation activities that teach students about science, robotics, and ecology while involving them with their local community. One community partner said that they have witnessed firsthand how well the students are responding to outdoor learning and said that the program allows kids to "do the things they are used to doing here," including running boats and exploring nature.

Most students agreed that going outside more this year helped them learn. The improvements to the nature trails and outdoor classrooms that were made possible by the RREV grant has created more meaningful learning opportunities for students. On a student survey (Exhibit 3), 85 percent of students said they were glad they went outside the classroom to learn this year, and over 70 percent of students agreed that going outside helped them learn this year. During focus groups, students were asked why they learn better outside, and many said that they are "hands-on" learners, so being outside helps them apply what they learn in the classroom to the real world.

EXHIBIT 3. SUMMARY OF STUDENT SURVEY RESULTS

To what extent do you agree or disagree with the following statements	Strongly or somewhat agree	Neither agree nor disagree	Somewhat or strongly disagree
I am glad I went outside the classroom to learn this year. (n=90)	85%	13%	2%
Going outside the classroom helped me learn this year. (n=89)	73%	24%	3%
Overall, I liked my experience going outside the classroom to learn this year. (n=88)	78%	16%	5%
This year, I had more opportunities to learn outside a traditional classroom than in the past. (n=89)	69%	22%	9%

Parents noticed a change in their children's behavior as a result of the RREV award and report high levels of satisfaction with outdoor learning. Given the vibrant fishing culture and opportunity for students to make money soon after high school, the Director of Place-Based Learning mentioned that parents in SU76 sometimes struggle to see the value in traditional education. However, they mentioned that parents are excited when they hear about outdoor learning at the school because it closely aligns with their own experiences. On a parent survey (Exhibit 3), 100 percent of parents reported that their child enjoyed participating the *Classrooms in the Community* this year, and 100 percent were satisfied with their child's experience. Parents also offered positive feedback on an open-ended question about the pilot. For example, one parent observed that their child "felt more connection to the earth" and has been excited about learning during the program. This parent also stated that their child comes home "energized"



about planting seedlings," which has led to family activities in the garden. During focus groups, parents were asked to elaborate on why they are satisfied with the program. One parent noted that outdoors is "where their child's passion is," and said that their child is more likely to talk about what they learned in school that day when they go outside. Another parent said that outdoor learning has been an "amazing thing" for their children, and they enjoy watching their children "absorb" the information and get excited about the place-based projects.

EXHIBIT 4. SUMMARY OF PARENT SURVEY RESULTS

To what extent do you agree or disagree with the following statements	Strongly or somewhat agree	Neither agree nor disagree	Somewhat or strongly disagree
My child enjoyed participating in Classrooms in the Community. (n=10)	100%	-	_
My child learned a lot participating in <i>Classrooms in the Community</i> . (n=10)	90%	10%	-
I am satisfied with my child's experience with <i>Classrooms in the Community</i> . (n=9)	100%	-	_

Students have demonstrated academic growth during the 2021–2022 school year. Among the 220 students involved in the program, 214 students (97 percent) achieve a higher NWEA RIT score in the spring than in the fall on at least one NWEA assessment. Students with an individualized education plan or 504 plan demonstrated similar growth, as 68 of 71 students (96 percent) also achieved a higher NWEA RIT score in the spring on at least one assessment. These academic outcomes aligned with student and teacher sentiment during the focus groups, during which many students noted that being outside helps them learn better and many teachers reported that being outside helps their students clear their minds and focus more on what is in front of them.

Future plans

Some educators and staff involved in *Classrooms in the Community* expressed uncertainty about the sustainability of the program in the years ahead. As mentioned before, the Director of Place-Based Learning, who oversaw all operational aspects of the program in the 2021–2022 school year, left the role in June 2022. Additionally, SU76 has experienced a high level of staff and administrative turnover over the past few years. As the Director of Place-Based Learning put it, mostly everyone who was involved in the development of the pilot model has left the district or retired. As a result, some staff expressed uncertainty as to what next year will look like. However, one of the creators of the pilot model will be taking over the role of Director of Place-Based Learning, so they will have a good sense of the vision and goals of the program. When we spoke with this teacher, they were "excited and amazed" at what they were able to accomplish in their first year and were enthusiastic about sustaining the program. Going forward, the success of *Classrooms in the Community* will rely on teacher buy



in to continue implementing the place-based activities next year, along with the continued support of the new Director of Place-Based Learning in overseeing the program.

