


Lessons from an Environmental Education “State of the State” Initiative

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Introduction

WHAT?


- Partnership between the Maine Math and Science Alliance and the Maine Environmental Education Association

WHY?

- To provide baseline information about all that is happening across the EE sector in Maine

WHO?

- Targeting K-12 schools and community/EE organizations (libraries, nature centers, camps, land trusts, etc.)



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Purpose of the Report

Create a baseline report to be updated regularly for in-school and out-of-school K-12 to :

- **Describe challenges** to implementing CBEL and **identify creative solutions** to overcome these barriers
- Identify any **inequities in access** to CBEL programs
- Understand **current practice** and provide **opportunities for improvement**
- Determine **professional development needs**
- Gather and share **success stories** that highlight creativity and innovation



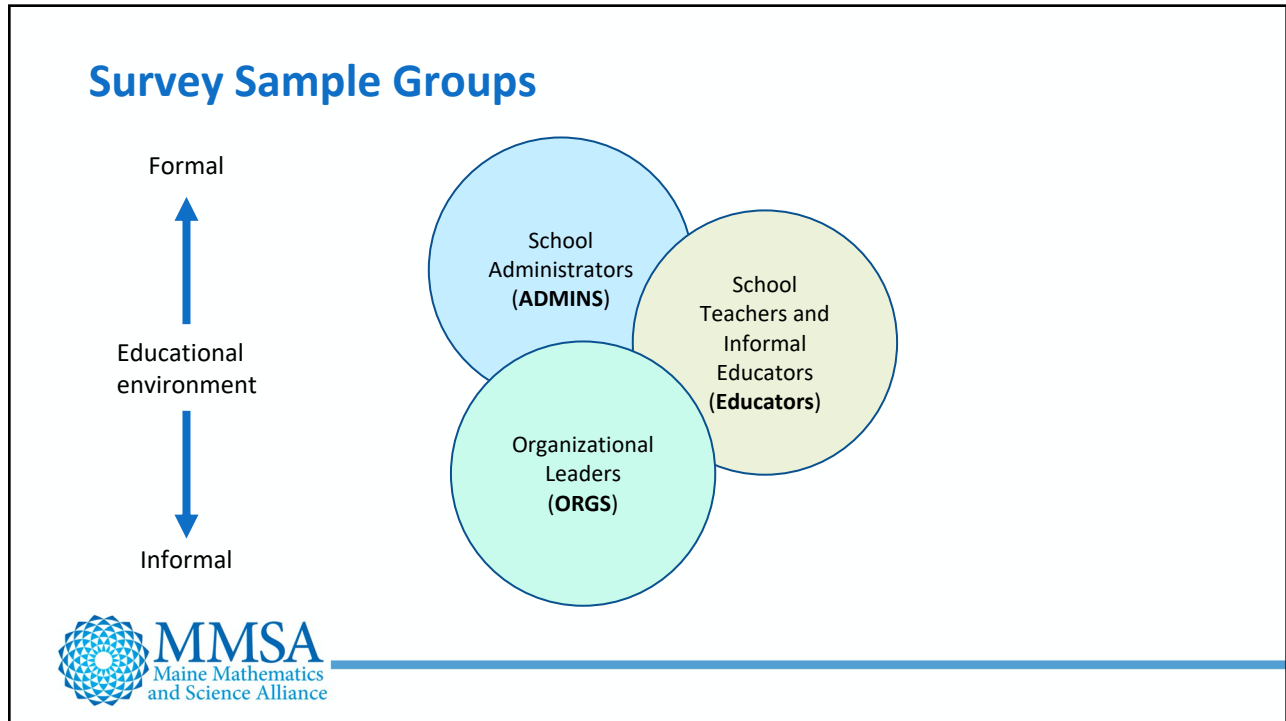
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Stakeholder Advisory Group

- Representation across schools, nonprofit organizations, universities
- Met monthly to:
 - Identify and discuss other similar surveys and initiatives
 - Define CBEL and draft survey items
 - Market the survey
 - Discuss findings and results
 - Identify case study candidates



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Survey Administration and Completion

- Survey open period:
November 9, 2018 -February 28, 2019
- **479 individuals** from **434 schools/orgs** provided information on **405 projects**
- Average completion time: 17 minutes
- Responses represented:
 - 28% schools
 - 30% libraries
 - 40% land trusts
 - 28% registered camps

The pie chart displays the distribution of responses by group. The largest segment is 'Organizational leaders' at 36%, followed by 'Teachers' at 24%, 'School administrators' at 19%, 'Informal Educators' at 8%, and 'Not doing CBEL' at 13%.

