



Rethinking Responsive Education Ventures: Year 3 Report



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Contents

Executive Summary	iii
<i>Introduction</i>	<i>iii</i>
<i>Key Findings</i>	<i>iv</i>
Sustainability of innovative education models	<i>iv</i>
RREV coaching.....	<i>iv</i>
Educator collaboration	<i>v</i>
Introduction	1
<i>Background and Theory of Change</i>	<i>1</i>
<i>Program Description</i>	<i>3</i>
Elements of RREV	<i>4</i>
<i>Evaluation Goals</i>	<i>5</i>
Chapter 1: Sustainability of Innovative Education Models	7
<i>Background and Purpose</i>	<i>7</i>
<i>Methods</i>	<i>9</i>
<i>Findings</i>	<i>10</i>
To what extent have schools implemented their RREV pilots as planned, and sustained or expanded their innovations?	<i>10</i>
How are RREV pilots contributing to positive outcomes for students, teachers, and communities? .	<i>13</i>
How are RREV pilots contributing to systemic and sustainable change at Adopter Schools?.....	<i>15</i>
How effective have the sustainability awards been for supporting RREV teams in maintaining and scaling pilot activities?.....	<i>22</i>
How could Maine DOE keep supporting innovative learning models in K–12 education?	<i>23</i>
Chapter 2: RREV Coaching	26
<i>Background and Purpose</i>	<i>26</i>
Evaluation questions	<i>26</i>
<i>Methods</i>	<i>26</i>
<i>Theory of Change on RREV Coaching</i>	<i>27</i>
Problem statement	<i>27</i>
The role of a RREV coach	<i>27</i>
How RREV coaches fulfill their role	<i>28</i>
<i>Findings</i>	<i>29</i>
How prepared did RREV coaches feel in their ability to serve, and how did they envision their role?	<i>30</i>
How did RREV coaches implement the various elements of the Coaching Framework throughout the school year?	<i>32</i>
How did RREV coaches support Adopter Schools throughout the year from the perspective of Adopter Schools?.....	<i>34</i>
How has RREV coaching compared to other coaching models pilot teams have encountered?.....	<i>36</i>

What were the successes and challenges experienced by coaches and Adopter Schools? 37
 Challenges 40
Recommendations 41
 Coaches’ recommendations to Maine DOE 41
 Adopter Schools’ recommendations for Maine DOE 42

Chapter 3: Educator Collaboration 43

Background and Purpose..... 43
Methods..... 43
Findings..... 44
 How do Maine educators like to collaborate within schools and across the state? 44
 What challenges do Maine educators face that inhibit collaboration? 45
 How has EnGiNE promoted collaboration among Maine educators, and what feedback do Maine educators have on EnGiNE?..... 46
 How can Maine DOE best support educator collaboration going forward? 48

Innovative Implementation Guides 52

Executive Summary

Introduction

In June 2020, the Maine Department of Education was awarded a \$16.9 million grant from the U.S. Department of Education’s Rethink K–12 Education Models program to implement the Rethinking Responsive Education Ventures (RREV) program. The overarching purpose of RREV is to promote innovation and systemic change in Maine schools so that all students across the state have access to high quality and responsive learning opportunities.

RREV promotes the creation, implementation, and dissemination of innovative education models by providing funding and support to school administrative units (SAUs), referred to as “Adopter Schools,” to pilot new educational approaches. Between August 2021 and March 2023, Maine DOE awarded funding for 45 RREV pilots across five rounds of funding. These pilots fall into four broad categories of innovative education models:

- Extended Learning Opportunities
- Multiple Pathways
- Online Learning
- Outdoor Education

ICF is a research firm hired by the Maine Department of Education (Maine DOE) to provide an external evaluation of RREV that documents lessons learned from program implementation and assesses the extent to which it has changed the educational environment in Maine. This evaluation report is the third evaluation ICF has submitted, and builds on our previous two annual reports, which focused on the development of the innovative pilot programs (Year 1) and their implementation at Adopter Schools (Year 2). This report focuses on the systemic changes that RREV brought to Maine and how Maine DOE can help sustain and expand on these changes going forward. The report is divided into three chapters:

- **Chapter 1** describes how Adopter Schools are working to transition the RREV pilots into longer-term programs and to derive lessons for supporting effective innovative models in education.
- **Chapter 2** describes how the RREV coaching model contributed to systemic changes at Adopter Schools and discusses how this model could support future initiatives.
- **Chapter 3** describes RREV’s impact on educator collaboration and discusses how Maine DOE can continue to support collaboration going forward.

While the focus of this report is on implications for Maine DOE, Appendices 1–4 provide more in-depth guidance for individual schools or districts interested in implementing an innovative education model based on data gathered through our evaluation.

Key Findings

Sustainability of innovative education models

The vast majority of Adopter Schools will continue implementing their innovative models even after RREV funding ends, and many have expanded beyond their original ambitions.

Almost all pilots (97%) expressed confidence they would sustain the innovative programs developed and piloted through RREV even after program funding expired. In fact, almost a quarter of schools (24%) said they had already expanded their pilot beyond their original plan. Adopter Schools described institutional changes they had made to ensure long-term sustainability of their innovations, such as adjustments to curriculum, scheduling, staffing, credit, and graduation requirements. Perhaps more importantly, Adopter Schools described cultural changes from the pilot, including support from teachers and administrators for taking risks and trying new approaches. Actually, most pilot teams (82%) said commitment from school or district administrators contributed “a great deal” to their pilot’s success and sustainability.

Community partnerships served as an important enabling factor to support pilot implementation and help ensure financial sustainability. Nearly all pilots (93%) reported that community partnerships contributed to the success and sustainability of their pilots, especially by providing equipment and learning spaces for innovative activities. Qualitative data described the diverse and pivotal contributions made by nonprofit organizations, local businesses, and government agencies during pilot implementation—ranging from one-time donations to broad, ongoing collaboration to benefit students and the wider community.

The additional support provided by the sustainability award was viewed by recipients as critical for sustaining or scaling pilot activities. All attendees at the Sustainability Symposium expressed overall satisfaction with their experience, including 57% who were “very satisfied.” Attendees credited the symposium for helping them understand challenges that could undermine sustainability, develop a realistic sustainability plan, and establish community partnerships, among other benefits. During site visits, RREV teams called the sustainability awards “absolutely essential” and “very strategic” for continuing pilot implementation and planning the transition to a longer-term program.

RREV coaching

Most RREV coaches were well-prepared to fulfill their role. Coaches helped schools develop logic models and performance objectives, build administrative buy-in for their pilots, and brainstorm ways to promote innovative thinking at their schools. RREV coaches expressed high satisfaction with the support they received from Maine DOE to fulfill their role, especially the summer coaching retreat, which provided them an opportunity to familiarize themselves with the coaching framework and collaborate with each other.

Adopter schools appreciated the objective, third-party perspective of RREV coaches. Pilot teams appreciated the unique role RREV coaches played, especially their external perspective from outside their school management structure. Pilot teams told ICF they could be vulnerable and honest with RREV coaches, which helped them address the challenging process of systemic change. Pilot teams said RREV coaches offered a “refreshing” perspective that helped them think more deeply about their goals and how they could accomplish them.

Educator collaboration

Most educators were satisfied with their opportunities to collaborate, but a substantial minority desires more time and opportunities for collaboration. Almost three-quarters (74%) of educators were satisfied or very satisfied with collaboration opportunities *within* their building, and 70% were satisfied with opportunities to collaborate with colleagues *outside* their building. However, there was still a sizable proportion of educators who were unsatisfied with their collaboration opportunities within their building (27%) or with colleagues outside their building (31%). By far the most common obstacle was lack of time to collaborate, which was described by 88% of educators as either a major or minor obstacle.

Inoperability between Google and Microsoft platforms inhibits collaboration between schools and Maine DOE. EnGiNE has potential to address interoperability between Google and Microsoft, but school-based teachers are reluctant to move away from Google. In focus groups, we learned that school-based educators almost all use Google applications for collaboration, whereas Maine DOE staff use Microsoft, and that this difference creates technical difficulties when sharing documents or otherwise working in shared virtual space. While EnGiNE allows for more collaboration between school-based educators and Maine DOE staff, most teachers did not express a need to move away from Google for collaborating with their colleagues, especially when they were already accustomed to its features and capabilities.

RREV could be a springboard for greater collaboration among educators across the state, especially with schools interested in their specific innovative model or experience with systemic change more generally. Maine DOE could play a key role in fostering this collaboration by connecting interested schools with pilot teams with relevant experiences, or fostering targeted communities of practice for educators interested in specific innovations. Maine DOE could use EnGiNE to promote these connections, for example by hosting “Ask Me Anything” online chats with pilot teams, where educators from across the state could probe them about their experiences and reflections. Maine DOE could also provide more learning tours and other events where educators with shared interests could meet and learn from each other.



Bucksport Middle School

Introduction

Background and Theory of Change

In June 2020, the Maine Department of Education (Maine DOE) was awarded a \$16.9 million grant from the U.S. Department of Education's Rethinking K–12 Education Models program to implement the Rethinking Responsive Education Ventures (RREV) program. RREV provides funding and coaching to schools to support the creation, implementation, and dissemination of education models that are responsive to student and community needs and innovative in their approach to teaching and learning. Ultimately, RREV seeks to promote systemic change in Maine schools, such that responsive and innovative education models are continuously developed and refined in response to emerging student needs so that all students across the state have access to high quality and responsive learning opportunities. Exhibit 1 provides a visual logic model of RREV's theory of change.

EXHIBIT 1. RREV LOGIC MODEL

Resources	Strategies & Activities	Outputs	Short-Term Outcomes	Long-Term Outcomes	Impact
<ul style="list-style-type: none"> Maine educators' ideas and experience Maine's natural resources and environment \$16.9M grant from the U.S. Department of Education Rethinking K–12 Education Models program Institutional support from the Maine Department of Education 	<ul style="list-style-type: none"> Implement Innovative Mindset Pilot Development (IMPD) to help educators strengthen knowledge of design thinking and create innovative and responsive education models Provide \$250,000 awards to school administrative units (SAUs) to implement innovative and responsive education models Offer awardees services of a RREV coach to support pilot implementation Host the EnGiNE online community of practice where educators post pilot plans and resources 	<ul style="list-style-type: none"> # of IMPD courses # of educators who complete an IMPD course # of innovative education models created # of SAUs that receive RREV awards # of RREV coaches hired # of teachers involved in an innovative education model # of students served by an innovative education model # of pilot plans posted on EnGiNE # of educators who are active on EnGiNE 	<ul style="list-style-type: none"> Improved educator knowledge of design thinking Improved educator attitudes toward innovation Increased SAU support for innovative ideas and programs for education Increased parent satisfaction with availability of responsive education models Increased student access to innovative and responsive education models 	<ul style="list-style-type: none"> Maine educators integrate design thinking and innovation in their regular practice Maine schools systematically support and reward innovative and responsive educators Increased parent satisfaction with their children's education Improved student academic achievement and engagement 	<ul style="list-style-type: none"> There is a culture of innovation in Maine schools where responsive education models are continuously developed, refined, and disseminated All students across Maine have access to high quality and responsive learning opportunities

Program Description

RREV supported the *creation* of innovative education models through the **Innovative Mindset Pilot Development (IMPD)** courses, which were offered at no cost to educators through Maine Institutes of Higher Education between fall 2020 and summer 2022. During IMPD courses, educators learned how to apply design thinking concepts and ultimately created a pilot plan that outlines the activities and expected outcomes of an innovative education model. ICF described the implementation and outcomes of IMPD courses in its Year 1 evaluation report.

RREV supported the *implementation* of innovative education models through awards made to **Adopter Schools**. A “full” RREV award provided up to \$250,000 to a school administrative unit (SAU) to pilot an innovative education model that was developed during an IMPD course. An “Accelerator” RREV award provided up to \$100,000 to adapt an existing innovative education model for the Adopter School’s specific context. To be eligible for a RREV award, at least one teacher and one administrator from an SAU must have completed an IMPD course and developed a full pilot plan. At least 67% of RREV funding must be applied toward direct instruction and may be used for expenses such as infrastructure development, purchase of materials or services, or staff salaries and benefits. In addition to financial resources, RREV also supports implementation of pilot models by offering Adopter Schools access to a RREV coach, who is an individual with expertise aligned with the innovative model (e.g., Outdoor Education) or extensive experience with the RREV program. RREV coaches meet with educators at their Adopter Schools to discuss opportunities and help solve challenges as they implement their pilot plan.

RREV supported the *sustainability* of innovative education models through the provision of **sustainability awards**. These awards, which provided up to \$100,000 in additional funding for full awardees and up to \$40,000 for Accelerator awardees, provided resources for assets and planning needed to continue implementing innovative models over time. To receive a sustainability award, pilot teams attended a Sustainability Symposium and developed a sustainability plan that described specific action steps they would take during the near, medium, and long-term to sustain their innovative model.

RREV supported the *dissemination* of innovative education models through an online community of practice called **EnGiNE**. Pilot plans and other resources—such as curricula, class activities, and assessments—are posted on EnGiNE by educators, administrators, RREV coaches, and Maine DOE staff. EnGiNE also provides a place for educators throughout the state to discuss their ideas and experiences with innovative education. The resources and discussions hosted on EnGiNE will persist even after RREV grant funding has been spent and thus may serve as an ongoing resource supporting a culture of innovation in Maine schools.

Elements of RREV

Innovative Mindset Pilot Development (IMPD) Course: Rethinking Responsive Education Ventures (RREV) supported the creation of innovative education models through the IMPD courses, which were offered at no cost to educators through Maine Institutes of Higher Education. During an IMPD course, educators learned how to apply design thinking concepts to address needs and seize opportunities at their school. Throughout the IMPD course, participants conceptualized and refined an innovative educational model that was responsive to their local context. Ultimately, IMPD participants created a detailed pilot plan that outlines the activities and expected outcomes of their innovative education model.

Adopter Schools: RREV supported the implementation of innovative education models through awards made to Adopter Schools. A RREV award provides up to \$250,000 to a school administrative unit (SAU) to pilot an innovative education model that was developed during an IMPD course. To be eligible for a RREV award, at least one teacher and one administrator from an SAU must have completed an IMPD course and developed a full pilot plan. At least 67% of RREV funding must be applied toward direct instruction and may be used for expenses such as purchase of materials or services and staff salaries and benefits.

RREV Coaching: RREV also supported implementation of pilot models by offering Adopter Schools access to a RREV coach, who is an individual with expertise aligned with the innovative model (e.g., Outdoor Education). A RREV coach meets with educators at the Adopter School to discuss opportunities and help solve challenges as they implement their pilot plan.

EnGiNE: RREV supported the dissemination of innovative education models through an online community of practice called EnGiNE. Pilot plans and other resources—such as curricula, class activities, and assessments—are posted on EnGiNE by educators, administrators, RREV coaches, and the Maine Department of Education (Maine DOE) staff. EnGiNE also provides a place for educators throughout the state to discuss their ideas and experiences with innovative education. The resources and discussions hosted on EnGiNE will persist even after RREV grant funding has been spent and thus may serve as an ongoing resource supporting a culture of innovation in Maine schools.

Sustainability Support: One overarching goal of RREV is for Adopter Schools to continue implementing their pilot programs beyond the length of the RREV grant. To support this, Maine DOE offered Adopter Schools the opportunity to participate in a Sustainability Symposium, where Adopter Schools developed a structured sustainability plan that identified the ways in which they can sustain the programs for the next year, 5 years, and 10 years. Adopter Schools who participated in this Symposium were awarded an additional year of funding of up to 40% of their initial RREV award to help sustain their programs.

Evaluation Goals

During the first year of the RREV grant, ICF's evaluation was focused on the development of the innovative pilot programs, including a comprehensive assessment of the IMPD course. During the second year, ICF focused on pilot implementation, including in-person site visits to Adopter Schools and data collected from pilot team members, teachers, students, and parents. For the third year of the RREV grant, our evaluation report focuses on the systemic changes that RREV brought to Maine and how Maine DOE can help sustain and expand on these changes going forward.

This report is divided into three chapters, each of which addresses a different element of systemic change ushered in by RREV. Within each chapter, the report describes our evaluation methods and presents answers to topic-specific research questions.

Chapter 1 explores how schools and districts are working to **transition the RREV pilots into longer-term programs** and to derive lessons for supporting effective innovative models in education. This chapter addresses the following research questions:

1. To what extent have schools implemented their RREV pilots as planned and sustained or expanded their innovations?
2. How are RREV pilots contributing to positive outcomes for students, teachers, and communities?
3. How are RREV pilots contributing to systemic and sustainable change at Adopter Schools?
4. How effective have the sustainability awards been for supporting RREV teams in maintaining or scaling pilot activities?
5. How could Maine DOE keep supporting innovative learning models in K–12 education?

Chapter 2 is focused on how **RREV coaches** have supported Adopter Schools throughout the RREV grant, and addresses the following research questions:

1. How prepared did RREV coaches feel in their ability to serve, and how did they envision their role?
2. How did RREV coaches implement the various elements of the Coaching Framework throughout the school year?
3. How did RREV coaches support Adopter Schools throughout the year from the perspective of Adopter Schools?
4. How has RREV coaching compared to other coaching models that pilot teams have encountered?
5. What were the successes and challenges experienced by coaches and Adopter Schools?



Bath Middle School

Chapter 3 is focused on **collaboration among educators** at Adopter Schools, including their use of **EnGiNE**. This chapter addresses the following research questions:

1. How do Maine educators like to collaborate within schools and across the state?
2. What are the key challenges that inhibit collaboration among Maine educators?
3. How has EnGiNE promoted collaboration among Maine educators, and what feedback do Maine educators have on EnGiNE?
4. How can Maine DOE best support educator collaboration going forward?

Chapter 1: Sustainability of Innovative Education Models

Background and Purpose

From 2021 to 2023, Maine DOE awarded RREV funding to SAUs to implement 44 pilots focused on Outdoor Education, Extended Learning Opportunities, Online Programs, or Multiple Pathways. ICF's 2022 and 2023 evaluation reports focused on the development and implementation of these pilots.

The focus in this chapter is to understand how schools and districts are working to transition the RREV pilots into longer-term programs and to derive lessons for supporting effective innovative models in education. Specifically, this chapter addresses five main evaluation questions:

- **To what extent have schools implemented their RREV pilots as planned, and sustained or expanded their innovations?** An assessment of the status of the pilots at the end of the funding period provides an early snapshot of short-term sustainability and a descriptive understanding of the ways in which the RREV program has changed the landscape of K–12 education in Maine.
- **How are RREV pilots contributing to positive outcomes for students, teachers, and communities?** While it is too soon to draw conclusions about the long-term impact of RREV pilots, especially those from later award rounds, the emerging results are encouraging. Beyond their immediate effects on program beneficiaries such as students and teachers, positive findings are also key to the long-term sustainability of innovative models because they demonstrate the value of investing time and resources in innovation and systemic change.
- **How are RREV pilots contributing to systemic and sustainable change at Adopter Schools?** RREV awards were meant to kickstart innovation in Maine schools, but achieving systemic change requires steps to maintain and sustain new approaches beyond the pilot period. These steps fall into three categories:
- **Changes in the teaching and learning culture.** Culture shifts help new learning models gain traction. Steps to build support and momentum for the new models include incentives and professional development to improve teachers' motivation, skills, and confidence; dissemination to build administrator commitment and increase parent and community engagement; and new leadership structures for validation and oversight.
- **Changes in personnel, practices and policies** that are formally adopted within a school or district to institutionalize structures and approaches introduced or adapted by RREV. These "institutional changes" include adding or adapting staff positions; implementing new curricula or learning pathways; changing the school schedule; and modifying other policies governing the behaviors of students, teachers, administrators, volunteers, or others in the community.
- **Changes to improve financial sustainability.** Schools are identifying the funding and in-kind resources necessary for sustaining new learning programs. Aside from



Belfast Area High School

integrating new program costs into the regular budget cycle, tactics for establishing financial sustainability include developing broader regional support, generating new revenue streams, and counting on community organizations to donate funds, supplies, expertise, and time to create opportunities for students.

- **How effective have the sustainability awards been for supporting RREV teams in maintaining or scaling pilot activities?** Extra support provided to a subset of 25 pilots included participation in a Sustainability Symposium, development of a structured sustainability plan, and an additional year of funding of up to 40% of the initial RREV award.
- **How could Maine DOE keep supporting innovative learning models in K–12 education?** Actions following the RREV award funding period might include providing connections among schools or programs with similar activities and models, advocating for state or federal changes in education requirements (e.g., related to standardized testing and funding), and providing targeted support through coaching or other means.

The following sections present the data sources and methods, and the findings that address each evaluation question.

