

A public magnet high school for marine science, technology, transportation, and engineering

January 19, 2022

Committee on Education and Cultural Affairs Maine State Legislature 100 State House Station Augusta, ME 04333

Good afternoon Senator Rafferty, Representative Brennan, and Distinguished Members of the Committee.

At the request of the Committee, the Maine Ocean School Board and our supporting partners have evaluated alternative models for the School. We hope this information proves useful in your consideration of LD1389 - An Act To Improve Maritime Education In Maine. The School's Board of Trustees asks that you review the following work and analyses and use this information to inform your decision making on the pending legislation to ensure the continuity and sustainability of Maine Ocean School. Positive action on LD1389 and removal of School's sunset clause, will ensure continuity in ocean-themed education as you consider alternative models for the School.

In meeting the Committee's request, we have:

- 1. Discussed alternative funding models that would secure the School's ability to remain a viable ocean-themed high school and diploma-granting institution with continued growth following the passage of LD1389.
- 2. Created an Alternative Program Model for ocean-themed high school education where students in grades 11/12 would participate in Hands-on/Minds-on, place-based 2-year certificate programs in one of 4 marine tracks. This model is presented following this letter. The courses are based on courses approved by the Committee from the Program Plan and recently developed and offered at the School aimed to educate students on marine industries, economies, and career opportunities.
- 3. Investigated alternative locations and partnerships for both the School and Alternative Program Model. Our investigation of alternatives comparatively evaluates a School vs. a Program, a location of the alternative, governance and oversight, funding needs and possible models, anticipated enrollment, the need for legislative intervention and appropriations, and how well these alternatives meet Maine Ocean School's current legislative mandate and approved mission, and vision.



With respect to alternative locations and partnerships, we have identified the potential to move the School as a diploma-granting institution to the UMS Hutchinson Center or Maine Maritime Academy. We have also identified the potential to create an Alternative Program Model that is certificate-based that might be housed at UMS Hutchinson Center, Maine Maritime Academy, or RSU 20 or as part of a state-wide CTE program with regional deployment of job training at specific CTE locations or at a single CTE location or with the JMG program.

A tabulated comparative analysis for these Alternatives is presented following this letter that shows preliminary findings that are based on our conversations with RSU 20 (Superintendent Downing), UMS Hutchinson Center (UMaine Provost & Interim Director Kim Wilson-Raymond), and a state-wide CTE Program Leader (Mr. Dwight Littlefield).

While a number of these alternatives show promise, additional details around the educational model, where students can be recruited from, funding models, and governance, etc. need to be further evaluated. Specifically, there are complexities and critical decision points around how a possible alternative would be implemented legislatively and funded through appropriations. This highlights the need for input from multiple collaborators and entities with authority, including members of this Committee. We seek the Committee's support of LD1389, in maintaining a state-wide, ocean-themed, high school or high school program with appropriate funding and governance that effectively can integrate Maine Ocean School with potential collaborative entities.

Respectfully,

Melissa Landon, Ph.D., P.E. Chair, Maine Ocean School Board of Trustees melissa@maineoceanschool.org



Committee on Education & Cultural Affairs ALTERNATIVE PROGRAM MODEL Ocean-Themed High School Professional Development and Certificates

Maine Ocean School (2018-present)

- Legislatively enacted, 4-year ocean-themed, diploma-granting high school in Searsport, Maine with virtual offerings.
- <u>Mission</u>: Provide a theme-based high school education focused on Maine's maritime heritage and ongoing connection, with an emphasis on leadership, work ethic, and transferable skills for careers involving the ocean.
- <u>Vision</u>: Actively engage and challenge its students. Graduates will be valued for their strong work ethic, knowledge, experience, and leadership capabilities. Maine Ocean School will stay on the leading edge of innovative technologies and teaching strategies, and help support learning in our communities.

Board of Trustees and School staff have considered restructuring to offer a statewide ocean-themed Program model:

- *Primary Focus*: Hands-on/Minds-on Place-based 2-year certificate program in one of 4 tracks (aligned with state needs and developed in partnership with marine-experts on the Board):
- Track 1: Marine Science, Fisheries & Aquaculture
- Track 2: Oceanography and Ocean Energy
- Track 3: Maritime World Trade and Policy
- Track 4: Marine Transportation and Engineering
- Program and Coursework developed previously by the School staff and Board in partnership with marine educators and leaders in Maine and implemented with students over the last 3 years at Maine Ocean School:

	Science, Fisheries and Aquaculture ¹	Oceanography & Ocean Energy	Maritime World Trade and Policy	Marine Transportation and Engineering						
Semester 1, Class 1	Marine Foundations ²									
Semester 1, Class 2	Intro to Oceanograp	hy (Earth Science) ³	Trade, Exploration, and Cultural Diffusion							
Semester 2, Class 1	Marine Biology	Marine Physics	Marine Policy	Marine Physics						
Semester 2, Class 2	Marine Foundations II									
Semester 3, Class 1	Marine Science II	Basic Marine Engineering	Marine Management	Marine Engineering						
Semester 3, Class 2	2 Capstone									
Semester 4	Apprenticeship or Job Certification									

- Anticipated Staffing:
 - Statewide student participation in in-person and/or virtual learning from a central location: 2.5 teachers, Community/Workforce Coordinator for workshops & presentations, Program Administrator (Coord. and Admin are part-time or full-time depending on student enrollment)
 - Statewide student participation in in-person learning at specific and multiple sites: 2.5 teachers per site, single Community/Workforce Coordinator and Program Administrator.
- *Secondary Focus*: PreK-10 Teacher Professional Development program and asynchronous curriculum (modeled after <u>MOOSE program</u>) to feed 11/12 certificate, starting with Middle Schools that already have aligned courses.
 - Anticipated staffing not yet considered.