MMSA
Maine Mathematics and Science Alliance

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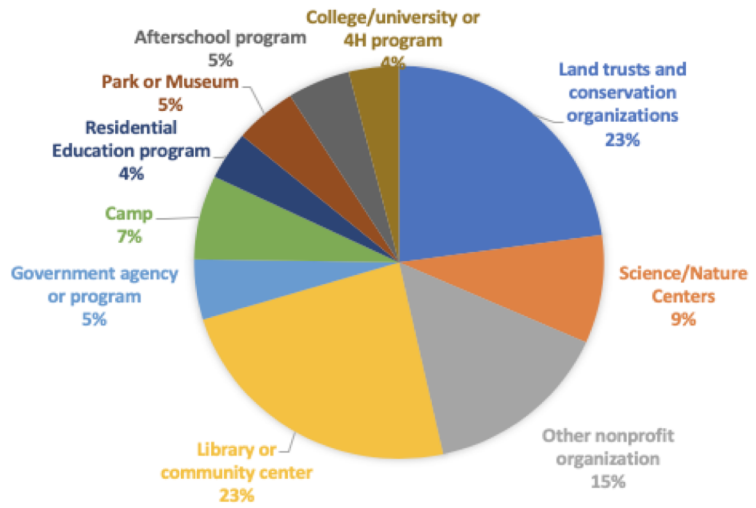
Census Respondents

Responses constituted

47% schools

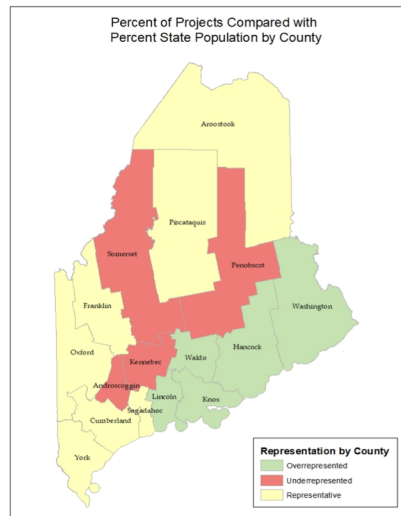
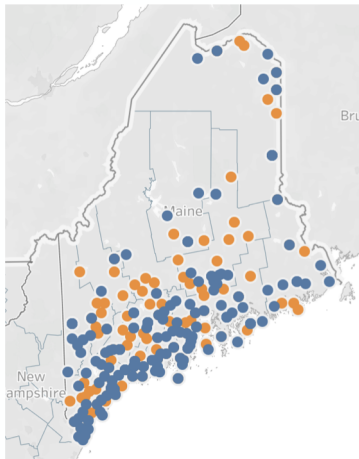
53% organizations

ORGANIZATION RESPONDENTS



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Geographic Distribution of Responses



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Data Insights



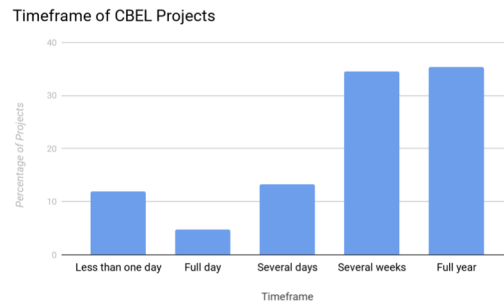
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Structure of Programming

- Short-term (field trip) experiences are the most common
- BUT
- Educators highlighted extended programming to share as the most impactful/aligned with best practice

Schools
<ul style="list-style-type: none"> • Day program offsite (field trip) – 55% • Day program onsite (presentation) – 40% • Long term partnership – 39%

Organizations
<ul style="list-style-type: none"> • Field trip – 47% • School presentation – 40% • Long term partnership – 31%



Recommendation: Short-term programming can be an effective entry point to CBEL, but as the field looks to improve practice and quality of programs, long-term partnerships should be encouraged and supported.