Methods

The sustainability study relied on a mixed-method approach to address the evaluation questions. The scope included the 41 active RREV pilots with a particular focus on the 25 pilots supported by sustainability awards during the 2023–24 school year. Five data sources and methods provided the basis for the findings:

- **Survey of RREV pilot teams.** In April 2024, ICF administered a mostly closed-ended survey to each RREV point of contact (POC) exploring issues related to sustainability and received responses from 39 pilots. The open-ended prompts elicited recommendations for how to better sustain these new programs in schools and support innovation.
- **Surveys of students and families.** Two other short surveys administered by ICF in the spring of 2024 included one for students at pilot schools and another with similar questions for their families. These explored satisfaction and general perceptions about the pilot experience, with responses from 1,310 students and 527 parents and guardians.
- **Performance objectives data.** At the beginning of the school year, every RREV pilot worked with their RREV coach to define at least two performance objectives for their pilot, including at least one related to student educational growth. Pilots had discretion to choose performance objectives appropriate to their context and, in addition to the mandatory educational growth objective, measured a variety of indicators including student engagement, attendance, and social-emotional wellness. At the end of the school year, each pilot submitted data to the evaluation team to show progress toward their defined objectives.
- **Desk review of sustainability plans.** A structured review of the 25 standard sustainability plans developed as part of the sustainability award process enabled ICF to explore common themes across pilots related to facilitating factors and challenges; planned changes in policies, practices, and structures; and essential resources needed for maintaining or expanding the new program.
- **Site visits.** ICF teams visited eight schools during the 2023–24 school year to explore the planning and implementation experiences of nine pilots in more depth.¹ These visits included interviews with RREV team members and other administrators, teachers, students, and/or community partners as appropriate to develop a qualitative understanding of the implementation experience and factors affecting each pilot's sustainability.

Separate chapters focus on the coaching services provided by Maine DOE and on RREV's new online hub called EnGiNE; so these topics receive limited attention in this chapter.

¹ One of the sites selected, Belfast Area High School, had two separate RREV pilots under implementation.

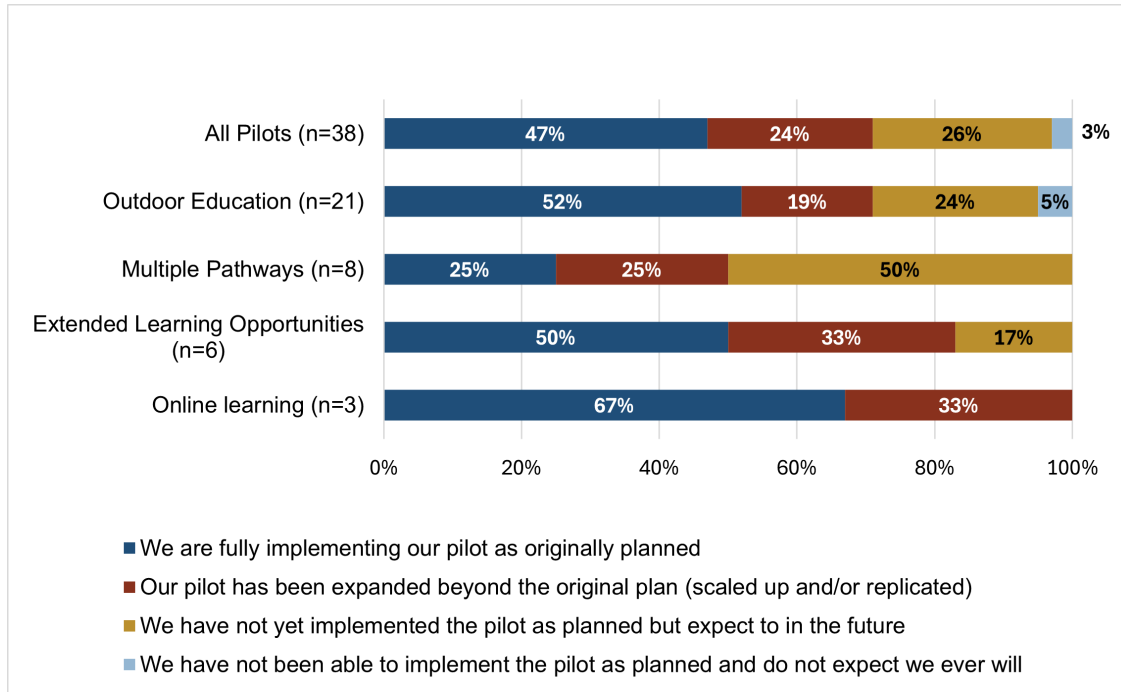
Findings

To what extent have schools implemented their RREV pilots as planned, and sustained or expanded their innovations?

Nearly three-quarters (71%) of the POC survey respondents indicated that they are either fully implementing their pilots as planned (47%) or have expanded beyond their original plan (24%). About a quarter (26%) have not yet implemented the pilot as planned but expect to in the future, and only one school indicated that they do not expect to ever implement the pilot as planned (Exhibit 2). There were some notable variations in responses based on the category of RREV award and whether the pilot had received additional support through the sustainability award:

- More than half of the pilots that responded to the survey focused on Outdoor Education (21 of 38), and these were somewhat more likely to report that they were fully implementing their pilots as planned (55% versus 47%).
- Multiple Pathway pilots tended to need more time for their initial implementation. They were the least likely to report that they were fully implementing their pilot as planned (25%), but two of these pilots had expanded beyond the original plan (25%) and the rest expected to implement the pilot as planned in the future (50%).
- The small set of pilots focused on Extended Learning Opportunities (6) or Online Learning (3) were more likely to have expanded beyond the original plan (both 33%).
- Pilots that received the sustainability award were also more likely to have expanded beyond the original plan (30% compared to 24% among all pilots).
- Of the 11 pilots that were not yet implemented as planned, most (9) were from the later rounds of awards: Round 5 (3), Round 4 (3), and Round 3 (3).

EXHIBIT 2. EXTENT OF PILOT IMPLEMENTATION (N=38)



Almost all pilots expressed confidence that their innovative model would continue even after their RREV award funding ceased. Administrators and teachers interviewed during site visits described the lasting changes and longstanding benefits they expected to endure for the foreseeable future (Box 1). Survey respondents were asked to rate their confidence that their main pilot activities would continue in 2024–25 and beyond. Nearly three-quarters of respondents (74%) were “very confident” that activities would continue, and another 15% were “somewhat confident.” Fewer respondents were “a little confident” (8%) their pilot activities would continue next year, and only one school (3%) did not expect to continue their innovative model next year.

BOX 1. PERCEPTIONS FROM TEACHERS AND ADMINISTRATORS ON THE LASTING IMPACT OF THE RREV AWARDS

“Some of these activities were already being tried a bit on a smaller scale, but this pilot gave us momentum and shaped our identity now for who we are.”

“Things are just going to get better from this point. The more people know about this building and use it ... it will get better by the year.”

“Ten years from now I see the beginning of Mexico [ME] and Rumford being the bee capital in Maine. ... I really think we can do this.”

“There is a culture change. The expeditions get teachers energized and engaged. Teams are getting inspired and getting competitive.”

Source: RREV Site Visits

Pilots were expanding by reaching more students or adding learning activities in the same schools, spreading programming to additional schools, or creating a regional hub. The survey data, sustainability plans, and site visits illuminated the broad range of ways that expansion was being implemented or planned, such as the following examples:

- Adapting the curriculum developed for middle school students to use for grades K–5.
- Focusing on the same groups of core content teachers and campus students, but continuing efforts to add activities and improve the quality of instruction.
- Scaling up from engagement at one school to focus on all 10 schools in the district (PreK–12).
- Addition of a learning lab to serve the school and community members.
- Creating joint projects between the high school, middle school, and elementary school in the outdoor experiential classroom zone.
- Fully funding a new remediation position to scale the program for at-risk students transitioning from 8th grade to the high school and for current high school students struggling with credit deficiencies and truancy.
- Adding floating classrooms to provide students hands-on access to Penobscot Bay
- Creation of an edible schoolyard space around existing greenhouse.
- Adding a micro-award component so that teachers and/or students can propose and implement their own projects for improving the school environment and learning experience.
- Planning to establish a satellite aquaculture career and technical education program to make hands-on learning opportunities available to students from other high schools in the county.

- Having all students at school visit local contractors or businesses involved in trades and technical fields.
- Continuing to integrate critical thematic content across all grades, such as adding activities related to local waterways or to the Passamaquoddy language and cultural values.

How are RREV pilots contributing to positive outcomes for students, teachers, and communities?

Overall, evaluation data show a recurring theme of transformation at RREV-supported schools. Input from administrators and teachers described a shift from initial skepticism and indifference as yet “another temporary funding scheme” was tried locally toward growing energy around new viable alternatives to the bricks-and-mortar model that places too much emphasis on seat time. Interviews elicited enthusiasm, optimism, and determination from educators as the RREV models continued to gain momentum and started to yield tangible results (Box 2).

BOX 2. THE TRANSFORMATION STARTED BY RREV: REFLECTIONS FROM ADMINISTRATORS & TEACHERS

“Kids want to come to school now.”

“This is how we raise human beings.”

“The outdoors should be a viable place for learning. ... I’m all about spreading this to as many places as possible. If public schools are not providing a strong educational environment that supports health and well-being, then what are we doing?”

“Not only are we getting at-risk students engaged in school, they are also able to access counseling and health and food services, and their parents are able to go to work.”

Source: RREV Site Visits

Emerging evidence indicates that students, teachers, families, and communities were benefiting from the RREV pilots. Schools and districts were working to transition their pilots into longer-term sustainable programs, and the available data show promising signs that increased access to high quality and responsive learning opportunities yields positive results related to student engagement, academic growth, and socio-emotional wellness among other outcomes.

Better student engagement and improved attendance were common themes across data sources. During the 2023–24 school year, 24 pilots included a performance measure related to student engagement and attendance. Of these, 15 pilots from all RREV categories had met targets set for increasing enrollment in alternative learning pathways and improving student engagement and attendance. In addition to these performance objective data, many pilots

collected administrative and student survey data that showed promising trends for student engagement at pilot schools, which educators qualitatively attributed to RREV-supported activities. For example, office discipline referrals decreased 52% at Maine School Administrative District (MSAD) 61's Lake Region Middle School and 84% of surveyed students at regional school unit (RSU) 25's Bucksport Middle School reported increased positive engagement. Site visits conducted by the evaluation team during the 2022–23 and 2023–24 school years highlighted similar findings, with administrators referring to declining dropout rates and a reduction in truancy and teachers describing how students who had failed in a traditional classroom had become more motivated, attending school more regularly, “doing fantastic work” and “getting great grades.”

This increase in motivation and engagement is likely contributing to academic growth. In ICF's 2024 survey of students, about two-thirds of 1,282 respondents (64%) agreed that participating in pilot activities “helped me learn this year.” ICF's 2024 family survey corroborated this finding, with 83% of 389 responding parents and guardians agreeing that “my child learned a lot” participating in pilot activities. Some RREV performance objectives focused on student-related educational growth, and 31 of these targets were met for 2023–24 by 25 pilots, typically by demonstrating that students mastered academic content by participating in new learning pathways. For example, the Falmouth Navigator Program used pre- and post-assessments of student learning in science and social science to measure significant growth in students' knowledge of the Wabanaki history and of the Presumpscot River ecology.

Students and parents reported a happier learning environment with increased mental and emotional wellness. The vast majority of students across pilots (79%) said they were “glad” they participated in pilot activities this year and 76% said that they liked their pilot activities overall. More than half (55%) of 1,286 responding students agreed that participating in pilot activities “helped me be a happier person,” and most (81%) of the 389 responding parents agreed that participating in pilot activities “improved my child's mental and emotional well-being.” Feedback from students in the Outdoor Education models included that the pilot “helped my anxiety and depression,” “made me happy,” and “helped me discover the best parts of me.” These sentiments were echoed across pilot categories, with Extended Learning Opportunities students noting that “our voices seemed to matter this year,” and “we were excited to take charge of our own learning,” and those in Online Learning or Multiple Pathway pilots also describing how the experience restored their enjoyment of learning and contributed to greater levels of confidence, happiness, and self-esteem. Some schools, such as those in RSU 9 (Mt. Blue), RSU 20 (Searsport), RSU 21 (Kennebunk), and RSU 35 (Marshwood) Great Works School, used formalized assessments to track positive impacts for students' social-emotional development.

Future benefits for school communities are likely to accrue through enhanced partnerships and durable facilities that align learning more closely with local workforce needs and bring community members together. Connections with local agencies, businesses, and community organizations enabled students to learn from subject matter experts in their area and gain hands-on experience with local industries. For example, RSU 71 (Belfast) Area High School Marine Institute added 60 placements for students during the 2022–23 school year to complete student internships, job shadowing, and paid work experience. Many pilots used some of their award resources to build new structures that take advantage of their

surroundings and make them accessible to students of all abilities and their families. Examples include new buildings with combined greenhouse and kitchen capabilities at Bucksport Middle School and School Union 103's Jonesport-Beals High School, an outdoor cabin built by the Maine Cabin Masters at MSAD 11's Gardiner Area High School, and an Americans with Disabilities Act-compliant trail for School Union 76 (Deer Isle-Stonington).

How are RREV pilots contributing to systemic and sustainable change at Adopter Schools?

RREV's aspiration to help ensure that all students have access to high quality and responsive learning opportunities calls for districts and schools to make fundamental, systemic changes. First, new commitment and skills are needed by all those involved to take learning beyond the traditional classroom—outside, online, and into the community. This requires *transforming the learning culture* among administrators, teachers, students, and the broader community to build support and momentum for new learning models. Second, many approaches introduced or expanded by RREV rely on the formal adoption of new staff roles, curricula, schedules, and other policy revisions. These *institutional changes* are often needed to transition from a temporary award-funded pilot to a longer-term sustainable learning model. Third, districts and schools have made changes to improve *financial sustainability* by identifying funding and in-kind resources to maintain or expand their RREV pilots. The sections below examine how schools are navigating these three types of changes—cultural, institutional, and financial.

Changes in teaching and learning culture

The most important factor supporting the implementation and sustainability of RREV pilots was commitment from school or district administrators to the pilot. POC survey respondents rated the extent to which different factors helped support the implementation of their pilot, and almost all (95%) said commitment from school or district administrators helped them implement their pilot, including 82% who said this helped them “a great deal” and 13% who said it helped “a little.” Five POC survey respondents identified “inadequate engagement or buy-in from school administrator(s)” as a specific challenge for their pilots. Qualitative comments in survey responses and site visits underscored the strategic importance of Maine DOE's requirement that an administrator be included on each RREV pilot team. Reported benefits of the support by a school or central office administrator included

- enabling the core team of teachers to take more risks and “think bigger,”
- providing advocacy for schedule or credit changes to the school board and broader community,
- allowing for and informing more structured professional development for teachers to help transform teaching practices, and
- pushing to integrate financial support to cover new staff positions or other costs into the school budget cycle.

Most pilots (92%) reported some positive support through professional development related to the pilot. This included both sessions offered broadly to RREV pilots by Maine DOE and professional development funded by individual pilots for their teachers and staff. While just

over a third of survey respondents (37%) indicated that professional development helped “a great deal,” another 55% reported this helped “a little.” The survey asked respondents to rate their overall satisfaction with the professional development opportunities available, and more than half (56%) were “very satisfied.” More than a third (38%) were “somewhat satisfied.” The remaining two pilots (5%) that were “not at all satisfied” both lost access to a RREV coach near the start of their award period, which might have been a contributing factor.

Incentives and professional development were designed to support teachers who must develop and deliver a new curriculum and help students and their families understand the changes. Nearly three-quarters (74%) of respondents indicated that incentives for teachers to participate in pilot activities helped “a great deal” (8%) or “a little” (66%), and nine pilots (23%) identified the lack of teacher interest to participate in the program as a specific challenge. Some schools provided stipends to teachers. For example, RSU 89 (Katahdin) schools offered stipends for 20 staff members to participate in the Whole Staff Cohort focused on teaching outside, staff wellness, and reflective journaling, which led to increased teacher participation in outdoor teaching and learning. Similarly, Lake Region Middle School and Deer Isle-Stonington Elementary School offered stipends for teachers to write place-based lesson plans. Teachers also received professional development to increase their motivation for and abilities to develop and deliver new curricula. For example, Bucksport Middle School offered a dedicated summer institute for teachers to learn how to cover needed content while using the new Applied Learning Lab, and the Falmouth Navigator Program integrated professional learning time into the new teacher induction program.

Resources to support teachers increased as in-house banks of curricula were established and instructional coaching became available. Katahdin schools, Agnes Gray Elementary School and Lake Region Middle School were establishing local libraries of lesson plans for Outdoor Education. Deer Isle-Stonington Elementary School planned to develop a calendar of projects that would make the best use of the greenhouse and edible garden during the year, with some projects attached to a lesson plan as more of these are developed. Bucksport Middle School, RSU 1 (Bath) Middle School, and Katahdin schools allocated funds for instructional coaching to help teachers create or adapt lessons plans throughout the school year.

Successful pilots invested in intentional communication strategies and community engagement activities to spread the word about new learning models, build support, and broaden their impact. Several schools presented periodic updates to their local school boards. The Falmouth team was developing a page for the district website and a regular newsletter. The new Applied Learning Lab at Bucksport Middle School hosts regular celebrations of student learning with community partners, parents, students, and educators. Gardiner Area High School planned to build family support by offering experiential learning opportunities on Saturdays to allow for more parent interaction and increase support for outdoor learning.

Schools were also developing or exploring leadership arrangements for their new learning programs to provide validation and oversight. The new Outdoor Education program in Deer Isle was working with the superintendent to create a stipend-supported place-based learning leadership team. St. George’s K–12 Career and Technical Education (CTE) Program planned to create a CTE/Makerspace Board to ensure there would always be an organized group advocating for and supporting the program. The envisioned roles of this board



Katahdin Schools

include operating the annual fundraising campaign; conducting community outreach; and liaising with public and industry leaders at the national, state and district levels, with direct engagement by the superintendent and school board. These roles are still being refined, but as of December 2023, the St. George School Fund to support the new CTE/Makerspace building had raised over \$2.7 million.

Changes in personnel, practices, and policies

Emerging institutional changes at pilot schools included adjustments in curricula, scheduling, staffing, credit and graduation requirements, and other policies. Formal curricula revisions aimed to improve student engagement and academic outcomes, provide practical skills and connections, and boost socio-emotional health. Adjustments in school schedules were designed to enable students to engage more fully in innovative learning programs and for teachers to have time during the school day to rethink lessons and plan collaboratively. Changes in school staffing were reported as critical for sustaining new innovative learning programs beyond their pilot phase. Other policy changes were underway to support the operation and maintenance of new facilities and enable richer learning experiences and community engagement. These various types of institutional changes are explored below with examples.

Many of the curricula changes focused on creating a more integrated learning experience across academic content areas and across grades and on connecting students with relevant experiential learning opportunities. Schools were establishing interdisciplinary academic pathways and collaborative teaching teams to immerse students in place-based lessons. Typical units covered some combination of math, social studies, English language arts, and science and technology content standards with a few also including art and wellness components. For example, the Navigator Program in Falmouth planned to offer interdisciplinary units for students in grades K–9 that focus on the common theme of local waterways and deepen understanding of the Wabanaki culture. At Bath Middle School, students were immersed in interdisciplinary learning expeditions comprising case studies and activities taught collaboratively by core content teachers on a topic of interest—such as theater, food trucks, and ocean sustainability.

Hands-on, outdoor, and/or project-based elements were being added to the curriculum to develop knowledge and skills with real-world applications. Three examples include a new on-campus blacksmithing program at the Maine Academy of Natural Sciences, a new internship requirement for students completing the marine studies class as part of the Belfast Area High School Marine Institute, and the establishment of a replica ancient Viking longhouse in Searsport to serve as an outdoor classroom for middle and high school students during the school year and summer.

Schedule shifts included prescribed changes in class blocks and planning periods as well as flexible options to customize learning. Both Bucksport Middle School and Bath Middle School changed the structure of their school days to allow grade-level teaching teams the ability to collaborate on curriculum design and deliver interdisciplinary units. Belfast Area High School moved to a block schedule to allow for local field trips to fit within one class period. To create a differentiated learning experience, some schools offered alternative schedules for students or provided activities outside of the regular school day. Lee Academy adapted its program to include both half- and full-day options to accommodate students who opt to complete needed coursework for college while also participating in immersive experiences in the Outdoor Leadership Program. Gardiner Area High School started to offer optional after-school make-up sessions for students struggling with reading issues or attendance. Belfast Area High School rearranged the school day schedule to allow for student release time in the afternoon as needed for participation in internships, job shadows, and other career experiences.

Newly hired educators played a vital role in successful pilot implementation, but staff turnover was a challenge for many pilots. Almost two-thirds of respondents (63%) indicated that new teaching or staff positions supported pilot implementation “a great deal” (39%) or “a little” (24%). However, when asked about challenges, 14 pilots (36%) selected the turnover of key personnel with institutional memory of pilot design and activities. The issue of turnover surfaced repeatedly during site visits, with administrators and teachers often transitioning to new roles between school years. As articulated by one administrator, “If something is not working at a school, this can motivate that school to take risks and try something different, but those problems are also likely to create burnout and cause educators to look at other opportunities.”

Sustainability plans described steps to add new roles more permanently that had been introduced through RREV award funding. For example, new positions expected to be funded through local budgets include an environmental literacy teacher at Portland High School

(Portland Public Schools) and a remote learning specialist at Bucksport High School. Some schools planned to reallocate responsibilities or attract different skill sets through recruiting and onboarding practices. Gardiner Area High School planned to add an experiential outdoor instructor as retirements occur in the science department. Falmouth planned to integrate professional learning time into the teacher induction program, possibly spreading this over a 2-year period.