The pilot team hopes to expand the program into Brooklin Elementary School and Deer Isle – Stonington High School. As mentioned, in Year 1 *Classrooms in the Community* only took place at Sedgwick Elementary School and Deer Isle – Stonington Elementary School. Those involved in the pilot program said that a goal for next year is to incorporate place-based learning into Brooklin Elementary and Deer Isle – Stonington High School. The Director of Place-Based Learning mentioned that preliminary conversations have already started taking place with Brooklin Elementary, and one member of the pilot team said that creating the shared resource would make it easier to connect with Deer Isle – Stonington High School. By involving all schools in the pilot program, students of all grade levels would be able to experience outdoor learning and increase communication among schools, which some staff mentioned was lacking during the first year of implementation.

Lessons learned

Staff with responsibilities across multiple schools must balance competing demands from teachers across the district. During focus groups and interviews, teachers and administration alike expressed how important the Director of Place-Based Learning was to the success of the program this year. However, some noted, including the Director of Place-Based Learning, that the responsibilities of the position were too demanding for a single person. For example, the Director of Place-Based Learning had to spend the majority of their time with students, which left very little planning time with teachers. When coupled with needing to manage multiple schools throughout the district, the Director of Place-Based Learning was often stretched too thin in their role. As a result, the Director of Place-Based Learning, along with multiple teachers and administrators, recommended that the role be spread across multiple stipend positions that each are assigned to one of the four schools. Having consistent, local support in the schools would increase communication and decrease the separation between the program itself and the teachers and administrators implementing it.

Clarity about goals and expectations are vital to building teacher buy-in. The Director of Place-Based Learning in SU76 mentioned that there were mixed levels of buy-in from teachers when the RREV award was announced. They mentioned that teachers are already overworked and burned out, and in the beginning of the program some saw the program as "another thing on their plate" that they need to incorporate into their busy schedules. Additionally, educators expressed confusion as to what the RREV award is actually for, especially since many of them already incorporate outdoor learning into their curriculum. As a result, the Director of Place-Based Learning said that teachers often expressed hesitation when encouraged to implement something new from the award, leading to less innovation and change throughout the district. As one educator put it, "Old dogs don't learn new tricks that easily," so some teachers who have established themselves and their curriculum have had a difficult time opening up to the program. This educator, when asked how to increase teacher buy-in, said "you need to ask teachers what they want and how they can use the outdoor curriculum," and give teachers the "latitude" to figure out how they want to incorporate outdoor learning into their own curriculum. The Director of Place-Based Learning said that a stipend or other incentive for teachers who invest time in developing the program and mentoring others may also help increase buy-in next year



Staff buy-in is crucial to implementing place-based learning. Place-based learning requires teachers to get out of their comfort zone and invest extra time in developing new teaching methods. While the full-time Director of Place-Based Learning can help reduce this burden on teachers, it still requires extra effort and buy-in from staff. SU76 has helped get this crucial buy-in by involving teaching staff in planning and developing partnerships. They have also focused on supporting staff who are already interested in place-based learning so that they can develop models other teachers can follow. Although pilot team members said there were mixed reactions from teachers at the beginning of the program, more teachers are beginning to open up to the idea of outdoor and place-based learning.



Another section of the ADA-accessible nature trail at Deer Isle – Stonington Elementary School.

Inexperienced teachers would benefit from taking students outside for non-

academic purposes before attempting outdoor lessons. Inexperienced teachers described feeling surprised by the degree of logistical and pedagogical challenges posed by outdoor education, which elevates the importance of supportive programs to help teachers grow their confidence. Pilot team members said teachers do not always have the tools or knowledge to handle classroom management, manage outdoor supplies, adapt to changes in weather, or respond to other variables that are not present indoors. SU76 helped mitigate these concerns by providing specific trainings around logistics and preparedness. The 2020–2021 school year also forced teachers to regularly take students outside due to COVID-19, which some teachers said increased their comfort level with outdoor learning. As a result, encouraging inexperienced teachers to take their students outside for non-academic purposes such as lunch and recess can help them become more comfortable with logistics and classroom management before attempting to integrate outdoor learning into their lessons plans. By doing so, teachers will gain "practice," which in turn could help build confidence with outdoor learning.