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Equity in CBEL

- Schools with high Free and Reduced Lunch eligibility report more significant challenges to implementing CBEL

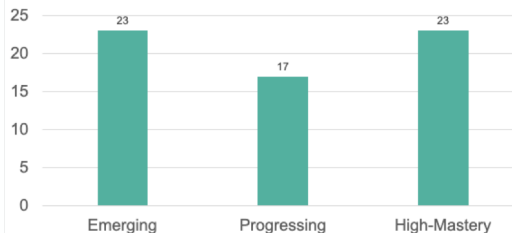
BUT

- Still had equal representation of High-Mastery projects.

CBEL Challenge Index by F&R Eligibility



Percentage of Projects at High Free and Reduced Lunch Schools



Recommendation: By looking towards high-mastery projects in lower-resourced school districts, we may be able to identify more concrete methods to address issues of inequity and accessibility of CBEL.

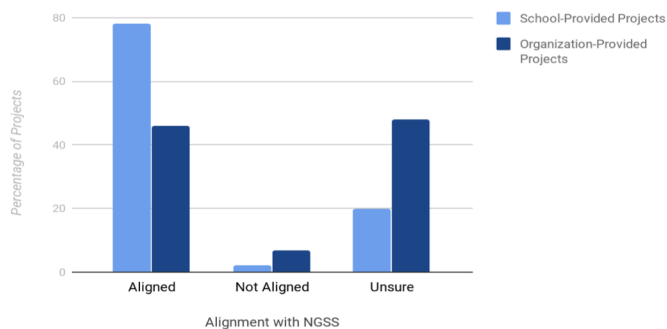


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Connection to Standards

Projects from school respondents were more often aligned with the *Next Generation Science Standards* than organization-provided projects and there is a lack of knowledge of the science standards for org. reps.

Project Alignment with Next Generation Science Standards



Recommendation: Efforts should be made to support organizations in learning the common language of schools with regards to science standards, to facilitate collaborations between the two.



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Partnerships in CBEL

Partnerships are related to high-quality, best-practice aligned programming and there are opportunities to overcome challenges with creative partnership opportunities.

- ▶ Over 80% of projects included at least one partner; 1/3 of projects had 3+ partners
- ▶ Partnerships are related to quality programming and use of best practices
- ▶ Gaps in partnerships (i.e. transportation, evaluation, supporting connections to community)



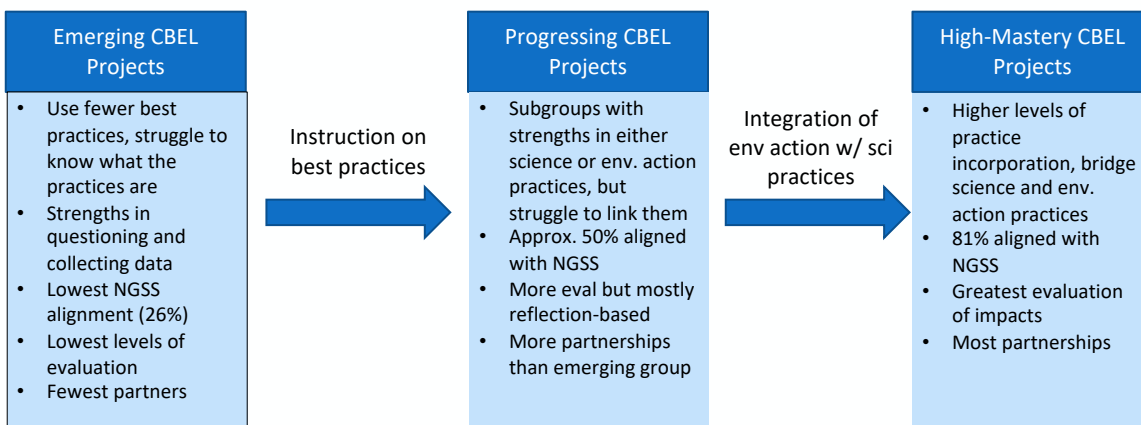
Recommendation: There is an opportunity to fill in gaps by expanding partnerships to support project needs.



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Project Clusters

Clusters of projects emerge that incorporate practices in a similar way.