Other institutional factors reported to affect pilot implementation included school policies related to scheduling, credit, and eligibility criteria. Almost half (45%) of the respondents indicated that school schedule changes for the pilot helped “a great deal” (29%) or “a little” (16%), and more than a quarter (28%) indicated that a restrictive school schedule or policies that limit program activities was a challenge they faced during implementation. About a third (34%) indicated that credit or eligibility policy changes related to the pilot had helped “a great deal” (16%) or “a little” (18%).

Schools were revising credit and graduation requirements to better address students’ interests and needs. These changes were designed to provide a sense of academic success, enable real-world connections and link students with local colleges. The Learning Intentionally Online Now (LION) Semester program at Belfast Area High School enabled students to earn 0.5 elective credit from their summer experience to strengthen the transition between 8th and 9th grade. The RSU 60’s Noble FLEX Program enabled some students in upper grades to enroll in local community colleges and earn college credits that also counted toward high school graduation.

Policy changes were also being explored to support the operation and maintenance of new facilities and enable richer learning experiences and community engagement. For example, schools with remote or hybrid programs in RSU 60 (Noble) and RSU 34 (Old Town) were adapting district attendance policies to honor outside the box student efforts and track nontraditional indicators. Alternatives to requiring in-person attendance included using remote daily check-ins with a case manager during set times to focus on goal setting and accountability and documenting regular progress in remote learning with evidence. Lake Region Middle School planned to update the district’s Energy Conservation and Management Policy to enable the heating of the greenhouse throughout the winter. Other common policy changes being explored by schools included streamlining procedures for enlisting volunteers, particularly during the summer, and updating district policies on food and the use of facilities to enable food grown at school to be used by the cafeteria and teachers.

Changes to improve financial sustainability

Aside from integrating new program costs into the regular budget cycle, tactics for establishing financial sustainability included developing broader regional support, generating new revenue streams, and counting on community organizations to donate funds, supplies, expertise, and time to create opportunities for students. Details provided in the sustainability plans, site visits, and POC survey helped to build a nuanced understanding of how schools are identifying the funding and in-kind resources necessary for sustaining new learning programs. These approaches with examples are described below.

Broadening the program to serve more students and schools through regional collaboration allowed programs to tap into other schools’ budgets or to receive state

funding. The Brewer School Department established a pilot memorandum of understanding between its local alternative organizational structure and Bangor School Department to streamline administrative processes and financial transactions for making the remote-learning Nu Program available more broadly to students across the Penobscot Region. Belfast Area High School planned to establish a regional CTE program involving multiple high schools. Under this plan, an aquaculture satellite program would be housed at Belfast Area High School; direct state funding would support a teaching position; and all students from Belfast Area High School, RSU 3's Mount View High School, and Searsport District High School could participate in the Marine Institute to receive industry standard training and explore potential career opportunities

Schools also explored how to create new revenue streams by raising funds through student-supported businesses and special events. For example, the Outdoor Education programs at RSU 13's Oceanside High School and the Maine Academy of Natural Sciences were developing businesses to sell various garden produce, perennial plants, and/or honey and maple products. Bath Middle School launched a new theater program that includes an annual bake sale to defray costs. Belfast Area High School applied for a business license to sell kelp cultivated and harvested by students.

Community partnerships served as an important enabling factor to support pilot implementation and help ensure financial sustainability. Nearly all POC survey respondents (93%) reported that community partnerships to provide learning opportunities related to the pilot helped “a great deal” (61%) or “a little” (32%). Most (82%) also reported that community partnerships to provide equipment or learning spaces for the pilot helped “a great deal” (50%) or “a little” (32%). About two-thirds (65%) indicated that community partnerships to help maintain property or equipment for the pilot helped “a great deal” (39%) or “a little” (26%). Qualitative data described the diverse and pivotal contributions made by nonprofit organizations, local businesses, and government agencies during pilot implementation—ranging from one-time donations to broad ongoing collaboration to benefit students and the wider community (Box 3).

BOX 3. EXAMPLES OF COMMUNITY PARTNERSHIPS SUPPORTING RREV IMPLEMENTATION

- A local jewelry business, Fretz Design, donated about \$3,000 of tools and materials to Bucksport Middle School to use in the school's new Applied Learning Lab.
- RSU 84 East Grand School partnered with the Greater East Grand Economic Council to provide students and community members with increased opportunities through the business pathway in the school's new learning lab. The council will rent office space in the new learning lab and help with maintenance.
- Happy Hive Farm provided bees and ongoing support to establish the apiary for RSU 10's Meroby Elementary School and Mountain Valley Middle School.
- At Belfast Area High School, growing community support and active outreach by the Extended Learning Opportunities coordinator translated into more than 60 new community-based learning placements for student internships, job shadowing, and paid work experiences. Example placements include the Penobscot Marine Museum, the local fire department, a veterinary hospital, Belfast Water District, and the police department.
- Deer Isle-Stonington Elementary School partnered with the local land trust, garden club, and Haystack Mountain School of Crafts to help school staff and volunteers develop expertise and to provide equipment for place-based learning.
- The Navigator Program in Falmouth relies on a range of community organizations to provide content and support for fieldwork. Examples include Maine Audubon, Falmouth Land Trust, Cumberland County Soil & Water Conservation District, Friends of the Presumpscot River, and Maine Master Naturalists.

Source: RREV site visits and POC survey data

Nonprofit organizations, businesses, and local government agencies benefit from and help to sustain opportunities for outdoor and place-based education. Schools were continuing to strengthen connections with local entities. For example, Maine Indian Education schools planned to continue building partnerships with Wabanaki Youth in Science and Wabanaki Public Health & Wellness, whereas Deer Isle-Stonington Elementary School was fostering links with the local land trust, libraries, and Haystack Mountain School of Craft. Direct funding could be available through local partners in some cases. Katahdin Schools (preK–12) created a nonprofit foundation, the Katahdin Children and Families Foundation, with a mission to support children and families in rural communities. For the 2023–24 school year, the district was able to offset the school budget by \$30,000 through memoranda of understanding with the

foundation. Belfast Area High School was exploring how to have the Extended Learning Opportunities coordinator position at least partly supported through sponsorship by local businesses.

How effective have the sustainability awards been for supporting RREV teams in maintaining and scaling pilot activities?

The additional support provided by the sustainability award was viewed by recipients as critical for sustaining or scaling pilot activities. Key elements of this support included participation in a Sustainability Symposium, development of a sustainability plan for the pilot using a standard template to consider needs and planned actions over the next 3–5 years, and funding up to 40% of the original RREV award.² In reflecting on the value of the sustainability award during site visits, RREV teams said it was “absolutely essential” and “very strategic” for continuing pilot implementation and planning the transition to a longer-term program.

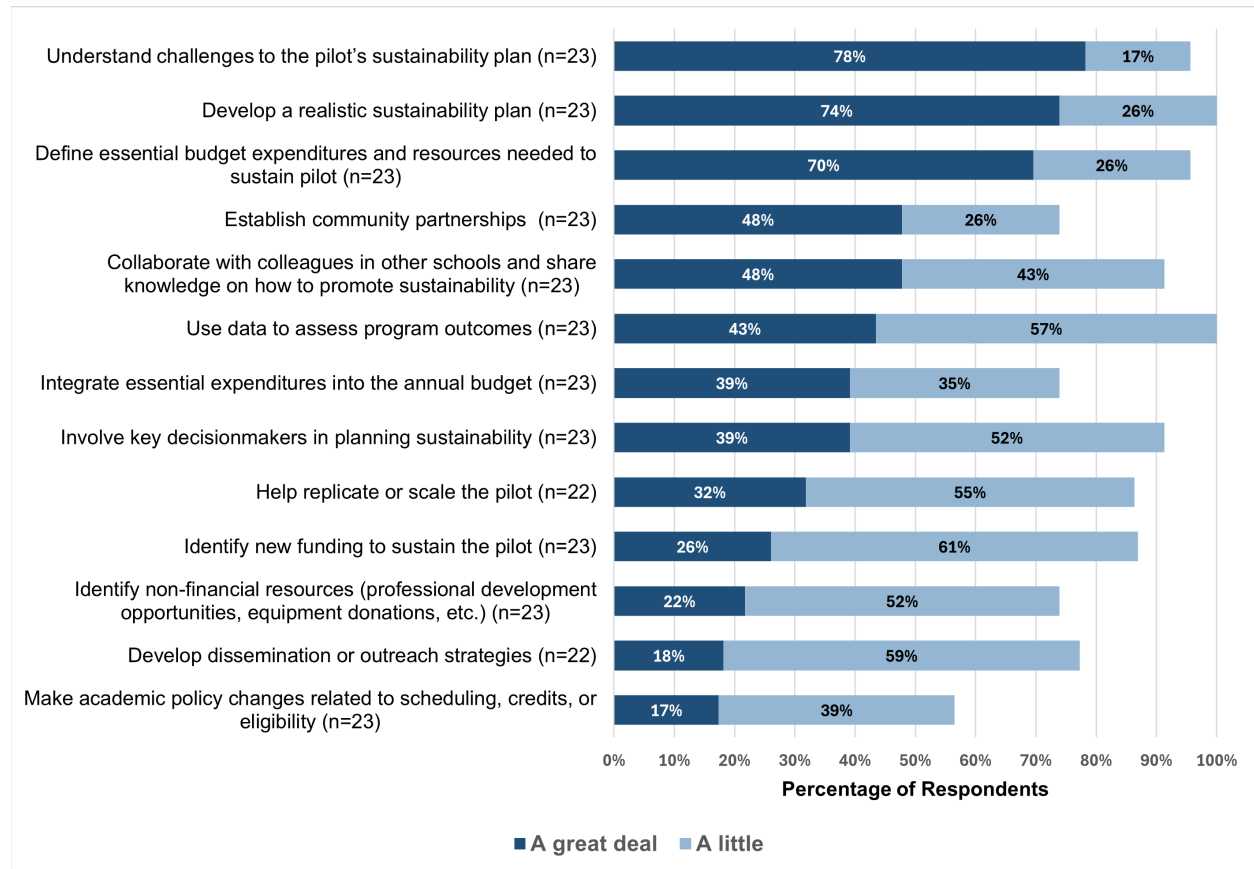
Survey respondents who attended the Sustainability Symposium were generally positive about this experience. More than half (57%) were “very satisfied”, and the remaining share (43%) were “somewhat satisfied.” No respondents indicated that they were “not at all satisfied.” These positive sentiments were corroborated by comments during school site visits. The one recurring theme highlighting an area for improvement was that more time could have been provided during the symposium for busy teachers and administrators to develop their pilots’ sustainability plans rather than expecting them to find time to do this later.

Aside from the funding provided, the sustainability award delivered other critical benefits for RREV teams. Respondents rated the extent to which receiving the award and participating in the Sustainability Symposium helped their program to achieve needed actions and characteristics (Figure 4).³ About three-quarters indicated that these helped “a great deal” for understanding challenges (78%), developing a realistic sustainability plan (74%), and defining essential budget expenditures and resources (70%). In addition, nearly half noted “a great deal” of help for establishing community partnerships (49%) and collaborating with colleagues in other schools and sharing knowledge on how to promote sustainability (48%). All respondents reported the value of the sustainability award for helping to use data to assess program outcomes, indicating that this helped either “a great deal” (43%) or “a little” (57%).

² Recipients of full RREV awards could receive up to \$100,000 from the sustainability funds, whereas accelerator awardees could receive up to \$40,000.

³ Ratings were on a 3-point scale: A great deal, a little, and not at all.

EXHIBIT 3. TO WHAT EXTENT THE SUSTAINABILITY AWARD AND SUSTAINABILITY SYMPOSIUM HELPED PILOT TEAMS



Areas of support that received lower ratings on average were still perceived as broadly beneficial. More than a third of respondents indicated that the sustainability award helped them “a great deal” when integrating essential expenditures into the annual budget (39%) or involving key stakeholders in planning sustainability (39%). All of the areas for support listed in the survey received positive ratings of “a great deal” or “a little” from a majority of respondents.

How could Maine DOE keep supporting innovative learning models in K–12 education?

RREV teams identified potential ways that Maine DOE could help to sustain RREV pilots and foster the development of other innovative learning models. Suggestions gathered through the POC survey and site visit interviews coalesced around five themes. These are described briefly below, with relevant areas explored more in Chapter 2 on coaching and Chapter 3 on educator collaboration.

- **Professional development.** Ongoing support for educators can enable and empower them to implement innovative activities and overcome challenges inherent in trying to do things differently. Chapter 3 describes specific ways Maine DOE can facilitate this support, including:

- **Continued learning tours to showcase specific pilots, including their outcomes and lessons learned.**
- **Establish targeted communities of practice and mentor relationships for educators interested in specific innovative models.** Interactions across this network could be catalyzed by hosting 5–6 meetings per year—sometimes in person and sometimes virtually—to share successes, brainstorm on approaches, and address problems.
- **Host events on EnGiNE, such as virtual classes or discussion groups.**
- **Coaching support.** A designated coach could check in with schools regularly to provide customized guidance as needed. Ideally, this would include in-person visits to ensure the coach has an on-the-ground understanding of progress and challenges as well as regular virtual discussions that could take place on EnGiNE. Suggested areas for coaching support included assistance with adapting curricula, data collection, public relations, and networking with other schools addressing similar issues.
- **How-to guidance and tools.** Maine DOE could host a library of resources and facilitate the sharing of guidance and tools among schools addressing common challenges or implementing similar models. These could include the *Innovation Implementation Guides* ICF has already produced (Appendices 1-4). Other types of resources educators requested during focus groups and on survey responses included the following.
 - Guidance on how to engage new community partners, including how to think through potential roles and then initiate and build connections.
 - A template for an information campaign with examples. This would include nudges to promote changes in school district attitudes and behaviors, such as to build support for bringing students outside for learning.
 - A regularly updated list of other potential funding sources.
 - Step-by-step advice on financial management, including a description of the responsibilities typically needed to navigate grant requirements.
 - Lists of timelines, resources, and tips generated by other schools successfully implementing Outdoor Education, Online Learning, Extended Learning Opportunities, or Multiple Pathway models.
- **Additional funding.** In case Maine DOE has opportunities to provide future funding for innovative learning models, suggestions for making these awards most effective included the following.
 - Establish longer time frames in the award design. Fostering innovation takes longer than 1 year.
 - Customize coaching support based on district needs. This includes using coaches to minimize the administrative burden on schools (i.e., by having them fill out grant paperwork), which allowed RREV teams to dedicate more time to pilot implementation.
 - Require accountability from administrators. This should be not just at the building level but also at the district level.



Maine Academy of Natural Sciences

- Establish well-defined and transparent rules for the funding during the proposal period. These should specify whether the funds can be used to build infrastructure, when all the funds need to be spent by, and other relevant details.
- Build in regular opportunities for pilots to adjust their design with coach support. The willingness to take risks is an inherent part of innovation, so learning and adaptation should play critical roles during implementation.
- **Advocacy for policy changes.** Maine DOE could advocate at the state and federal levels to shift the emphasis away from standardized tests and focus more on what students need. Teachers reflected that too often now there is a focus on “learning deficits” rather than strengths because standardized tests are used to identify areas where student performance needs improving.

Chapter 2: RREV Coaching

Background and Purpose

A core premise of the RREV model is that innovation is not easy and creating systemic change in Maine schools requires educators to continuously experiment and iterate on their approach in response to evolving challenges and opportunities in their local context. One way Maine DOE supports Adopter Schools in this endeavor is by assigning a “RREV coach” to support them in their innovation. In this role, RREV coaches help schools conceptualize their innovation, choose appropriate data to track their impact, engage stakeholders, troubleshoot challenges, identify new opportunities, and plan for the future. Throughout all of their interactions, RREV coaches serve as thought partners with their schools as they work toward the inherently challenging goal of systemic change in education.

The following chapter includes findings from our evaluation of the coaching component of the RREV grant. It begins with the theory of change and logic model for RREV coaching, including how Maine DOE used the theory to establish the role of RREV coach. It then includes a section on findings from Year 3 of the RREV grant, which includes five research questions about how the coaching components have looked in practice. This section includes feedback from RREV coaches gathered during the coaching retreat and semi-structured interviews that took place throughout the year, along with feedback from Adopter Schools on how their coach impacted their ability to support innovation throughout their school community. Finally, we include a section on recommendations that coaches and Adopter Schools provided throughout data collection on how to improve future coaching initiatives within Maine DOE.

Evaluation questions

ICF used the following research questions to evaluate how the RREV coaching model has worked in Year 3 of implementation:

1. How prepared did RREV coaches feel in their ability to serve, and how did they envision their role?
2. How did RREV coaches implement the various elements of the Coaching Framework throughout the school year?
3. How did RREV coaches support Adopter Schools throughout the year from the perspective of Adopter Schools?
4. How has RREV coaching compared to other coaching models that pilot teams have encountered?
5. What were the successes and challenges experienced by coaches and Adopter Schools?

Methods

ICF used multiple methods to gather data to answer these research questions, including:

- Semi-structured interviews with seven RREV coaches throughout the 2023–24 school year.⁴
- Participation and observation during the in-person coaches retreats in July 2022 and June 2023, the Logic Model Workshop, and regular weekly phone calls.
- An end-of-year survey for school points of contact about their experience working with their RREV coach.
- A series of in-depth interviews with a few Adopter Schools that have had a particularly valuable experience with their RREV coach throughout the school year.

Theory of Change on RREV Coaching

Problem statement

Achieving systemic change in a complex environment such as a school is an inherently challenging goal. Processes and practices that worked in certain times and places can lose their effectiveness or even become counterproductive to learning when circumstances change. Innovation coaching empowers schools to rethink these systems and create new programs that respond to emergent needs and reflect the ideas, priorities, and lived experiences of educators and students. However, this process of systemic change entails challenges, including resistance from those used to current practices, unintended consequences from altering complex systems, and the trial and error inherent to implementing new ways of thinking and doing.

The role of a RREV coach

The RREV coaching theory of change posits that an external thought partner and ally can help schools navigate the challenges of systemic change because they:

- Help educators develop, test, and refine ideas for innovative education models that are responsive to their schools' local assets and needs.
- Identify key activities, preparatory steps, and partners schools need to implement their programs.
- Co-create data collection plans and instruments that allow educators to gather feedback about their program.
- Collaborate with educators to map out downstream effects of changes to avoid unforeseen challenges or unintended consequences.
- Reflect with schools about their experiences with their programs' implementation and outcomes.

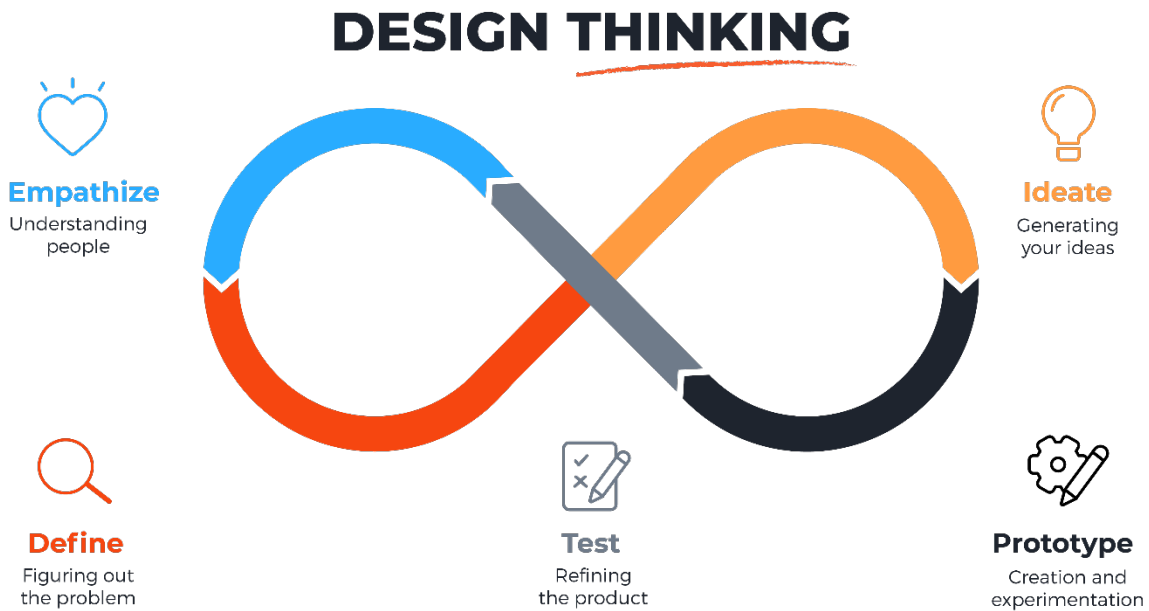
⁴ RREV began the school year with eight coaches, but one coach left in the middle of the school year.

- Encourage schools to continually iterate and adapt their programs as needs change and new opportunities arise.

How RREV coaches fulfill their role

RREV coaches can fulfill their role because of their training and tools, experiences and expertise, and relationships. Innovation coaches are trained in design thinking, which is a problem-solving approach that involves the iterative creation, testing, and improvement of ideas and products (Exhibit 4). Design thinking was integral to RREV’s purpose of supporting continuous innovation and productive experimentation in response to evolving challenges and opportunities across Maine schools.