Recommendation: Generate targeted opportunities for project advancement by scaffolding best practices and emphasize patterns of High-Mastery projects.



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Professional Development Needs

Educators had clear needs for professional development support and structures to support continued professional growth

- ▶ Climate change education
- ▶ Instruction on specific topics/activities
- ▶ Making connections to science standards
- ▶ Making connections to the community
- ▶ Centralized way of accessing information about PD and other opportunities

"I would love to find more ways to take the NGSS and MEA standards and help connect them to the local community and its issues." - Teacher

"I would be interested in PD that focuses on teaching educators like myself activities that support the NGSS outcomes the schools are trying to meet. Our programs are almost exclusively organized through the school so opportunities to learn how to best forge those partnerships are a great help." –Out-of-School Educator



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Next Steps

Deliverables

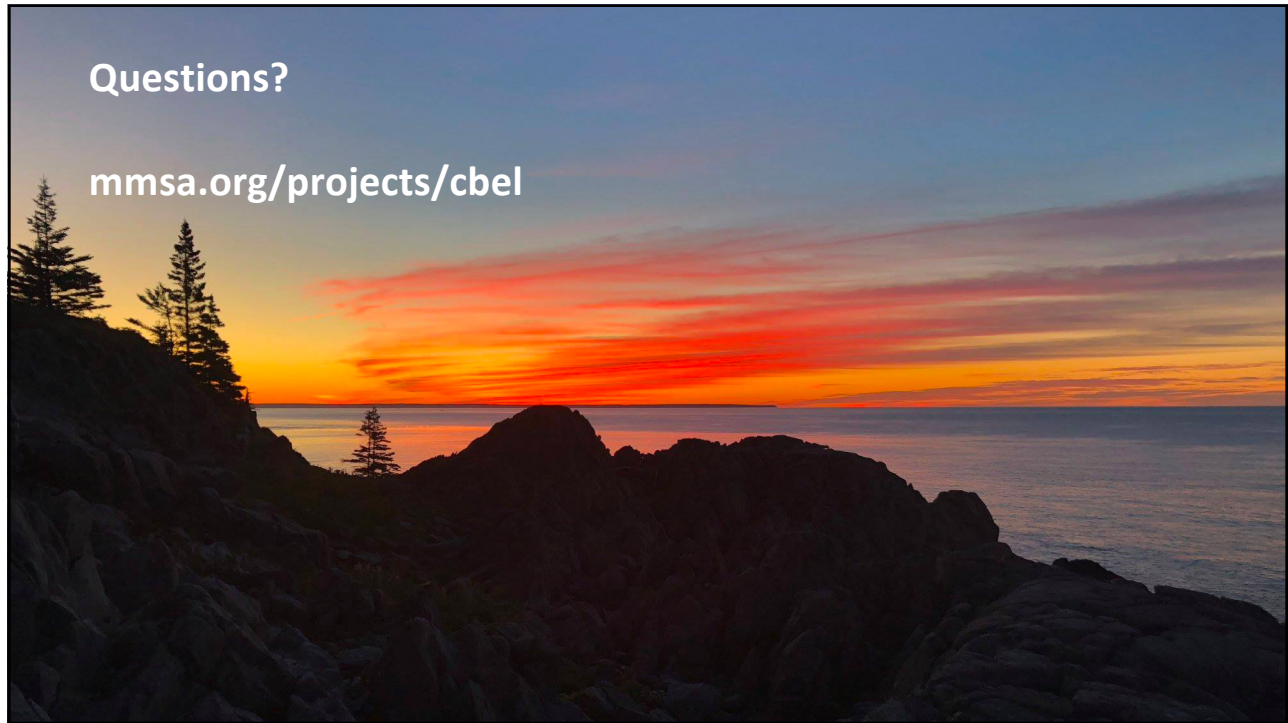
1. A survey that can be replicated in the future
2. Community-Based Environmental Learning Report
3. Case studies to serve as examples of best practices

Future Actions

1. Convene regional listening sessions to share findings and gather ideas
2. Establish a professional development advisory team
3. Connect educators with field-wide professional development and community partners
4. Activate Maine EE evaluation collaborative
5. Develop realistic scenarios to generate sustainable funding for EE in Maine



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Questions?

mmsa.org/projects/cbel