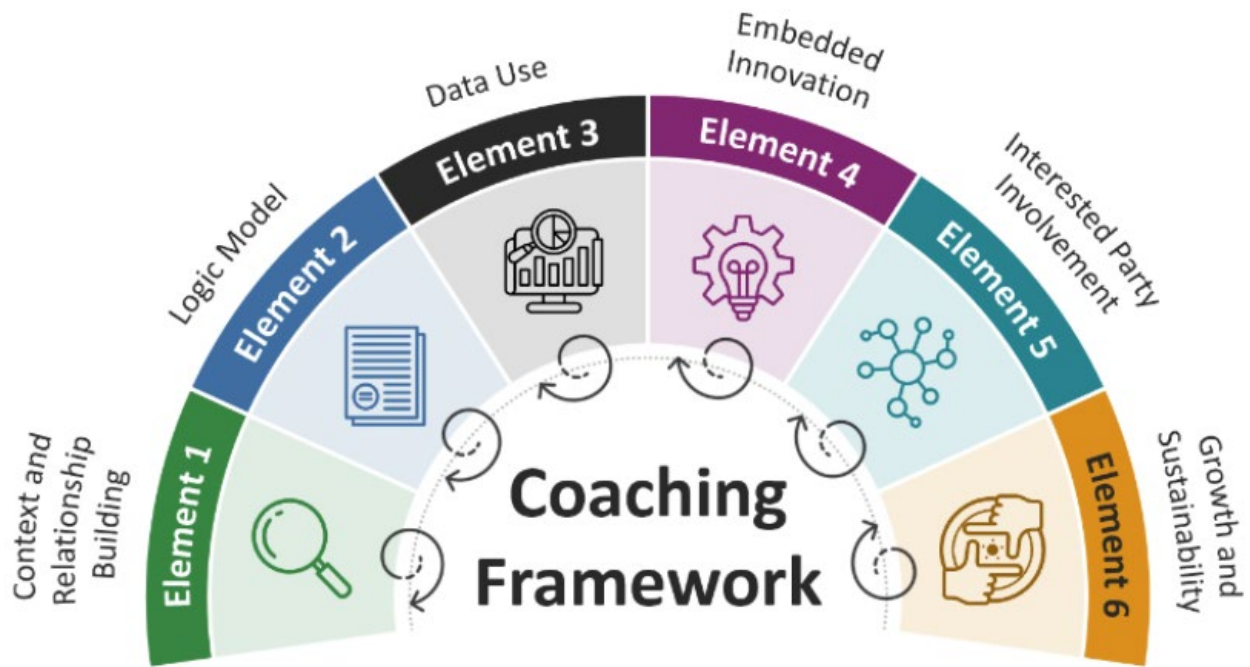
EXHIBIT 4. PRINCIPLES OF DESIGN THINKING



Source: MAQE.com (2020)

RREV coaches apply the principles of design thinking while working closely with a small number of Adopter Schools implementing a locally developed innovative education program. Coaches’ work with schools is based on the RREV Coaching Framework, which provides coaches with a six-element process to engage with schools throughout their engagement (Exhibit 5).

EXHIBIT 5. RREV COACHING FRAMEWORK



Source: [Region 1 Comprehensive Center Network](#) serving Maine, Massachusetts, New Hampshire, and Vermont

While their training in design thinking and the Coaching Framework provides coaches with tools to fulfill their role, the experiences and relationships they bring—and those they form during their engagement—are also vital to the coaching model. Their position as a fellow educator, who is also external to the specific school they support, gives them credibility and independence to see their school’s challenges clearly and gain buy-in for their proposed solutions. The relationships they cultivate with key parties at their schools, and more broadly in the fields related to the innovation, help them build coalitions and leverage outside support for their schools’ programs.

In short, the role of a RREV coach is a unique and challenging one. The success of the coaching model rests on finding individuals who are passionate about innovation in education and giving them the tools and support they need throughout the year to empower schools to design and implement the systemic changes suited to their local needs and assets.

Findings

The following section includes findings from data collection that occurred throughout the 2023–2024 school year. We gathered data from RREV coaches and Adopter Schools themselves related to how RREV coaching has looked in practice, and what successes and challenges coaches and schools experienced along the way.

How prepared did RREV coaches feel in their ability to serve, and how did they envision their role?

Coaches retreat

In July 2023, Maine DOE held an in-person RREV coaches retreat in Augusta to prepare coaches for the year ahead. During the retreat, RREV coaches and Maine DOE discussed expectations surrounding the Coaching Framework, how to use EnGiNE to work with the pilot schools, and how to overcome common challenges that may arise during the school year. Activities included creating a logic model for an existing pilot project, discussing how coaches would respond to a variety of hypothetical challenges faced by pilot schools, and other team-building exercises for coaches to strengthen relationships with each other.

During interviews, coaches expressed satisfaction with the retreat as it related to collaborating with each other and preparing them for their role. For example, one coach said the primary benefit of the coaching retreat was the opportunity to be “together and understand each other” since this was the first time many RREV coaches met in person. Coaches also expressed satisfaction with the level of detail in the topics that were presented. One coach said their school had a lot of questions about the RREV evaluation requirements and felt the coaching retreat provided answers to those questions. Another coach said they found the overview of the Coaching Framework to be particularly helpful because it helped “standardize” the coach model across schools that are different in terms of context and pilot implementation.

Perceived role

Beyond the pragmatic benefits of relationship building and reviewing RREV requirements and the Coaching Framework, the retreat was also an opportunity for coaches and Maine DOE staff to discuss how they could help schools conceptualize and execute their visions for innovative education models. During our interviews with coaches, we asked them to elaborate on what role they felt they could play to support innovation in education.

Through our analysis of coaches’ responses, we identified three overarching themes in the ways coaches characterize their role. They see themselves as:

- **Catalysts for creativity.** Coaches felt it was important to encourage pilot teams to think creatively about how to address challenges they observed in their schools. Several coaches felt like their position from outside the school system helped them contribute fresh thinking and new ideas for addressing complex challenges. Some coaches characterized their role as a catalyst for creativity, in the sense that they sparked conversations among educators at their schools, who in turn had more local knowledge and context to turn their creative ideas into practical solutions.
- **Advocates for student-centered change:** In addition to being creative, coaches saw their role as helping schools embrace change, especially in ways that put students first. Several coaches commented that schools in general could be resistant to change, and felt they played a constructive role in fostering a more nimble culture that embraced change as a positive process for addressing students’ evolving needs. Coaches described helping schools integrate more student agency in their program models,

especially by creating opportunities for students to reflect on their learning and make meaning from their experiences.

- **Team- and trust-builders.** Coaches observed that innovation and systemic change require trust and camaraderie among teachers, administrators, students, and families. Coaches described their role as helping schools let go their fear of failure by seeing that it is an inherent part of experimentation and, more importantly, a necessary step on the path toward learning and improvement. Coaches play a key role in building relationships at their schools, and more broadly contributing through their words and actions to an environment where students and teachers feel comfortable taking risks.

EXHIBIT 6. RREV COACH QUOTES ABOUT THEIR VISION OF INNOVATIVE EDUCATION

<p>Catalysts for Creativity</p>	<ul style="list-style-type: none"> • “Education is taking care of the children in front of you. Innovation is doing what needs to be done even if it hasn’t been prescribed in the past.” • “Looking at the data, you have to develop out-of-the-box solutions. Thinking about creative and different ways to address certain problems or situations that are going on in education.”
<p>Advocates for Student-Centered Change</p>	<ul style="list-style-type: none"> • “Our world is changing, and our students are changing. What they need is constantly in flux, so education should always be thinking about change.” • “Education where teachers and students are working together and learning side by side in ways that are interactive and create deep connection.” • “Innovation has to be meaningful and meet the needs of students in a way that needs haven’t been met before.”
<p>Team- and Trust-Builders</p>	<ul style="list-style-type: none"> • “Process, safety, and relationship. I think what I've seen incredibly beneficial has been schools having a process to innovate because there's incredible ideas, tons of energy... . But having a process to hone that energy in relation to innovation [is where] I would think in terms of relationships ... really harnessing the relationships between even just their internal school.”

How did RREV coaches implement the various elements of the Coaching Framework throughout the school year?

RREV coaches used the coaching Framework to guide their engagement with pilot schools over the course of the year. To understand how coaches are implementing the framework, we asked them about the specific types of support they provided throughout the school year. Overall, coaches found the framework to be a valuable tool. In particular, coaches liked how the Framework helped them understand what they should do and when, but also gave them space to bring their own style and expertise to the role. The following describes ways coaches implemented each element of the Coaching Framework with their pilot schools this year (see Exhibit 2 for graphic of Coaching Framework):

Element 1: Context and Relationship Building. The first element of the Coaching Framework involves coaches meeting with their pilot schools to review the budgets, discuss pilot goals, and build relationships with their Adopter Schools. All coaches held meetings to read through their pilot school's grant proposal and an introductory meeting with their schools to learn more about the budget and goals of the program. This element was particularly helpful for pilot schools because it provided them with an outside perspective to ask questions about the grant and identify potential challenges. For example, one coach discussed the importance of establishing a trusting relationship with schools early on in the grant, so that schools feel like they can contact coaches when they run into challenges. Additionally, this coach said meeting schools in-person has been vital to establishing a relationship, as opposed to only meeting online or through email.

Element 2: Logic Model. This element of the Coaching Framework involves coaches helping their schools develop a logic model to use as a guide for their pilot projects throughout the course of the grant. During interviews, RREV coaches said helping schools develop a logic model for their pilot was a valuable use of their time, both for their own understanding of the pilot's innovation and for the conversations that arose with and among pilot teams while creating and iterating their logic model. Several coaches observed that pilot team members were unfamiliar with this tool and appreciated how the coaches helped them apply the logic model outline to their specific context, especially in ways that refined their own thinking about how their program components fit together. For example, one coach described how a traditional, linear logic model did not align with their Adopter Schools' cultures, so they worked with their schools to develop a more cyclical model that teachers were able to connect with in a meaningful way.

Element 3: Data Use. The third element is to help schools collect data that is relevant to their pilot project such as surveys of students, parents, and faculty about their perceptions of the pilot's impact. During interviews, coaches said they often helped schools consider not only data they *were required* to collect as a condition of their award, but also to identify other data that could show the benefits of their programming to broader audiences. Coaches would then help them identify sources of these data and make a plan for collecting them. For example, all Adopter Schools were required to collect data related to a student-based educational outcome, but coaches also encouraged schools to collect data meaningful to their own pilot, such as social-emotional wellness with online programs or self-reporting a connection with nature for outdoor education pilots. By doing so, the data was not only helpful from an evaluation

perspective, but it was also useful for schools to showcase their pilot programs in the school community.

Element 4: Embedded Innovation. This element of the Coaching Framework is when the coach engages the project team in deep conversations about the nature of their innovation, especially what they intend to accomplish and how and why their approach can do so. This element asks coaches to help pilot teams interrogate their assumptions, critically analyze the systems in which they operate, and reflect on what is working and not working in their pilot. In short, this is when RREV coaching becomes more of an “art” than a “science” because it requires a deft touch and trusting relationships to spur the self-reflection among pilot teams necessary for this element. For example, one coach described themselves as a “thought partner” for an Adopter School that was running into administrative resistance related to their program. This coach was able to provide an “outside voice” on the issues that were going on in the school, which both the coach and pilot school identified as necessary for ensuring that the focus of the program remained on innovation as opposed to other motivations put forth by administration.



Meroby Elementary School

Element 5: Interested Party Involvement. Element 5 is when RREV coaches help pilot teams engage diverse stakeholders and expand the reach of RREV across families and communities. This element is where RREV coaches’ professional and community connections are vital. For example, one coach described how they have connected their pilot school with various environmental education organizations such as the Gulf of Maine Research Institute, Maine Mathematics & Science Alliance, and the Downeast Chapter of Maine Audubon to provide students with the opportunity to meet new people and take on new projects.

Element 6: Growth and Sustainability. The last element of the Coaching Framework is about planning for the future. RREV pilot schools had the opportunity to apply for additional funding by submitting a sustainability plan that outlined how they plan to sustain the program beyond the length of the RREV grant. Most RREV coaches said they were involved in reviewing their school’s sustainability plans to ensure the information was correct as well as offering advice on what systems or supports need to be put in place at the schools to sustain the program in the future. One coach described how they tried to bring up sustainability in most conversations with their school because it is important that schools constantly think about how they can continue refining or growing their pilot over the next few years.

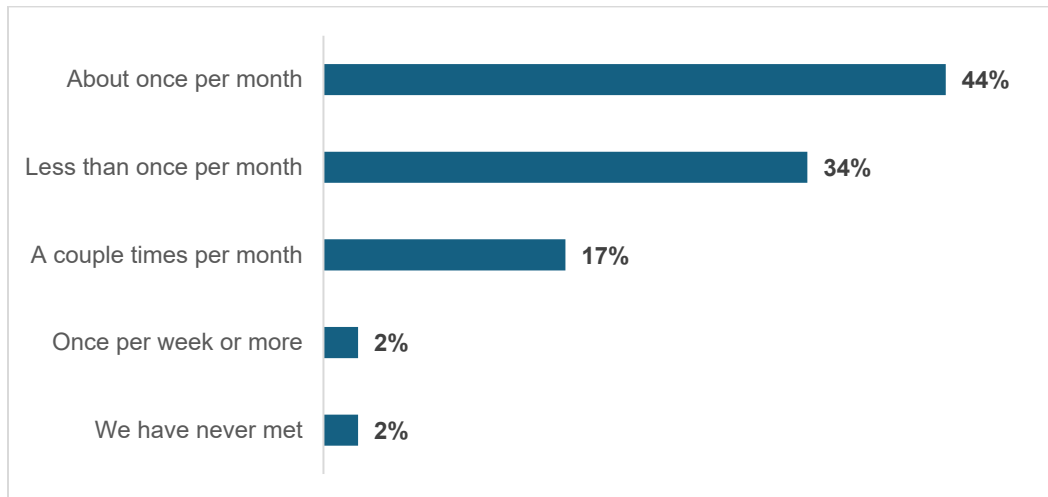
How did RREV coaches support Adopter Schools throughout the year from the perspective of Adopter Schools?

Respondents on the school point of contact survey were asked questions about their relationship with their RREV coach, including how often they met, what platform they used to meet, and the extent to which their coach has been instrumental in adding to the success of their pilot project. The following includes findings from this survey. It begins with background information on how Adopter Schools worked with their coach and then leads into how useful Adopter Schools found RREV coaching to be in relation to their pilot project.

Frequency of meetings

As discussed, each Adopter School was assigned a RREV coach in the beginning of the year to guide them in their implementation process. However, coaches and schools alike described varying levels of engagement throughout the school year. Exhibit 7 below shows how often Adopter Schools reported meeting with their RREV coach. Forty-four percent of respondents reported meeting with their RREV coach about once per month, followed by two-thirds who reported meeting less than once per month. Only one respondent said they have never met with their RREV coach: “We have not worked with our RREV coach this year (although in the past her support was very helpful). We have built internal structures for support and so have not needed to reach out for her support.”

EXHIBIT 7. FREQUENCY OF RREV COACHING MEETINGS WITH ADOPTER SCHOOLS (N=45)

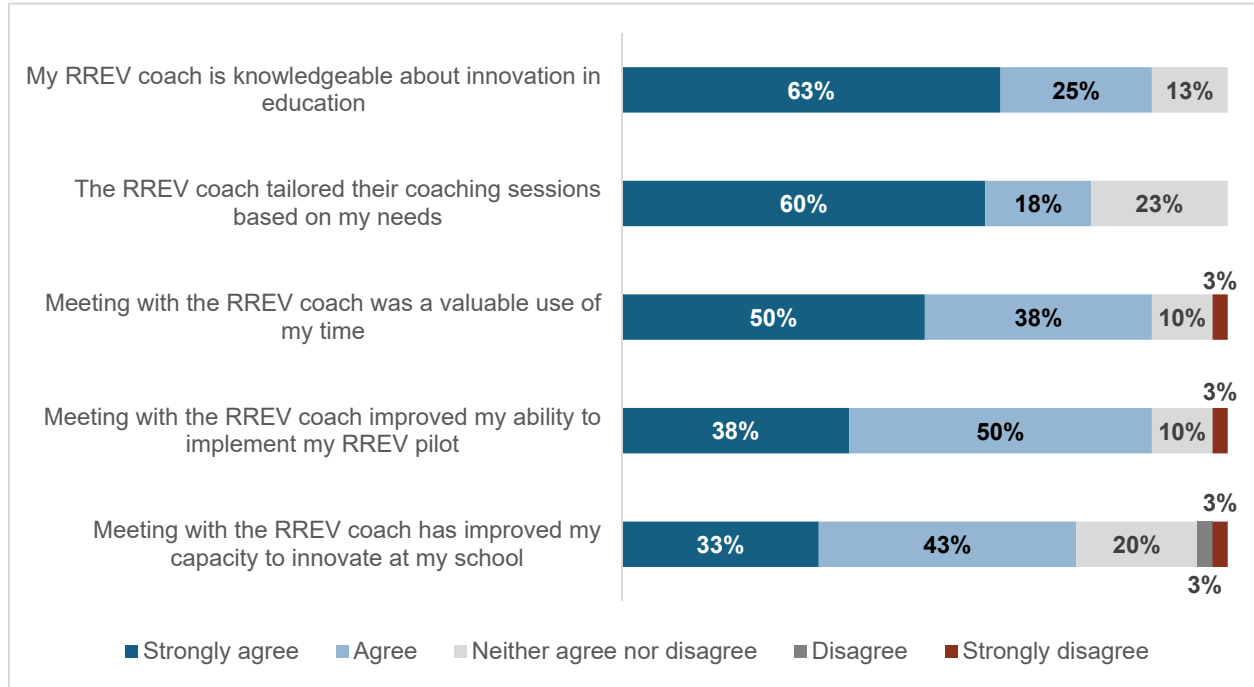


When school points of contact met with their RREV coach, just under two-thirds of respondents (63%) said they “always” or “sometimes” meet in EnGiNE. To better understand what other platforms schools are using to connect with RREV coaches, we asked respondents to rank the frequency with which they use the following methods to communicate with their RREV coach. Just under half of respondents (46%) indicated they use email as their primary method of communication with their RREV coach, followed by 9% who said they primarily use a video/phone call platform other than EnGiNE.

RREV coaching support

Respondents were then asked a series of questions about how the RREV coaching meetings have contributed to the success of their pilot program (Exhibit 8). Most respondents were highly satisfied with their RREV coaching meetings, with 88% of respondents agreeing or strongly agreeing that a) their RREV coach was knowledgeable about innovation and b) meeting with their RREV coach was a valuable use of their time. Additionally, 60% of respondents “strongly agreed” that their RREV coach tailored their coaching sessions to their schools’ needs.

EXHIBIT 8. ADOPTER SCHOOLS’ PERCEPTION OF RREV COACHING SUPPORT (N=40)

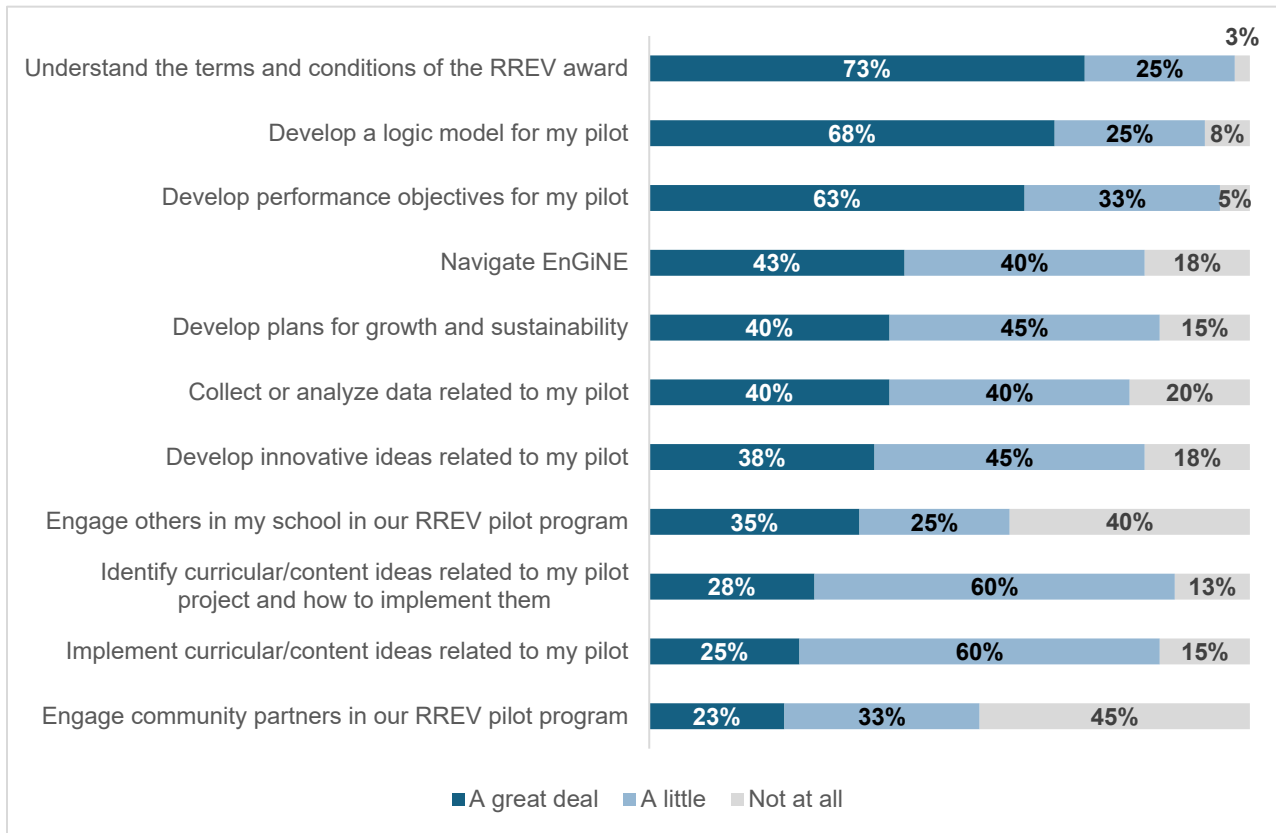


Impact of RREV coaching

Respondents were also asked questions about the ways in which their RREV coach has helped them with various components of the RREV grant (Exhibit 9). Respondents reported that RREV coaches were particularly instrumental in helping them understand the terms and conditions of the RREV award, with just under three-quarters (73%) reporting that their coach helped with this “a great deal.” Similarly, respondents found coaches helpful in assisting with the planning and data-driven phases of the grant, with over two-thirds reporting that their coach helped “a great deal” with their logic model and 63% reporting their coach helped “a great deal” with developing the performance objectives for their pilot.

On the other hand, respondents reported that RREV coaches were not as involved in some of the content-based components of the RREV grant, such as identifying or implementing curricular/content ideas related to the pilot or engaging with community partners. Nonetheless, over 50% of respondents still reported that their coach was at least “a little” helpful with these areas.

EXHIBIT 9. ADOPTER SCHOOLS' PERCEPTION OF THE IMPACT OF RREV COACHING ON THEIR PILOT PROGRAM (N=40)



How has RREV coaching compared to other coaching models pilot teams have encountered?

On the point of contact survey, we also asked respondents how RREV coaching has been different from other coaching initiatives they have been involved with throughout their time in education.

In the surveys and interview, we asked coaches and pilot teams to describe their most significant successes and challenges they experienced with RREV coaching. The following list includes the most common feedback given by respondents:

1. Pilot teams felt more comfortable sharing their true opinions and concerns with RREV coaches because they existed outside the school management structure. A few respondents noted that the RREV coaches departed from other coaching models because they provided an outside perspective. Respondents appreciated this perspective and said that it

“[My RREV coach] felt like my advocate throughout the RREV process. It was so helpful to have a go-between in terms of bouncing ideas off and having her reframe my thoughts into cohesive actions.”

– Adopter School

created a feeling that coaches were more of an advocate for them as opposed to an evaluator. For example, one respondent said, “My other coaching experiences were with people who were in the same building or within the same district, so this is the first time I have had one outside of the institution in which I was working. I appreciated having an outside perspective on things.” Another respondent said, “RREV coaching experience was different because it was an outside perspective—she was not working for the school system or in any way evaluating us.”

- 2. RREV coaches have focused more on boosting morale compared to other coaching initiatives.** Another difference noted by a few respondents was that RREV coaches encouraged schools to be creative and innovative whereas other coaching models tended to focus on simpler, more prescriptive models about what educators should do. For example, one respondent said, “This coaching experience is directly related to an innovation creation and implementation, not an effort to improve our teaching skills.” Another respondent said, “RREV is genuine and authentic. Other coaching strategies have been linear in design.”

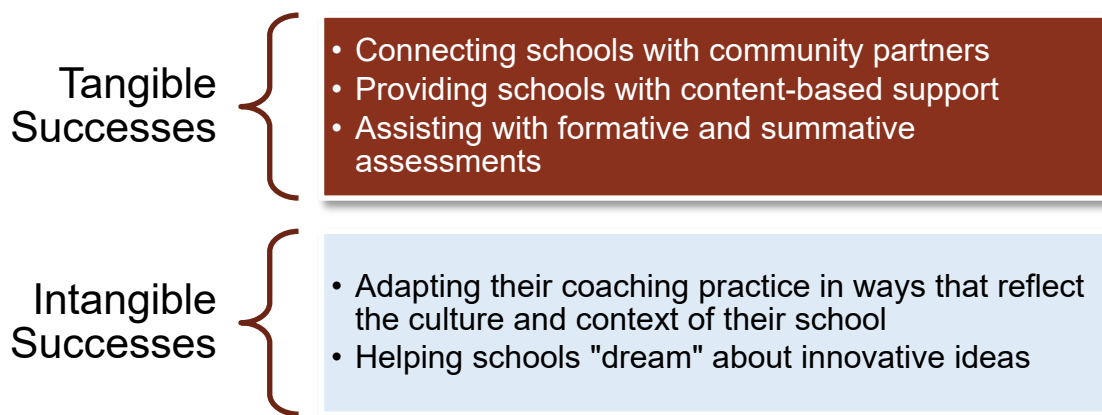
What were the successes and challenges experienced by coaches and Adopter Schools?

Successes

Coaches’ perspectives

RREV coaches described a range of successes throughout the year. These included tangible successes—meaning discrete accomplishments schools could immediately apply—as well as intangible successes with longer-term, more diffuse impacts. The ways RREV coaches described “success” reflects differences in schools’ needs and preferences for support. For example, some schools looked for consistent guidance on data-driven tasks such as performance objectives whereas others wanted a more “hands-off” thought partner to help brainstorm innovative ideas. Exhibit 10 summarizes what RREV coaches described as their successes this year.

EXHIBIT 10. SUCCESSES OF RREV COACHING



1. **Connecting schools with community partners.** Several RREV coaches were peer educators with expertise in the pilot’s model and had existing relationships with organizations in this space. Coaches were able to leverage their expertise and relationships to connect schools with key community partners. For example, one coach who has a background in environmental education helped connect their pilot schools with community partners such as the Gulf of Maine Research Institute, Maine Mathematics & Science Alliance, and the Downeast Chapter of Maine Audubon to provide content-based support for their pilot programs.
2. **Providing schools with content-based support.** Many RREV coaches were assigned to schools with pilot projects aligned with their area of expertise. For example, RREV coaches who work at environmental education organizations were assigned to schools implementing outdoor education pilots. One coach who has a background in engineering said their greatest success was providing content-based support to their school. This coach said their school was looking to put in weather stations and doing a design competition for offshore wind turbines and they were able to share their experience working as an engineer and provide some technical support for designing weather stations.
3. **Assisting with formative and summative assessments.** Some RREV coaches with an educational administration background were able to assist schools with admin-related tasks such as student assessments. For example, one RREV coach described helping their pilot school develop formative and summative assessments based on what the students are doing and what kinds of activities they could do in the class to give them more useful feedback.
4. **Adapting their coaching practice in ways that reflect the culture and context of their school.** Each school implements their pilot project in their own unique environment. RREV coaches adapted their coaching practice to match the culture and context of the school they serve. For example, one coach described how they worked with a school that educated students through the Indigenous Wabanaki worldview, and a linear logic model did not align with the cyclical nature of their culture, so they were able to help the school develop a cyclical logic model that better fit within the context and cultural components of their school.
5. **Helping schools “dream” about innovative ideas.** In addition to overseeing the RREV-related requirements of the grant, RREV coaches were also called on to provide general support and guidance throughout their school’s innovation journey. A few RREV coaches described how this support role was the biggest success for them. In particular, a few coaches described how the concept of innovation is often missing in

“Hearing about like the awesome things that [schools are] doing because ... we don't get to dream and make those types of things happen very often in public education. ... And so, seeing the excitement and sharing the excitement and sharing my own excitement with what was happening ... was the most gratifying.”

– RREV Coach

K–12 public education, and the opportunity to think, create, and celebrate with their pilot schools has been a rewarding experience for them.

Adopter Schools' perspective

The most common success mentioned by Adopter Schools was their coach's ability to provide support, both related to specific requirements of RREV and general support for innovation within their school.

Pilot teams appreciated their coaches' encouragement in the face of potential failure, which they found a welcome contrast to the fear of failure they had previously encountered in their careers. Pilot teams said they appreciated their coach's encouragement to not be afraid of failure. For example, one point of contact said "It was super helpful to have someone I could speak to candidly about the challenges I was facing in my role and have someone who was a line of communication to the central operations of the grant. I sincerely appreciated [my coaches'] support and guidance."

Adopter Schools said their coach was especially helpful as a third-party, outside observer of their pilot program, especially when Adopter Schools ran into administrative resistance for their program. As one point of contact stated, "[my coaches] objective perspective was so refreshing. She understood what we were trying to do and provided guidance and support throughout the entire process."

"We appreciated her absolute support when we faced a big problem. It was so nice to know that we had a shoulder to lean on when we were frantically trying to find our feet again."

– Adopter School

Adopter Schools appreciated how coaches were knowledgeable about the requirements of the RREV grant.

In addition to providing overall support, one role of the RREV coach is to aid their school in fulfilling certain requirements of the RREV grant, such as the logic model, performance objectives, or surveys. Adopter Schools said their coaches have been valuable in helping them navigate and clarify these components of the RREV grant. One point of contact called their coach "savvy in RREV systems and goals" and noted they help them organize their deliverables. Another coach said their coach has been "incredibly helpful [to] address the RREV requirements and developing goals and impact measures."

"[Our RREV coach] is super responsive, knowledgeable, friendly and helpful. Every time I email her (often in a panic about a deadline) she is right there to help me get back on track."

– Adopter School

Adopter Schools said that coaches who had expertise in topics relevant to their pilot helped them form community connections.

RREV coaches come from a variety of education backgrounds, from outdoor education to instructional technology. As such, Adopter Schools reported that coaches are instrumental in both adding content-based expertise and connecting them with community partners within their network. As one Adopter School noted, their coach "being a local partner who is like-minded in outdoor education, multiple pathways, was key."

Challenges

Coaches' perspectives

Coaches also described various challenges they encountered while working with their Adopter Schools. The most common challenges were:

- 1. Lack of responsiveness from schools.** The most common challenge mentioned was a lack of responsiveness from Adopter Schools. Some coaches described emailing their schools about tasks such as choosing their performance objectives or creating a logic model, but did not receive a response from schools. To address these challenges, coaches enlisted support from Maine DOE to spur responses from the schools, which worked in some but not all cases.
- 2. Time constraints.** In other cases, schools did respond but coaches described challenges in finding a suitable time to meet with them, given the time constraints of the school day and the fact that most coaches have full-time jobs outside of RREV. To address this challenge, coaches offered to meet at varying times outside the school day.
- 3. Administrative challenges/staff turnover.** Coaches also described school-level challenges such as administrative indifference impeding progress or communication in implementing their pilot. For example, one pilot program had little support from their administration, so they had to rely on their RREV coach as their support system to talk through program-related challenges. Additionally, frequent staff turnover often resulted in the pilot implementation team being different than the original team that wrote the pilot plan.

“Somewhat of a persistent challenge was the turnover in schools, the turnover of the teams, because sometimes the point of contact would leave or like three of their members would go and there's just one person left.”

– RREV Coach

Adopter Schools' perspectives

By far the most common challenge mentioned was lack of time to meet with their RREV coach. When asked on the point of contact survey what was the biggest challenge they faced this year, over half of respondents said a lack of time. Adopter Schools noted how working in education is already so busy that they rarely have time to devote to additional meetings with their RREV coach. For example, one point of contact said, “Finding the time to meet [was our biggest challenge]. It was definitely more of our problem, but it just escaped our minds throughout the year.”

A few Adopter Schools also said it was difficult not being close in proximity to their RREV coach. RREV coaches serve schools all throughout the state. As such, many coaches try to visit their schools in person occasionally, however it often becomes difficult once the school year starts. A few Adopter Schools said being far away from their RREV coach and needing to meet virtually presented a challenge, and it would have been nice to establish in-person meetings or site visits over the course of the school year.



Belfast Area High School

Recommendations

Coaches' recommendations to Maine DOE

Coaches were asked to offer any recommendations for future Maine DOE coaching programs based on their experience as RREV coaches. Common responses included:

1. **Hire full-time coaches.** One of the most common challenges identified by RREV coaches was finding time to devote to their role as RREV coach while balancing their own separate, full-time job. Several coaches said they had to work odd hours or take leave time from their full-time job to find suitable times to meet with their pilot schools. While this strategy helped them to hold more meetings with their pilot schools, they found it challenging to make this sacrifice to their own schedules for schools that were less engaged in the process, even though these may be the very schools that needed the most support from their coach. Some coaches felt that making the coaching role a full-time position would create a more standard experience for both coaches and schools, especially because they would have time and processes for following up with reluctant or unresponsive schools. Coaches also felt a full-time position would allow

coaches to better connect schools with each other—linking schools that are piloting similar programs or running into similar challenges.

2. **Add more accountability mechanisms for school engagement.** RREV coaches described a few schools as simply unresponsive despite many outreach attempts. While coaches understood that teachers and administration are busy, these schools' lack of engagement made it impossible for them as coaches to perform their role effectively. Coaches recommended that future coaching initiatives make clear to schools the expectations for engagement and include mechanisms for holding them accountable, such as a pause on funds disbursement for schools that do not meet with their coach a minimum number of times.
3. **Minimize administrative requirements on coaches, especially related to timekeeping.** Coaches felt the timekeeping requirements were burdensome, especially given the variation in their schedules from week to week. Some coaches said they did not even log all their hours some weeks because they did not feel the effort was worth it, given their hourly pay. One coach recommended Maine DOE pay coaches a flat stipend throughout the year, which they felt would motivate coaches to keep up with their responsibilities with their pilot schools without feeling like they are over- or under-utilizing their time.

Adopter Schools' recommendations for Maine DOE

1. **Pair coaches with schools that are close in proximity.** One challenge that was often brought up by both coaches and Adopter Schools was the inability to collaborate in person since their coach lived far from the school. As a result, a few Adopter Schools recommended assigning coaches to schools that are nearby to provide more opportunities to collaborate with the schools in person. For example, one point of contact said, "It's important to consider proximity—it can be helpful to be close enough to make visits [with my coach] with some frequency."
2. **Focus on coaching at the district or administrative level.** One point of contact recommended that coaching initiatives should be aimed at the administration as opposed to the teachers, since system change requires buy-in at the leadership level. This point of contact said, "Coaching initiatives should be focused on building or district administration. New initiatives need to be supported by the leaders if they are going to sustain. Additionally, creating systemic change requires a new way of thinking about education. If a leader is getting coaching, they are more likely to improve their own knowledge around innovation and pushing new initiatives that support student learning."

Chapter 3: Educator Collaboration

Background and Purpose

One of the key goals of RREV is to foster greater collaboration between educators both within their own school and with colleagues across the state. Within schools, the shared task of implementing and iterating on a RREV pilot encourages educators to solve problems and share ideas as they transform their pilot plan into reality. More broadly, RREV supports educator collaboration through learning tours, during which pilot teams share with other educators their lessons learned from implementing innovative programs, and by providing a virtual space for collaboration on a platform called EnGiNE. EnGiNE is an online hub where educators can connect and collaborate regardless of the digital platform available within their schools. Some of the key features of EnGiNE include rooms with both a virtual meeting space and a collaborative whiteboard, a central location for educators to post resources and upcoming events, and access to online courses developed through Maine DOE.

In this chapter, ICF describes feedback about RREV's efforts to promote collaboration. Specifically, it addresses the following evaluation questions:

1. How do Maine educators like to collaborate within schools and across the state?
2. What are the key challenges that inhibit collaboration among Maine educators?
3. How has EnGiNE promoted collaboration among Maine educators, and what feedback do Maine educators have on EnGiNE?
4. How can Maine DOE best support educator collaboration going forward?

Methods

This chapter is based on the following data sources:

- **An educator survey.** The educator survey was open to all Maine teachers and included open- and closed-ended questions about how often they collaborate, the tools they use to collaborate, the challenges they face, and how Maine DOE could best support collaboration. Teachers who had used EnGiNE were also asked specific questions about this platform. The survey was distributed by Maine DOE to all EnGiNE users and received 39 responses.
- **Virtual focus groups with educators.** ICF conducted five focus groups with educators in a variety of roles, including classroom teachers, support staff, district administrators, and Maine DOE staff. Focus groups were 60 minutes long and took place on Microsoft Teams.
- **Interviews with pilot staff during site visits.** ICF visited eight schools during May and June 2024. Educator collaboration was one of several topics addressed during interviews with educators during site visits

Findings

How do Maine educators like to collaborate within schools and across the state?

Educators appreciate time specifically set aside for collaboration. Many educators said their day-to-day collaborations occur during time specifically allocated for internal collaboration. One teacher noted, “I meet with my co-teacher, and I have the same prep every day, so we start our day in prep, which is really nice ... it is built-in time, which is awesome.” Another educator shared, “I also have some built-in time to collaborate because of my work as a coach. That’s really important to meet pretty regularly ... to begin with an initial plan.” During site visits, educators also noted the necessity of shared time. Some pilots such as Bath Middle School included aligned planning time as a part of their innovation.

In general, educators prefer in-person collaboration because they find it timelier and more substantive than virtual collaboration. During focus groups when educators were asked if they prefer in person, virtual, or a combination of the two, no teachers responded that they preferred fully virtual collaboration. Instead, most educators emphasized the importance of physical proximity for effective collaboration for a variety of reasons, some of which are listed here.

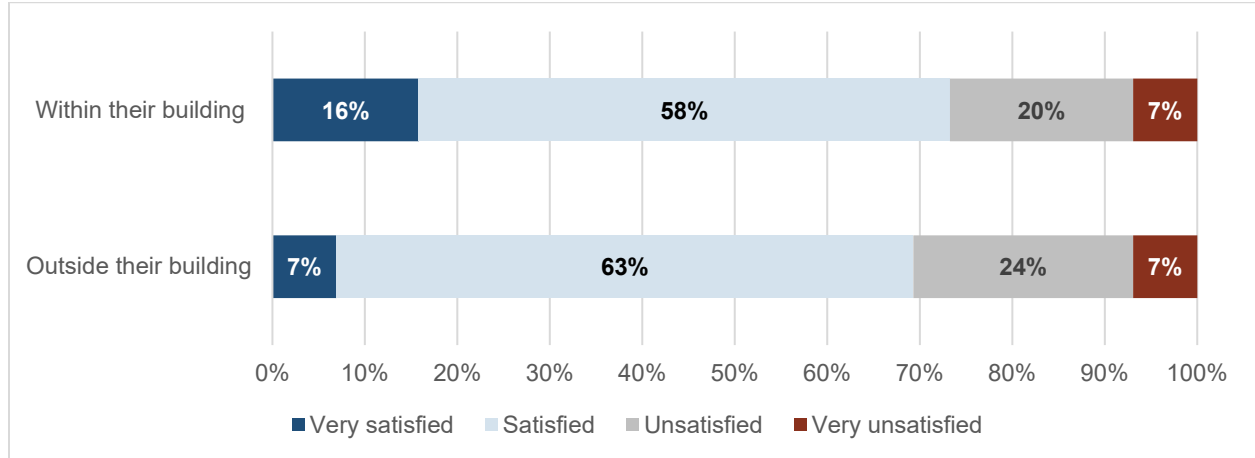
- **More timely exchanges.** Educators explained that their most effective collaboration often begins with an observation or thought they want to share in the immediate context in which it arose, such as right after a lesson or activity. For example, one teacher commented, “A lot of times it starts in the hallway, [you] meet somebody and have an idea and then follow up with scheduling some time together.” Another teacher observed that collaboration often occurs when teachers stop by and observe or talk with their colleagues throughout the day. “It’s definitely a lot of popping into classrooms,” she said. One district-level staff member shared, “During the workday, I have a communal office ... we were literally sitting next to each other [asking], ‘What do you think?’ ”
- **Deeper connections with colleagues.** Educators described stronger relationships with colleagues they see in person, which they felt led to more meaningful collaboration. For example, one educator stated that in-person collaboration supports “personal connections with folks, which lead to other connections and other opportunities.”

Learning tours and field trips contributed to valuable collaboration. During site visits, pilot teams also described how time outside regular school activities, such as learning tours or field trips to community partners, bolstered teacher engagement with one another. For example, several pilot teams told ICF evaluators that they had meaningful conversations with each other and with community partners during field trips to community partners sites, or when community partners visit their school and lead activities. Another pilot lead explained how they have been able to share their pilot with other schools through in-person visits and observations.

Most educators were satisfied with their opportunities to collaborate, but a substantial minority desires more opportunities for collaboration. Almost three quarters (74%) of educators were satisfied or very satisfied with collaboration opportunities *within* their building, and 70% were satisfied with opportunities to collaborate with colleagues *outside* their building. However, there was still a sizable proportion of educators who were unsatisfied with their

collaboration opportunities within their building (27%) or with colleagues outside their building (31%). The following sections describe some challenges driving dissatisfaction and offers recommendations for addressing them.

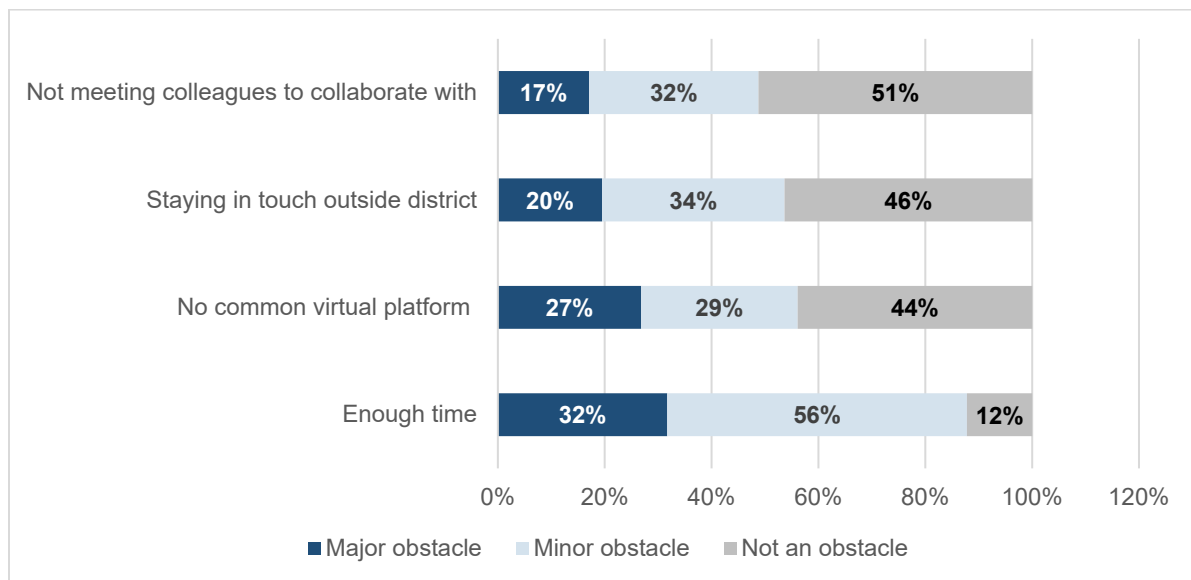
EXHIBIT 11. EDUCATOR SATISFACTION WITH COLLABORATION OPPORTUNITIES.



What challenges do Maine educators face that inhibit collaboration?

Lack of time to collaborate was the most cited obstacle to collaboration. Educators were asked to rate the extent to which certain factors are obstacles to collaborating well with colleagues. By far the most common obstacle was lack of time to collaborate, which was described by 88% of educators as either a major or minor obstacle. Educators were evenly split about other potential obstacles. The lack of a common virtual platform was at least a minor obstacle for 56% of educators, while difficulty staying in touch with colleagues from outside their district (54%) and lack of opportunities to meet colleagues to collaborate with (49%) were cited by about half of educators as either minor or major obstacles.

EXHIBIT 12. OBSTACLES TO COLLABORATION



Educators elaborated on their challenges to find time for collaboration in open-ended survey responses and during focus groups and site visits. For example, one educator commented, “We do not have any time built into our school schedule for our department to meet and as a larger faculty we have extremely limited time to meet to discuss teaching and learning.” Another educator echoed that sentiment about the lack of built-in time for collaboration, saying, “Common planning time is limited, and normal logistics of the school day/year occupy much of this time. It makes planning for interdisciplinary opportunities more challenging. Like-subject teachers do not always have the same planning time either.” Another educator noted, “I work a second job after school, so I’ve never taken the time to join [a committee] just because I really wouldn’t be able to.” A district-level educator shared, “I’d say what [teachers] don’t have is time. ... I can’t find a barrier that would come close to the level that that is.”

Inoperability between Google and Microsoft platforms inhibits collaboration between schools and Maine DOE. In focus groups, we learned that school-based educators almost all use Google applications for collaboration, whereas Maine DOE staff use Microsoft, and this difference creates technical difficulties when sharing documents or otherwise working in shared virtual space. In particular, teachers like using Google because it allows multiple individuals to work simultaneously on materials such as lessons plans or activity sheets. For example, one educator explained they use Google products for “instant [collaboration where] everybody can see the same thing.” Another educator noted, “I collaborate every day on Google. That is an important tool because you’re in the middle of getting stuff done. Someone comments, someone assigns, then you keep going. So why would I work in Microsoft Word? Because by the time I send it to you, it’s already outdated because I’ve added four more comments.” However, one Maine DOE staff member explained that “[Maine DOE is] not actually allowed to use Google, [but] all the field uses Google. ... All of a sudden, I can’t do a presentation and send it to them. I can’t work on a doc.”

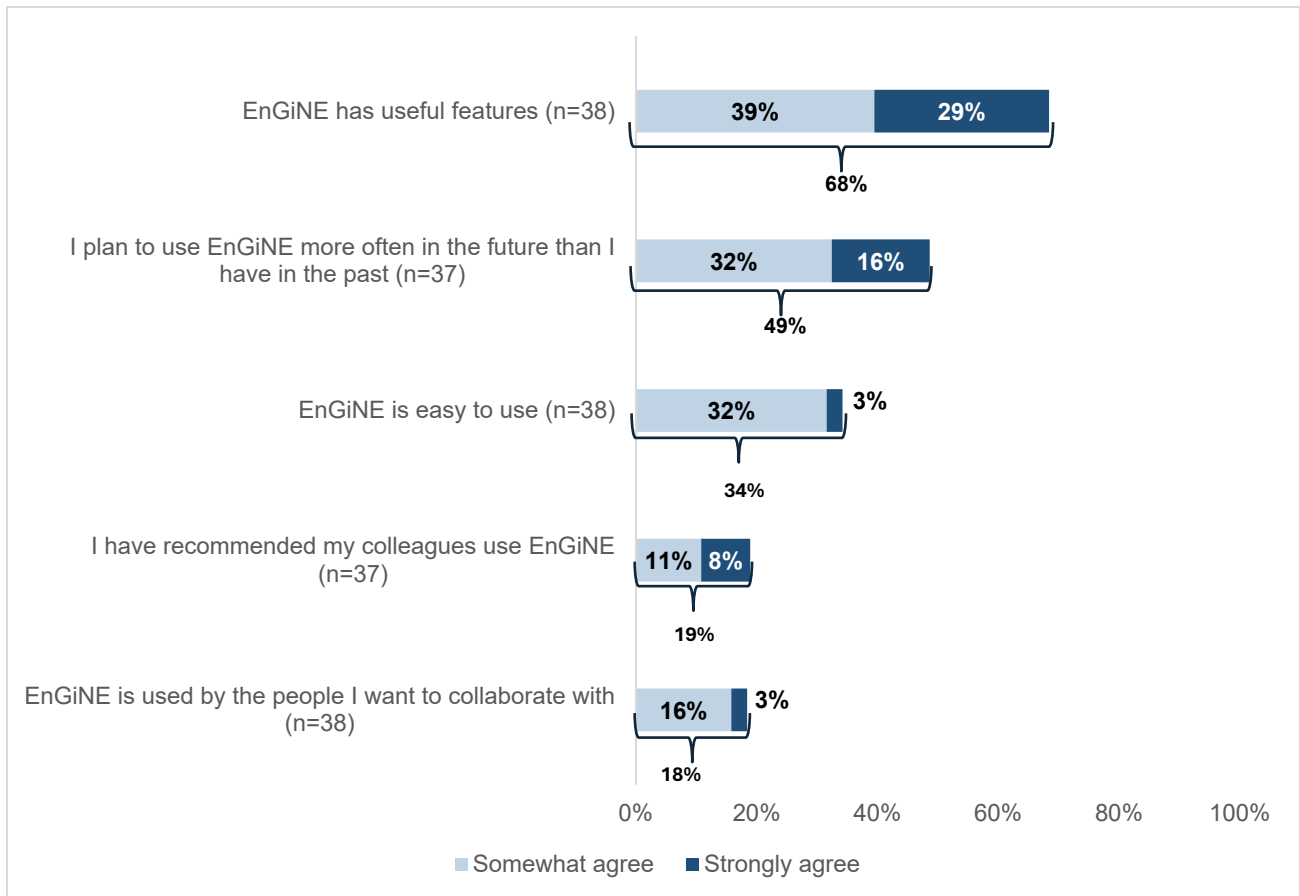
How has EnGiNE promoted collaboration among Maine educators, and what feedback do Maine educators have on EnGiNE?

EnGiNE has potential to address the interoperability between Google and Microsoft, but school-based teachers are reluctant to move away from Google. As noted earlier, a majority of educators were satisfied with their opportunities for collaboration, and most already used Google platforms to do so. While EnGiNE allows for more collaboration between school-based educators and Maine DOE staff, most teachers did not describe a need to move away from Google for collaborating with their colleagues, especially when they were already accustomed to its features and capabilities. Consequently, most interaction that occurred on EnGiNE was for RREV-specific collaboration, such as meeting with a coach or accessing RREV-related documents, but generally not for organic collaboration between educators independent of RREV.

Besides RREV-related uses, educators accessed EnGiNE for book studies. These are virtual courses, facilitated by individuals from Maine DOE, focused on various books related to education. Participating educators on the platform can engage with each other asynchronously via discussion boards. One educator shared, “I found that using EnGiNE for the book study was nice because I love the fact that it was kind of at your own pace. So, I really enjoyed that opportunity. It was my first experience with EnGiNE, but once you got on, I felt like it was good.”

Regular EnGiNE users like its functionality, but feedback was mixed overall. The educator survey asked educators to rate their overall satisfaction with EnGiNE as well as their satisfaction with its functionality and whether they thought it had useful features. A majority of respondents (62%) were at least somewhat satisfied with EnGiNE overall, but 30% were somewhat unsatisfied, and 8% were very unsatisfied. Interestingly, educators who used EnGiNE more often were more likely to be satisfied with it, with 75% of monthly users at least somewhat satisfied. This suggests that as more educators use EnGiNE, they may become more satisfied as they grow accustomed to its features and format. However, less than half of respondents agreed that they plan to use EnGiNE more in the future than in the past (43%), that it is easy to use (34%), or that they have recommended it to their colleagues (19%).

EXHIBIT 13. FEEDBACK ON ENGINE



Open-ended responses exhibited similarly mixed feedback on EnGiNE. On the positive side, educators liked:

- **Being able to share and see resources about specific topics of interest.** For example, one teacher said, “I like being able to post resources in the different communities of practice. So, if I know there's a great Outdoor Education conference coming up, I can put it in there and kind of share it out with different people.”
- **The video-conferencing function.** For example, one educator told ICF, “I love [that] I don't need a link to have a meeting. I just go to my meeting space. ... [By contrast],

when I switched to something else ... I have to find that email that had the link or hope that it's in my calendar.”

Educators appreciated the book discussions hosted on EnGiNE. During focus groups, multiple educators indicated that they enjoyed participating in book studies on EnGiNE and were interested in future opportunities to do so. One educator shared, “I just piloted a book study through EnGiNE and it was very collaborative across the field, across teachers all over the state. It was fantastic.” Book studies may also offer an additional opportunity to introduce educators to one another through the EnGiNE platform. For example, one book study participant envisioned further collaboration emerging from the book club: “If you're taking this book study and you were like, ‘Oh, I loved your comment.’ ‘Hey, let's chat.’ ” Going forward, book studies are a promising opportunity to engage educators from around the state on EnGiNE and grow use of the platform.

At the conceptual level, negative feedback about EnGiNE focused on its redundancy with Google, while at the practical level educators criticized its complexity. As noted earlier, many educators felt like their needs were already met with Google platform products, and did not want to spend their limited time to learn a new platform they did not think they needed. Beyond this conceptual critique, in practice many educators also said EnGiNE was difficult to navigate. For example, one educator said there have been many times when “I click a button and all of a sudden I'm in a spot where I'm not sure what it's about or why I'm there. There's two home pages or three home pages.” Another educator said, “There's a layer of complexity to it that makes it kind of not intuitive and it's hard to navigate and I think that can get frustrating for people.” Another educator said, “I'm only still trying to decipher the difference between ConnectEd and LearnEd, and through significant experimentation I have been able to add links or add photos, but I still don't understand, honestly, the difference between the various components, and adding a resource has been very painful.” Although concern about EnGiNE's complexity was a common theme in educator's feedback, a few educators said they liked EnGiNE more as they got used to it. For example, a few educators described a “learning curve,” but as they became more comfortable with EnGiNE, they began to appreciate its features more.

How can Maine DOE best support educator collaboration going forward?

Maine DOE should raise awareness about RREV and use the experiences of pilot teams as a springboard for more collaboration around innovative education models. As noted in Chapter 1 on the sustainability of RREV pilots, the vast majority of RREV awardees are implementing their innovative models as planned, or even expanding them beyond their original vision. Every one of these pilots has learned through experience the challenges, opportunities, and rewards of systemic change. Their perspective and knowledge could be a springboard for greater collaboration among educators across the state, especially with schools interested in their specific innovative model. However, without concerted efforts by Maine DOE to raise awareness about RREV, there is a risk the valuable lessons learned from pilots' experiences may never reach and inspire more schools. Maine DOE should therefore play an active role spreading the word about RREV pilots so other schools in Maine are aware of their innovative programming. To do so, Maine DOE could proactively disseminate some of the materials ICF created during our evaluation, such as the *Innovation Reports* and *Innovation Implementation*

Guides. For example, Maine DOE could disseminate these through newsletters, learning tours and other events, or social media. Concurrently, Maine DOE could recruit some pilot teams to share more specific lessons learned from their experience. For example, Maine DOE could facilitate an “Ask Me Anything” style online chat on EnGiNE, where schools could pose questions to RREV pilot teams about their experiences.

Maine DOE can facilitate a mentoring relationship between RREV pilot teams and other schools interested in their specific innovative models and experiences. While actions such as disseminating *Innovation Implementation Guides* and other products can help raise general awareness of RREV and what was learned through the program, more intensive and tailored collaboration with pilot teams will be vital for helping other schools navigate the complex challenges of systemic change. Maine DOE can play a key role in facilitating this deeper collaboration by recruiting some pilot teams to serve as “mentors” and connecting them with specific schools interested in their model. The role of a mentor would be to answer questions from these schools and help them learn from their experiences. In some cases, pilot team members may even become innovation coaches (in a role outlined in our recommendations in Chapter 2), but Maine DOE should make clear to pilot teams that they can be collaboration partners for schools without signing on for the full coaching role. To facilitate these relationships, Maine DOE could create a “collaboration clearinghouse” on EnGiNE, which could include a link to a survey where educators could indicate interest in connecting with a RREV pilot team based on attributes such as their innovative model, the grades served, or whether they are rural or urban. Maine DOE could send a link to this collaboration clearinghouse when it distributes the *Innovation Implementation Guides* and *Innovation Reports*, or otherwise communicates with schools. Maine DOE could then use these data to facilitate connections between interested schools and pilot mentors, for example through individual introductions, during learning tours, or by organizing virtual or in-person “meet and greet” events, including some organized around broader gatherings of educators.

Promote in-person connections by continuing learning tours and other events where educators with shared interests can meet. As noted earlier, educators value in-person connections, which often lead to follow-on collaboration over email or calls. Learning tours are a great opportunity to facilitate these connections, especially when they are well promoted and planned. Going forward, Maine DOE can continue these learning tours, but may consider some changes to expand their reach and reduce the burden on Maine DOE and host schools. First, Maine DOE could create a “learning tour playbook” that host schools can use to set expectations well in advance about the steps they should take for a successful event, such as how to piggyback off existing activities, strategies for coordinating with community partners, and a baseline schedule that builds in time for collaboration with attendees. Second, Maine DOE could use more targeted outreach about these events, for example by creating model invitations and helping schools identify and reach specific schools that have expressed an interest in similar learning models. During the learning tours, Maine DOE could offer to deliver a brief presentation, drawing on materials ICF created during the evaluation such as *Innovation Implementation Report* and the school’s *Pilot Snapshot*. Maine DOE could also live stream and record videos during learning tour events to reach more schools that could not attend in person. After a learning tour, Maine DOE could send individual introduction emails or host a follow-up virtual event on EnGiNE to help solidify connections made in person.

Use proactive techniques to promote EnGiNE to educators beyond those already involved with RREV, including through newsletters and announcements. A consistent theme ICF heard from EnGiNE users was that it would be more useful if more educators were active on the platform. For example, one educator told ICF during a focus group, “If [EnGiNE is] not being used by a lot of educators, then when you go there and everything looks exactly the same as the last time, you’re going to stop going. ... I think if we’re not using it, then we’re not gonna be motivated to go there.” In short, EnGiNE needs to reach a critical mass of users for it to reach its potential, so Maine DOE should consider vigorous outreach to build up its user base. This could include:

- **Consistently referencing EnGiNE in Maine DOE communications, including newsletters, new teacher orientation materials, and during learning tours.** During focus groups, several educators suggested Maine DOE use its touchpoints with teachers to tell them about EnGiNE. For example, during a focus group, an educator suggested Maine DOE could tell new teachers about EnGiNE in their orientation materials. In this teacher’s words, Maine DOE could say, “Welcome to the teaching profession. You are now licensed to work in Maine. One of the things we offer is EnGiNE.” Department of Education newsletters may be an opportunity to market EnGiNE. For example, during a focus group, one educator observed that EnGiNE “is not in the [Department of Education] weekly letter to schools. They don’t really talk about it,” and suggested they do so in the future.
- **Using EnGiNE to post interesting announcements, such as funding opportunities schools might be interested in.** These opportunities could be from Maine DOE directly, or they could be federal grants or foundation funding opportunities to which schools or districts could apply. For example, during a focus group, one educator observed that she visits the website for the North American Environmental Education Association to look for funding opportunities, and suggested EnGiNE could fill a similar role.
- **Using EnGiNE as the platform for hosting “Ask Me Anything” and other virtual events.** Maine DOE could recruit subject matter experts, pilot school teams, or Maine DOE leaders to participate in open-ended question and answer sessions on EnGiNE. These could be through video conferences or text based, as participants prefer.
- **Continuing to use book clubs and similar affinity groups to draw in users.** As noted earlier, book club participants had positive experiences with EnGiNE and felt the platform was a great tool for these discussions. In addition to book clubs, Maine DOE could host other discussion groups on EnGiNE, for example, affinity groups for teachers, such as rural science teachers or teachers with shared backgrounds.

Continue to improve the user experience on EnGiNE. A common theme from both the survey and focus groups was that EnGiNE could be made more user friendly and engaging. Suggestions included:

- **Adding a sitemap.** Several survey respondents felt a clearly labeled sitemap would make it easier to navigate. For example, one educator wrote, “Make it easier to sign up

and get enrolled in a course; easier to navigate!” and another one wrote, “I would add a sitemap.” Other participants recommended improving the naming structure for sections within the website to more plainly indicate the purpose and function of each.

- **Adding more content about how to use EnGiNE.** During the focus groups, it was clear that many educators desired more guidance about how to use EnGiNE, and in some cases did not realize such content already existed or how to find it. For example, one participant suggested integrating “video tutorials [about] how you use the creative space.” Another educator said, “I would just like a user-friendly introductory page on EnGiNE that says this is what [to do] if you wanna do this. ‘This is where you go.’ ‘You wanna do this? This is where you go and if you wanna do this, this is where you go.’” Additionally, including the video tutorial and “Welcome to EnGiNE” course as the landing page for all users immediately after signing on may help users when first becoming oriented to EnGiNE.
- **Notifying users via email when new resources or comments are posted.** On both the survey and in focus groups, educators suggested improving notifications would boost their engagement with the site. One educator on the survey suggested, “If there was a way to be notified when new resources are posted—or if new resources were posted more frequently—I would be more likely to check for them.” During focus groups, multiple educators acknowledged that they are primarily looking for collaboration opportunities via e-mail, sharing, “I definitely will look at emails that seem to talk about possible meetings and so forth” and “Where do we look for those opportunities? My email inbox I open every email that I think might possibly have something useful.” Currently educators can receive notifications for private messages as well as responses in a thread within the EnGiNE platform, however there is not currently a setting available to receive these notifications via e-mail. Improving notification settings by defaulting more users to receiving e-mail notifications may improve the experience of educators while using EnGiNE.

Innovative Implementation Guides

This evaluation report focused on broad questions about the sustainability of innovative education models and the structures Maine DOE established to support them. However, ICF also created four stand-alone documents intended for school-level audiences interested in applying lessons learned by schools implementing specific innovation models. These *Innovation Implementation Guides* offer ideas and provide practical tips schools can use to replicate and iterate on the RREV-supported pilots, based on data ICF gathered across all three years of our evaluation.

Appendix 1: Extended Learning Opportunities

Appendix 2: Multiple Pathways

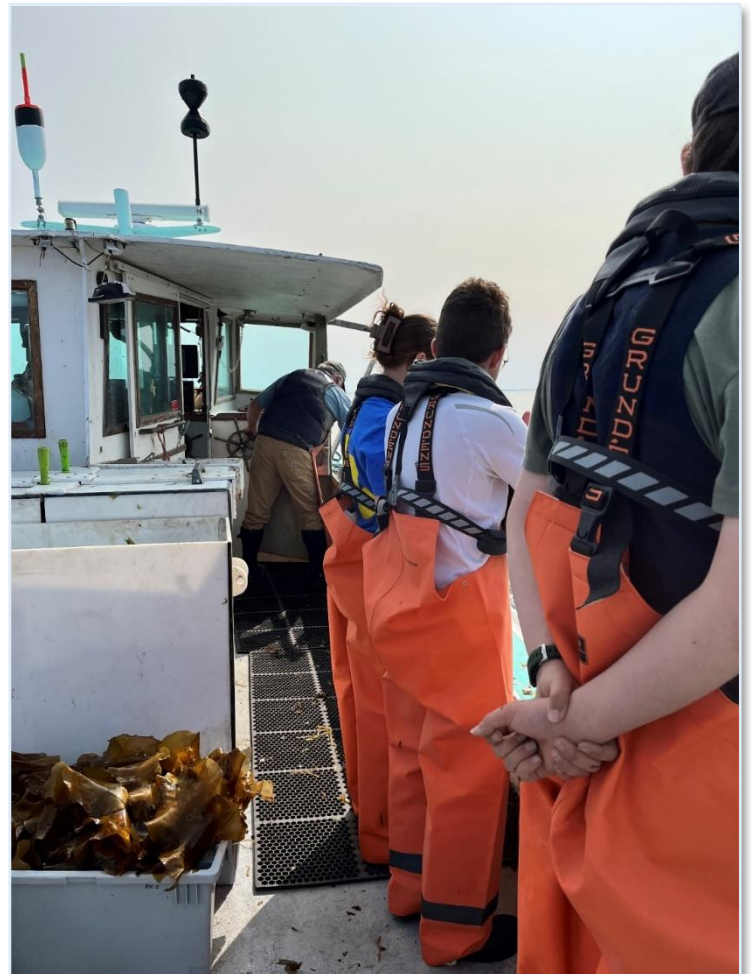
Appendix 3: Online Learning

Appendix 4: Outdoor Education

Background and Purpose

This document is intended for school leaders, teachers, and others interested in developing and implementing an innovative Expanded Learning Opportunities (ELO) program for their local context. It summarizes lessons learned from five pilots implementing ELO models in Maine.¹ Each of these ELO pilots was responsive to the school’s specific needs, but they shared some common characteristics, including:

- **Student-Driven Learning** – ELO students can earn credit through independent study projects or community-based internships, and they participate in designing new courses and infrastructure at their schools that will help them to establish core academic competencies.
- **Inclusivity** – ELO programs are flexible and accommodate students regardless of their learning abilities, career aspirations, and access to transportation.
- **Place-Based Interdisciplinary Learning** – New curricula provide students with opportunities to develop practical job and life skills out in the community while also learning about the local history, culture, and economy through experiential learning at school.
- **Community Connections** – Expanded opportunities for field work, service learning, and internships are designed to build long lasting connections between students and the community.
- **Leveraging Natural Resources** – Students gain hands-on opportunities to develop practical job and life skills by learning about and using existing resources around them.
- **Real-World Relevance** – ELO students learn about careers tied to the local economy and develop relevant job skills and community connections. Traditional academic concepts are applied to a real-world context as students explore sustainable solutions for addressing local challenges.



Students from regional school unit (RSU) 71 (Belfast) Area High School on a boat preparing to harvest kelp.

¹ These pilots were supported by the Maine Department of Education’s Rethinking Responsive Education Ventures (RREV) program, which was funded by a \$17 million grant from the U.S. Department of Education’s Rethink K–12 Education program.

Key Takeaways from Extended Learning Opportunities Pilots

The tips below are intended to give school leaders ideas to consider when developing an ELO program for their own school. These key takeaways are based on an external evaluation of the ELO pilots supported by the Maine Department of Education’s Rethinking Responsive Education Ventures (RREV) program, and can be adapted based on the local needs, opportunities, policies, and cultures of individual schools.

1 Demonstrated administrator buy-in helps to ensure the success of the core team in planning and implementing the program. High-level leadership support is critical for enabling curriculum or policy changes, bringing together educators or other staff who do not typically work together, and helping to foster a culture shift. For the ELO pilots, having a principal or assistant principal actively participate in drafting the proposal and carrying out planning activities helped build credibility and ensure a realistic design. These administrators encouraged teachers to envision nontraditional approaches to education, enabled course credits for new learning pathways, and publicly advocated for the new innovative model during teacher in-service days, school board meetings, and interactions with community businesses and organizations.

2 An effective core program team typically includes one or more academic content teachers, a community liaison, and a student advisor.

a. Academic content teachers are best positioned to serve as program

“champions.” The ELO champion role embodies a commitment to doing things differently, including integrating place-based learning into core academic subjects and complementing classroom opportunities with community-based connections and placements. Champions shepherd the change process within a school to adapt curriculum and policies, foster the buy-in of leadership and other educators for alternative learning pathways, and cultivate excitement among students and the broader school community. The right teachers for this role will depend on the envisioned curriculum to ensure that the experiential learning happening at school builds students’ mastery of core academic content areas. For example, regional school unit (RSU) 44 Telstar High School’s new interdisciplinary Local Ecology and Aspirations Pathway (LEAP) requires the ongoing collaboration between a science teacher and history teacher.

b. The community liaison cultivates and maintains

partnerships with businesses, nonprofits, and public agencies in the community. Each ELO pilot shaped this position differently, but all had a dedicated full- or part-time position separate from the academic teaching faculty with formal responsibilities for developing partnerships and coordinating community-based learning.

c. At least one member of the core team serves as a designated student advisor to customize the approach for addressing each student’s learning needs. ELO programs are crosscutting, pulling together students with different learning styles and diverse interests. A student advisor typically has schoolwide connections with the student body and an ability to help students select or create their own learning agenda. Some pilots relied on the ELO coordinator position to serve this role, and others pulled in the school guidance counselor.

“You can hear about doing these things from the classroom, but this is hands-on—this is as good as it gets.”

– Community partner, Belfast

3 ELO programs are closely aligned with local workforce needs and efforts to address local challenges. Community-based learning components increase familiarity with local industries and build awareness of local social and economic challenges, enabling students to contribute to finding potential solutions. Recommended actions include developing community partnerships and identifying specific mentoring opportunities for students.

- a. **Finding community partners with an interest in identifying the next generation of workers allows ELO programs to be strategic in helping to address the limited availability of skilled workers in the local economy.**

This process typically starts with direct outreach to community organizations, businesses, and public agencies to explore opportunities and mutual benefits. As these longer-term connections are developed, each entity might provide multiple placements for students or accommodate requests for one-off presentations or field trips.

- b. **Mentors provide students with positive adult role models who demonstrate the value of academic, social, and emotional skills in a real-life setting.** Individuals in the community can provide students with ongoing guidance and support through regular one-on-one contact, usually set up through an internship, ongoing job shadowing, or series of meetings to support an independent study program.

4 Community-based learning opportunities offered by ELO programs are best combined with experiential learning at school to help ensure students' mastery of core academic content areas. Immediate access to a physical environment enables a school to introduce nontraditional, hands-on curricula that immerse students in the local landscape and heritage. For example, school administrative unity (SAU) Traip Academy in Kittery is right on the Piscataqua River, and the RSU 44 (Telstar) school complex in Bethel has wetlands to study and maple trees to tap. The ability to adapt learning to the existing environment proved critical for RREV ELO programs even as schools pursued plans to develop new community-based learning placements and construct new facilities on their campuses.

5 A participatory process informs effective program design and implementation. Successful ELO programs emerge and evolve through a phased-in approach, with key stakeholder groups helping to plan and refine the program to address the needs of students and the community.

- a. **Students can play a leadership role to help ensure a relevant and effective ELO program.** RREV teams experimented with different content and arrangements to gauge student interest and



A student from RSU 71 (Belfast) Area High School partially submerged in an indoor pool with scuba diving gear.

explore how best to increase engagement while building competencies. At RSU 44 (Telstar) High School, a small group of students in a design class surveyed the entire student body to design an outdoor learning pavilion and other learning spaces. Traip Academy started with a small group of students enrolled in a new credit-bearing Marine Changemaker class while also testing out other activities outside of school hours, such as a State of the Harbor exercise testing the use of an underwater remote operated vehicle (ROV) to survey a debris field after a yacht sank.

- b. Plans for family and community engagement can be integrated into program design.** ELO pilots solicited input from parents early on by inviting them to information sessions and administering surveys to explore attitudes and priorities. Creative approaches to family engagement included family nights at Telstar’s new fireplace and pizza oven, and community cooking classes in the renovated kitchen at Jonesport–Beals High School (School Union 103). Ongoing support from parents or guardians is critical to enable permission for out-of-school activities, facilitate transportation, and promote a culture shift endorsing nontraditional learning. Parents also often work in the community and can help to bridge learning needs and workforce needs.
- c. Activities can be adapted or scaled up based on participant feedback and community interest.** ELO pilots collected input from students through exit surveys at the end of courses and sometimes surveyed parents or community members to inform design changes. This approach led to program expansions in the second year. For the RSU 71 Belfast Area High School Marine Institute, this meant adding new courses—including specialized physics and chemistry “of the ocean” courses—and increasing enrollment numbers.

6

Activities to increase student engagement and provide adaptive support are critical. ELO programs can serve students with different interests and learning styles, and they typically embrace an interdisciplinary approach to learning designed to address the range of student needs and career aspirations present in a community with socioeconomic diversity. However, students who could benefit might be hesitant to enroll in new programs, so intentional methods are needed to increase student engagement and achievement.

- a. Starting with a flexible structure to attract students can be an effective approach for increasing student engagement.** Two schools provided the option for students to try new courses at first as electives rather than having to rely on these programs for core academic credits. ELO pilots also planned events to generate student interest, such as offering an electives fair before class registration and holding a well-publicized logo contest for the new program.
- b. Active monitoring and support helps students to thrive in nontraditional learning pathways.** Each ELO program had a dedicated advisor or coordinator assigned to help students customize their learning plans and check in on their progress. Additional support was offered in cases where students were conducting independent studies, earning credit through internships, or completing individual capstone projects. Examples include scheduling a seminar for students to gather weekly to discuss progress and challenges and having students complete structured journaling exercises to facilitate self-reflection and course correction when needed.

“If we want to reform rural education, we need to leave the 1950s. We have to step outside and create a culture of customizing education for kids to meet their needs. Then our kids know they are valued.”

– Administrator,
Telstar



Mycelium buoys stored at Traip Academy in Kittery.

- 7** **It is never too early to think about sustainability.** A new ELO program might rely on an initial pool of funding for design and piloting that is not expected to support long-term program implementation. The RREV experience highlighted the following strategies to help ensure that startup funding leads to a sustainable initiative.
- a. **Integrate funding needs for new curricula into the regular school budget cycle.**
 - b. **Develop a maintenance plan for new physical structures and equipment, which might rely on formal budget support, partnerships with community organizations, or dedicated individual volunteers.**
 - c. **Find complementary initiatives and funding sources supporting similar nontraditional learning philosophies.**
 - d. **Use startup funding mostly for nonrecurring expenses, such as to build infrastructure, purchase equipment, and develop curriculum.**

Background and Purpose

This document is intended for school leaders, teachers, and others interested in developing and implementing a Multiple Pathways program for their local context. It summarizes lessons learned from the design and implementation of eight pilots implementing Multiple Pathways education models in Maine.¹ Each of these pilots was responsive to their school's specific needs, but they shared some common features, including:

- **Customization and Personalization** – Multiple Pathways programs give students agency and responsibility over their learning by allowing them to tailor their educational and career journeys to their specific interests, strengths, and goals. This customization can result in more engaged and motivated learners.
- **Diverse Learning Experiences** – Multiple Pathways programs offer a variety of learning experiences, such as internships, apprenticeships, work-study arrangements, project-based learning, outdoor learning, and traditional classroom instruction. This diversity can help students develop a well-rounded skill set.
- **Real-World Relevance** – By incorporating real-world experiences and practical skills training, Multiple Pathways programs bridge the gap between education and the job market. This can enhance graduates' employability and preparedness for the workforce.
- **Inclusivity** – Multiple Pathways programs aim to be inclusive and accessible to a broader range of individuals, including those from underrepresented backgrounds or with diverse learning styles and needs.
- **Collaboration and Partnerships** – They often involve collaborations between educational institutions, employers, and community organizations, fostering a more cohesive and holistic approach to education and workforce development.
- **Industry Alignment** – These programs are frequently designed in close consultation with industry experts, ensuring that curriculum and training are aligned with the current and future needs of the job market.
- **Economic Revitalization and Social Development** – Multiple Pathways programs can have broader economic benefits for communities through building a local workforce.

"Students are able to engage with their work through real-world, project-based learning that helps them learn essential skills."

– Parent, St. George

¹ These pilots were supported by the Maine Department of Education's Rethinking Responsive Education Ventures (RREV) program, which was funded by a \$17 million grant from the U.S. Department of Education's Rethink K-12 Education program.

Key Takeaways from Multiple Pathways Pilots

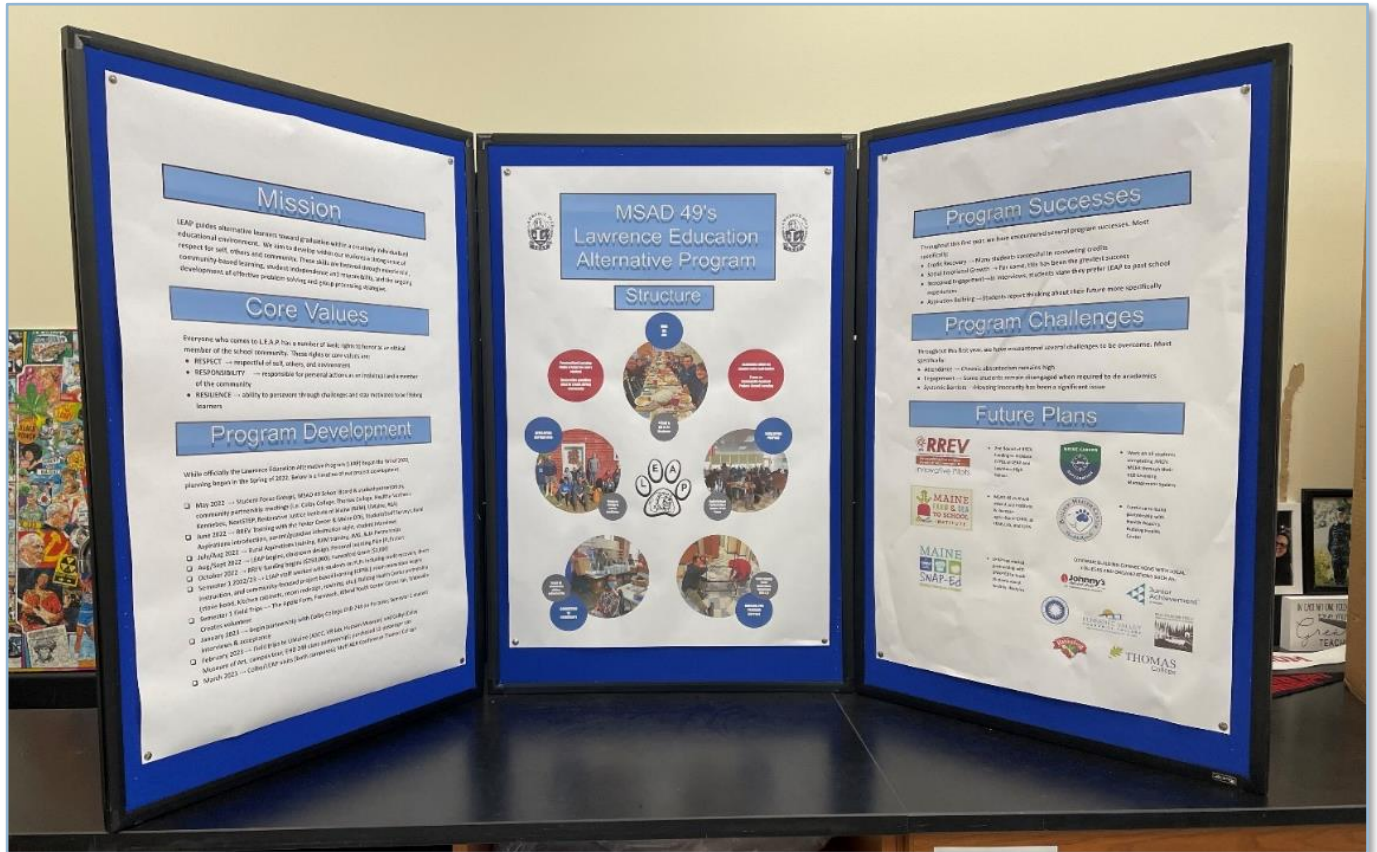
The tips below are intended to give school leaders ideas to consider when developing a Multiple Pathways program for their own school. These key takeaways are based on an external evaluation of the Multiple Pathways pilots supported by the Maine Department of Education's Rethinking Responsive Education Ventures (RREV) program, and can be adapted based on the local needs, opportunities, policies, and cultures of individual schools.

1 Cultivating partnerships with local businesses and community organizations can make Multiple Pathways programs more relevant to students' lives. Students were most engaged in Multiple Pathways programs that offered work-based learning opportunities that were relevant to their lives and visions for the future. Successful Multiple Pathways programs worked closely with partners that had strong roots in the community and could provide students with learning experiences with tangible connections to their daily lives and plans for the future. For instance, schools like school administrative unit (SAU) Lee Academy and SAU Falmouth engage students in service-learning projects with local partners, including trail work, community gardening, water testing, and outdoor learning connected to local ecosystems. These experiences not only enhance students' skills but also contribute to the well-being of the local community by fostering a sense of environmental stewardship and responsibility in students. Furthermore, Multiple Pathways programs contribute to the economic development of communities by creating workforce exposure opportunities. For example, SAU St. George Public Schools facilitates visits to local businesses, providing students with insights into trades and technical fields. Schools interested in creating a Multiple Pathways program could consider creating a community outreach position to focus on finding and fostering partnerships, especially in ways that reflect local needs and culture.

"The pilot program is new, different, and brings the kids to the place they live. Learning that's connected to their community, and connects them to the place they call home. I think that's huge."

– Parent, St. George

2 Enlisting support from school leaders and coordination with local institutes of higher education can create smooth transitions for students moving through different educational pathways. Multiple Pathways programs empower students to pursue their interests and career goals through experiential learning opportunities beyond traditional classrooms, and in ways that align with each student's particular interests. While these opportunities promote student engagement, district leadership's engagement and support is important to ensure these experiences are aligned with district policies and that students earn credits. For instance, Lee Academy and Falmouth have implemented outdoor-based integrated curricula that provide students with place-based learning experiences, thereby connecting real-world relevance to instruction. Regional school unit (RSU) 84 (East Grand) aligned its curriculum with standards to teach employability skills, financial literacy, business management, product development, and trades. Such standards-aligned curricula not only provide a framework for meaningful learning but also prepare students for college and career readiness. Engagement with institutes of higher education, such as colleges or trade schools, is also important for aligning Multiple Pathways experiences with their programs and standards. This approach is vital in fostering innovation and responsiveness within education models, as it empowers students to understand the relevance of their learning experiences, promotes agency and responsibility over their education, and expands access to career and technical resources.



Poster created by students at Maine School Administrative District (MSAD) 49 (Lawrence) showing this Multiple Pathways school's program structure.

3 Students benefit from systems and structures to support their mental, emotional, and social well-being as they navigate the greater independence and responsibility often associated with Multiple Pathways programs. A “whole child” focus in Multiple Pathways programs is of paramount importance as it ensures a comprehensive approach to students' development, encompassing not only academic progress but also their mental, emotional, and social well-being. RSU 21 (Kennebunk’s) Alternative Education program serves as a compelling example in which the curriculum, house renovation project, and explicit emphasis on wellness and social-emotional learning are direct outcomes of conversations with students. Recognizing that students entering the program had specific social-emotional needs and histories of adverse childhood experiences, the program intentionally addresses these aspects that may not have been adequately handled in mainstream education settings. Centering students’ lived experiences further enhances the “whole child” focus, tailoring educational pathways to individual needs and creating a novel and exciting learning environment. Lee Academy’s pilot project, characterized by a unique curricular model, has led to increased attendance, positive feedback, and elevated aspirations among students. Similarly, RSU 21 (Kennebunk’s) invests time in developing a responsive curriculum at the beginning of each school year, catering to the unique needs of the student cohort. SAU Wayfinder Schools’ pilot program goes a step further by centering each student’s lived

“Students were excited to come to school and participate. I had students ... who had tremendous growth in social areas, working with people they never would before as well as actually participating and talking in class.”

– Teacher,
St. George

experience, providing individualized instruction and fostering a mentorship role for instructors. In essence, the “whole child” focus acknowledges and responds to the diverse needs and experiences of students, contributing to a more holistic educational approach.

4 Creating a sense of community among Multiple Pathways students requires intentional effort, and can help students feel more supported and engaged in their learning.

Many students participating in these programs face challenges in mainstream educational settings, experiencing a sense of alienation that can impede their potential for success. The Multiple Pathways program at RSU 21 (Kennebunk) exemplifies the transformative power of community, where students collaboratively renovated a house at a local land trust. Their shared teamwork not only enhanced the learning experience but also instilled a profound sense of accomplishment. Similarly, SAU Maine Indian Education’s pilot project, with its explicit focus on Wabanaki cultural revitalization, recognizes the significance of fostering a learning community. In response to students feeling disconnected from traditional learning, the program places a heightened emphasis on Wabanaki culture, language, and practices, creating an environment where students prioritize their cultural identity.



Interior of a house built at RSU 21 (Kennebunk) for the Multiple Pathways pilot.

5 Dedicated staff play a crucial role guiding and assisting students along their unique pathways. For instance, RSU 21 (Kennebunk) hired educational technicians to support the alternative education program, while Falmouth hired an outdoor learning educator to enhance curriculum development and implement place-based learning experiences. Supportive staff play a vital role in facilitating the implementation of Multiple Pathways programs by contributing to the development and alignment of curricula, helping students pursue their interests and career goals, and providing guidance in navigating work-based learning opportunities. Moreover, the hiring of educational technicians and outdoor learning coordinators reflects a commitment to addressing the individual needs of students in alternative education settings.

Background and Purpose

This document is intended for school leaders, teachers, and others interested in developing and implementing an online education program for their local context. It summarizes lessons learned from the design and implementation of eight schools implementing Online Learning pilots.¹ Each of these pilots was responsive to their school’s specific needs, but they shared some common features, including:

- Greater Student Agency Over When, What, and How They Learn** – Online Learning programs offer students more control over many aspects of their learning, including their pace, content, and modality. Many programs offer students a wider ranges of courses to choose from than would be available in person. In many cases, students can take some courses online and others in-person at the school, and also participate in school activities even as they complete all or some of their coursework online.
- Tailored Support from a Dedicated Educator** – Even as Online Learning programs empower students to make more choices about their learning, they also provide additional support structures to help students navigate these choices. This support often takes the form of a staff member dedicated to online students, whose role encompasses the duties of a guidance counselor, teacher, and case manager—sometimes called a remote learning specialist.
- An Emphasis on Student Wellness** – Online Learning programs often establish systems and structures to support students physical, mental, and emotional well-being. These include intentional efforts to build a supportive culture and promote camaraderie, including dedicated spaces for online students to meet together in person, field trips, and community service activities. Online programs also often offer regular check-ins between students, teachers, parents, and counselors.

“My daughter loves being able to go at her own pace. She feels a great sense of accomplishment ... she is more ready for the real world when she graduates as she has been 100% responsible for her own success the last 2 years”

– Parent, Brewer



Noble Virtual Middle School students participate in service activities.

¹ These pilots were supported by the Maine Department of Education’s Rethinking Responsive Education Ventures (RREV) program, which was funded by a \$17 million grant from the U.S. Department of Education’s Rethink K–12 Education program.

Key Takeaways from Online Learning Pilots

The tips below are intended to give school leaders ideas to consider when developing an Online Learning program for their own school. These key takeaways are based on an external evaluation of the Online Learning pilots supported by the Maine Department of Education's Rethinking Responsive Education Ventures (RREV) program, and can be adapted based on the local needs, opportunities, policies, and cultures of individual schools.

1 Administrative support and engagement is vital, especially around setting policies for graduation requirements, teacher licensing, and activity eligibility. Administrative buy-in is critical to the success of Online Learning programs, specifically in areas related to setting policies about credits that can be earned in online courses and credits that are considered for on-time graduation as well as designing the program to address diverse student needs and determining eligibility for extra- and co-curricular activities. Administrative support is also integral for sustaining the program specifically in areas related to identifying funding sources to continue to bear the costs for licenses and other infrastructure needed to run the program and marketing the program to a specific student pool (e.g., students considered as chronically absent or students in the district's homeschooling network). Administrative buy-in also brings with it support from other school staff. Although the remote learning specialist is tasked with providing individualized support, having the support of other school staff would help increase the chances that students' learning and social-emotional needs are being addressed.

2 Students in online education programs benefit from the intentional creation of opportunities to foster a sense of belonging and community. Many Online Learning pilots created avenues for participating students to connect with each other, including opportunities for in-person interactions, in a concerted effort to establish and foster a shared culture for students to develop a sense of community and belonging. Some strategies for building and maintain this shared culture include:

- a. **Establishing a dedicated space for students to meet in-person.** Some Online Learning pilots offered regularly scheduled in-person days for students. During these times, students could check in with their remote learning specialist, meet with their counselor or any school staff, or simply use the space to connect with their peers in the program. For some pilots, this dedicated space took the form of a classroom, while another pilot—regional school unit (RSU) 60 Noble—constructed a yurt for students in their Online Learning program.
- b. **Embedding enriching in-person activities (e.g., field trips) in online learning.** Online Learning programs included in-person activities, such as field trips and community service. By offering these activities, programs allow for a safe space where students can develop their social relationships with their peers and instructors. All RREV pilots incorporated these in-person activities into their Online Learning programs.
- c. **Including student perspectives in the strategic vision of the program.** Pilots benefitted from a participatory approach in which student voices informed the creation of the program's mission statement, expectations, and other shared goals. In the RSU

"I love the fact Online Learning gives me independence and I feel like it is helping me with my work ethic and my motivation to do different things on my own. Overall, I love doing classes online and it has changed my high school experience for the better."

– Student, Brewer

60 (Noble) FLEX program, students developed a shared vision, mission, and goals for Be Well Connected, the wellness program at Noble Virtual Middle School.

- 3 Personalized academic and wellness support can help students maximize the benefits of Online Learning.** Students in Online Learning programs have greater flexibility to choose their courses and move at their own pace. Many Online Learning pilots assign a staff member to provide individualized support to students, often in multifaceted ways encompassing the responsibilities of a teacher, school counselor or social worker, and guidance counselor. This individualized support from the remote learning specialist involves the creation of tailored educational plans with input from students as they set goals and identify required courses; monitoring student progress on these plans; conducting regular check-ins with students about their academic, social, emotional, and mental health needs; and establishing relationships with students and their families. In RSU 25 (Bucksport), the role of the remote learning specialist focused on being able to provide the appropriate level of academic and social and emotional support and scaffolds to students, especially since they had access to a team of specialists (e.g., guidance counselor, special educator, etc.) to support their role. RSU 60 (Noble) identified a social worker in addition to their remote learning specialist to support students' social and emotional well-being (e.g., those who have encountered bullying) through development and management of behavior plans and provision of services to students and their families with the goal of fostering a sense of belonging. Students told evaluators that this individualized support gave them confidence to use the flexibility afforded by Online Learning to try new or more challenging courses than they otherwise would.
- 4 Online Learning programs are well-suited for students who struggle with in-person learning and students who have strong executive functioning skills.** Online Learning pilots found that their model worked best with two types of students. The first type of student was one who had physical, mental, or emotional challenges with in-person learning. In many cases, these were students who realized during the COVID-19 pandemic that remote learning was easier for them, especially when it ameliorated social anxiety, bullying, or physical health problems that interfered with their learning when they attended school in person. For these students, reducing the pressure to physically attend school helped them focus on their schoolwork, especially when their online programs had support structures to help them. The Noble Flex and school administrative unit (SAU) Brewer Public Schools Nu programs are examples of Online Learning pilots with such support structures. Another category of students who benefitted from online education were those who had strong self-regulated and executive functioning skills as well as academic performance. These students were more engaged with online courses because they had more options and could engage in faster-paced learning. RSU 25 (Bucksport) opened up their remote learning pathway to include these types of students. These students could exercise autonomy over their own learning experiences. These two categories of student profiles might, but do not necessarily, overlap.
- 5 Families and teachers should be clearly told about greater expectations for working together to support students and hold them accountable.** Building and maintaining partnerships with families of participating students is crucial to the success of online learning. Because learning in these settings is mainly self-paced and in some cases asynchronous, traditional methods of oversight that typically occur in the classroom (e.g., instructor may not be able to check if the student is engaging with the coursework) may not be applicable. Online Learning programs should clearly communicate with families their role as accountability partners for their child's learning. This includes setting expectations for parents/guardians that their child's participation in the program may require more from them where families are encouraged to proactively monitor and communicate with instructors about their child's



Interior of the yurt built at RSU 60 (Noble) as a place for FLEX students to gather.

progress. For example, Online Learning programs such as those at RSU 25 (Bucksport), RSU 60 (Noble), and SAU Brewer ask parents to verify that their student is engaging with the course material—particularly in asynchronous courses—and to participate in regular individual meetings with teachers about their student’s process.

- 6 Schools with Online Learning programs should consider developing a plan to prepare students for returning to in-person instruction.** Programs are either designed to offer students an alternate pathway where they could continue their schooling or are designed with the goal of helping students return to in-person schooling. If students may have to return to in-person learning, as in the case of an Online Learning program serving middle school students who are making the transition to in-person high school, programs can benefit from having a plan in place to prepare students to return to in-person learning. Some strategies include increasing awareness through discussions on the increased academic expectations in high school, equipping students with the academic and social-emotional skills necessary to be successful in high school, and offering enriching, positive in-person experiences (e.g., field trips). The goal for RSU 71 (Belfast) Area High School’s LION summer semester was for students to successfully transition to in-person schooling. Strategies to prepare students for this transition include completing courses in the summer semester so that when students return to in-person schooling they are on-track for graduation and on par with their peers—thus reducing stress. Students also continued to check in with the LION Semester instructor throughout the school year where discussion centered on monitoring academic progress. The LION Semester instructor also

leveraged relationships with the families of LION Semester students through regular communication to ensure a successful transition to in-person schooling.

Background and Purpose

This document is intended for school leaders, teachers, and others interested in developing and implementing an Outdoor Education program for their local context. It summarizes lessons learned from the design and implementation of 24 schools implementing Outdoor Education pilots.¹ Each of these pilots was responsive to the school's specific needs, but they shared some common features, including:

- **Expanding Opportunities for Students to Learn Outside Traditional Classrooms** – Many pilots set aside specific times when classes go outside to learn, and often leverage the woods, streams, lakes, or coastline on or near school property. Many pilots have built new outdoor learning spaces, such as yurts and trails, where students can learn, while others embark on more frequent field trips to places and partners with outdoor learning opportunities.
- **Developing Teacher Capacity in Outdoor and Project-Based Learning** – Pilots included activities to foster teacher capacity to facilitate the integration of outdoor learning activities into state curriculum requirements through professional development, coaching, and the creation of resources or modules teachers could use to teach students outside.
- **Emphasizing Community Partnerships and Involving Local Stakeholders** – Multiple pilots worked to forge and maintain connections with community organizations that promoted additional field trips and continued support for growing outdoor learning activities.

“This type of experiential learning is more relevant, meaningful, and memorable than traditional by-the-book learning. The things my students learn outside tend to be things they remember and understand more deeply”

– Teacher, MSAD 17

Key Takeaways from Outdoor Education Pilots

The tips below are intended to give school leaders ideas to consider when developing an Outdoor Education program for their own school. These key takeaways are based on an external evaluation of the Outdoor Education pilots supported by the Maine Department of Education's Rethinking Responsive Education Ventures (RREV) program, and can be adapted based on the local needs, opportunities, policies, and cultures of individual schools.

- 1 **Buy-in from school and district leadership is crucial for the long-term planning and wide-ranging policy changes involved in setting up and implementing an outdoor learning program.**
 - a. **Building infrastructure for outdoor learning takes careful planning, flexibility, and stakeholder management.** Several pilots found the process for building new outdoor infrastructure, such as greenhouses, docks, and yurts, more complicated and time-consuming than expected. Pilot staff explained that administrative engagement was vital for obtaining zoning approvals; liaising with contractors; and making decisions regarding timelines, costs, and

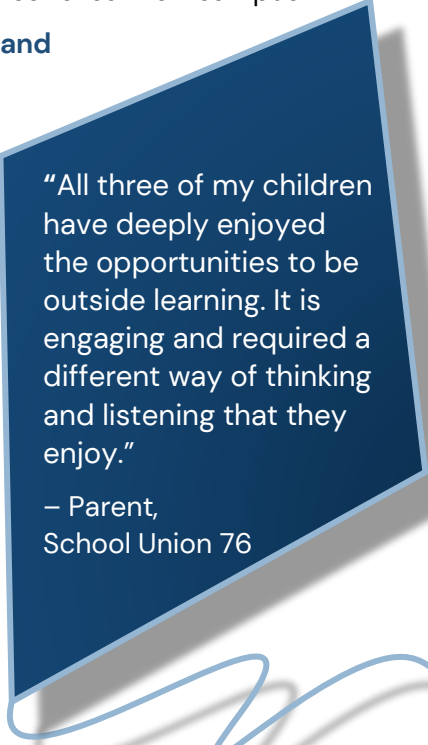
¹ These pilots were supported by the Maine Department of Education's Rethinking Responsive Education Ventures (RREV) program, which was funded by a \$17 million grant from the U.S. Department of Education's Rethink K-12 Education program.

other factors that arise while building new infrastructure. Schools considering new Outdoor Education facilities should focus on developing consensus and leadership buy-in about what to build and where, obtaining zoning approvals, finding contractors, obtaining supplies, and actual installation. A thorough understanding of local building codes and the structural needs of your outdoor learning program—like power and water utilities, Wi-Fi connectivity, storage space, and necessary safety—measures can help ensure a smooth transition from planning to construction.

- b. **Policy changes requiring administrator support may be necessary to make full use of outdoor learning spaces.** These changes could include expanding transition times between classes so students can move in and outdoors and adjusting schedules to allow for longer class periods for outdoor learning. In some subjects, it might mean offering or requiring more teacher professional development focused on outdoor learning, or more planning time for teachers to think about how best to use outdoor spaces. For example, regional school unit (RSU) 1 (Bath) Middle School created an entirely new schedule with longer blocks and better aligned teacher planning time to facilitate project-based learning and opportunities to learn off campus.

2 **Taking children outside requires extra attention to student behavior and “classroom” management, especially with younger children, but the change in environment can help students who have struggled in traditional classrooms to become more engaged learners.**

Some Outdoor Education programs serve the entire school, or even all schools in a district, while others are more narrowly tailored to certain subjects or students with particular needs. A common theme across these experiences was that the change in routine and environment often requires more attention from teachers on behavioral issues, including in some cases the use of additional staff to help with classroom management, especially during transitions. However, there was a consensus among pilot schools that Outdoor Education was a net positive for student engagement, confidence, and learning. Some schools, such as RSU 9 (Mt. Blue) High School and RSU 35 (Marshwood) Great Works School, used formalized assessments to help understand and track student social-emotional engagement while others used student surveys and other school metrics such as attendance or office referrals as proxies to help understand student engagement. Some pilots—RSU 35 (Marshwood) Great Works School, RSU 89 (Katahdin), and RSU 13 (Oceanside) High School—are specifically focusing on high-need groups in their school communities by supporting school counseling and student support services with pilot implementation. Other schools, such as RSU 73 (Spruce Mtn.) Elementary and school administrative unit (SAU) Limestone (Community School), focused on students with high truancy rates.



“All three of my children have deeply enjoyed the opportunities to be outside learning. It is engaging and required a different way of thinking and listening that they enjoy.”

– Parent,
School Union 76

- ## 3 **Outdoor learning spaces can support school-community relationships, especially by providing semi-public spaces for people or organizations to gather and enjoy the outdoors.**
- While outdoor learning spaces will primarily be designed for students, schools may consider opening some spaces for public use, especially when school is not in session. For example, School Union (SU) 76 (Deer Isle-Stonington) built a trail through a red maple swamp that exists between the elementary and high schools. During the school day, students use the trail and nearby spaces for class activities, but on weekends it is open to the public for walking, birdwatching, and other activities. These dual uses can help strengthen connections between the school and the community, which can have positive spillover effects when it comes to recruiting volunteers or maintaining support for funding school programs. When designing and building infrastructure for Outdoor Education, schools should consider ways to solicit input from the community about what they would value, and then establish clear but inviting

policies for public use of facilities. Additionally, local partners, such as nature centers or outdoors clubs, can advise on aspects of outdoor learning, including design of spaces, activities to offer, and so on.

4 Families can be great assets for Outdoor Education programs, and proactive steps to involve families can mitigate concerns about trade-offs with core content. Many pilots took intentional steps to involve parents in the planning and implementation of their outdoor learning pilots. For example, some pilots invited parents and students to contribute to the maintenance of spaces or organization of additional outdoor activities. Parental roles can include chaperoning outdoor activities or supporting upkeep of outdoor learning facilities while students can assist in caring for outdoor gear and planning seasonal planting and care for gardens or other plants. Taking a proactive approach to parental involvement can help parents see firsthand how students engage in outdoor learning, and thereby address concerns some parents may have that going outside takes away from traditional approaches.



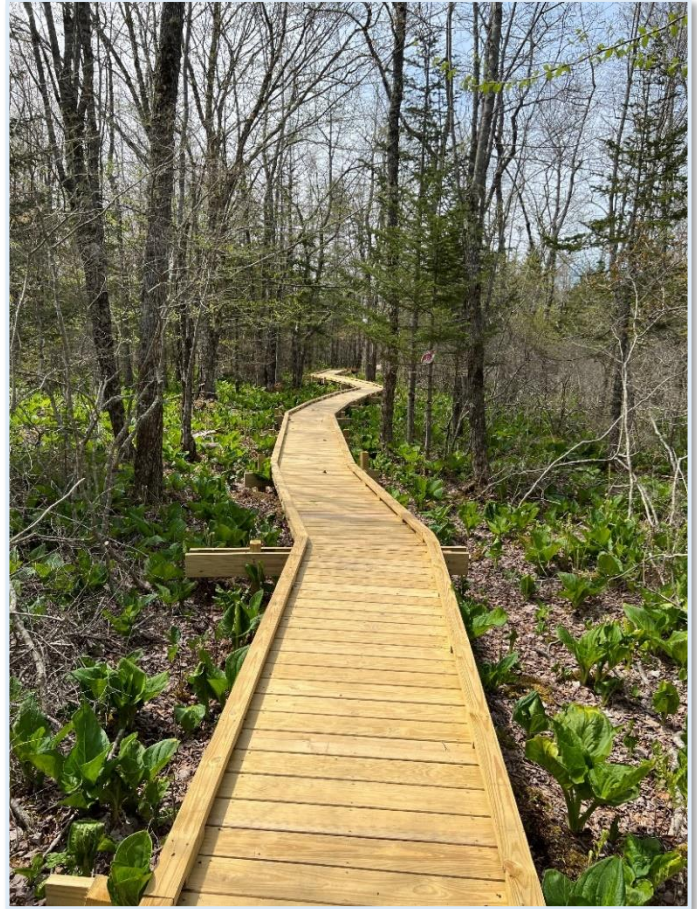
Pre-kindergarten students from MSAD 28 (Camden) Elementary School taking a rest between activities at one of the wooden educational platforms built with RREV funds.

5 Building accessible spaces and providing gear and equipment can make outdoor learning accessible to all students. Outdoor learning can benefit all children, so schools should consider incorporating accessibility into their design from the beginning. Some students, such as those with physical mobility challenges, may need additional support to access all spaces. RREV pilots such as Maine School Administrative District (MSAD) 59 (Madison) Elementary School and SU 76 (Deer Isle-Stonington) built designated accessible outdoor learning areas. Schools should also be cognizant that not all families can afford outdoor all-weather gear or other accessories for going outside, especially in the winter. Pilots such as MSAD 11 (Gardiner) High School maintain stocked gear closets with heavy coats, hats, gloves, and other items so that all students can learn outside, regardless of their socioeconomic background.

6 Activities such as journaling can help students reflect on their learning and its impact on their lives. Many pilots found that students benefited from activities in which they reflected on their experiences outside and how they could apply them to their lives. For example, students at RSU 1 (Bath) Middle School kept journals to write about their experiences outdoors and the effects on their mood and wellness. Students at RSU 9 (Mt. Blue) High School also engaged in resiliency training and mindfulness activities in order to connect their work on outdoor skills and certifications to their own well-being.

7 Teachers appreciate practical tips and tools and ongoing coaching about how to use outdoor spaces. Many of the teachers involved in RREV pilots said they most appreciated professional development that provided ready-to-use lessons and ideas for activities, and were less interested in abstract content about the benefits of learning outside. Teachers also appreciated ongoing coaching and support focused on developing outdoor learning strategies that matched their teaching style. For example, at RSU 20 (Searsport) District Middle High School teachers used their lived experience to support the design of new outdoor learning units. Other pilots, such as MSAD 17 (Agnes Grey Elementary School) and SU 76 (Deer Isle-Stonington), retained a place-based education integration specialist to help teachers make the most effective uses of outdoor learning spaces.

8 A small group of engaged teachers can serve as “ambassadors” for Outdoor Education with their colleagues. When rolling out a new educational approach, especially when it involves teaching in new environments, it is common for some teachers to embrace the change and others to be less enthusiastic. Schools interested in creating more outdoor learning opportunities may want to start by training a smaller group of teachers who have expressed interest in outdoor learning, and from there seek to grow interest in the program. A few RREV pilots used this approach, such as RSU 73 (Spruce Mtn.) Elementary School, where 4th-grade teachers served as pioneers to receive training to later act as mentors to the rest of the grades. RSU 25 (Bucksport) Middle School's and SAU Portland Public Schools' pilots also selected a group of teachers across grades to start receiving training before expanding their programs.



The wheelchair-accessible nature trail at SU 76 (Deer Isle-Stonington) Elementary School.