¹ Links to UMaine microcredentials, e.g., <u>https://ums.badgr.com/public/badges/o9yOblfiSGWA_ztppgqMAA</u>

² Basic careers/opportunities course involving weekly input from Marine industry and science professionals

³ Designed to prepare students for UMaine SMS100 course (uses same textbook and learning metrics)

MAINE OCEAN SCHOOL ALTERNATIVE SCHOOL AND ALTERNATIVE PROGRAM COLLABORATOR OPTIONS							Maine Ocean School (MOS) Mission & Vision Criteria										
Alt.	Туре	Facilitator & Location	Curriculum	Graduation/ Completion	Governance	Current State Reporting	Finance Structure & Funding Model	Target Enrollment	Legislative Effort Required?	Statewide Impact	High School		High Achieving Students	Hands On Minds On	Maritime Workforce Connectio n	Innovative Teaching Strategies	NOTES
1	Maine Ocean School (As Is)	RSU 20 (Searsport HS until growth requires new building)	Full HS curriculum (Notes 1, 2)	9-12, Full Diploma	State Board	Education and Cultural Affairs Committee	Charter formula (EPS per student) + Existing Maine Ocean School Foundation	100 w/ adequate resources	Yes. Pass LD1389. Updated funding model	Y (in person, virutual)	Y	Y	Y	Y	Y	Y	
2	Maine Ocean School (Improved)	TBD Higher Ed. Institution, e.g., UMS Hutchinson Center or Maine Maritime Academy	Full HS curriculum (Notes 1, 2)	9-12, Full Diploma	State Board w/ representation from Higher Ed. Inst.	Education and Cultural Affairs Committee	Grant from DOE Appropriations Fund + Foundation/Donations. \$250,000/yr (25 students) + \$10,000 per student over 25 depending on the location.	100 w/ adequate resources	Yes. LD1389. Updated legislation & funding model	Y (in person, virutual)	Y	Y	Y	Y	Y	Y	UMaine has a Task Force reviewing the Hutchinson Center. They are willing to consider how MOS might fit in or even shape their new structure.
3	Maine Ocean Program	RSU 20	Alternative Program Model (Notes 2, 3)	Certificates for Grade 11/12	RSU 20 oversight	Maine State Board of Education	Funding to RSU to establish Coordinator (permanent), Curriculum development (2 years), and either a new Teacher salary line (permanent) or Training for existing teachers to transistion to curriculum (temporary).	20-40	Yes. LD1389 for program continuity. Updated legislation & funding model	Y: virtual, N: in person	Y	Y. Requires Coord.	Y	Y	Y. Requires Coord.	Y. Requires Coord.	RSU 20 expressed willingness to work with MOS to develop questions and propose strategies for integration. Would it be possible to maintain the school (not just a program) within the RSU.
4	Maine Ocean Program	Higher Ed. Insitituion: University of Maine Hutchinson Center	Alternative Program Model (Notes 2, 3)	Certificates for Grade 11/12	State Board, UMaine Hutchinson Center Oversight	Education and Cultural Affairs Committee	Funding formula less clear than others. Could build on Early College opportunities and grant application experience staff already there.	40+ (depends on virtual learning, regional student interest)	Yes. LD1389 for program continuity. Updated legislation & funding model	Y: virutual , N: in person	Y	Y	Y	Y	Y. Requires Coord.	Y. Possible college level course instructio n	UMaine has a Task Force reviewing the Hutchinson Center. They are willing to consider how MOS might fit in or even shape their new structure.
5	Maine Ocean Program	Higher Ed. Insitituion: Maine Maritime Academy	Alternative Program Model (Notes 2, 3)	Certificates for Grade 11/12	State Board, Maine Maritime Academy	Education and Cultural Affairs Committee	Funding formula less clear than others.	40+ (depends on virtual learning, regional student interest)	Yes. LD1389 for program continuity. Updated legislation & funding model	Y: virtual, N: in person	Y	Y	Y	Y	Y. Requires Coord.	Y. Possible college level course instructio n	Maine Maritime not contacted
6	Maine Ocean Program	Maine CTE	Alternative Program Model (Notes 2, 3) + 350 hours marine industry job certification	Certificates for Grade 11/12 + Marine Job Certification	Maine State CTE	Maine State Board of Education	Non-CTE funding for Administrator and Coordinator liaisons to participating individual CTEs (state-wide program only) and teachers and students in	100 (at ~10 coastal CTE locations, depends on regional student interest)	Yes. LD1389 for program continuity. Additional legislation & appropriation. CTE funds may be available	Y: virtual, N: in person	Y	Y, Limited	?	Y	Y. Requires Coord. May be Limited.	Y: Requires teacher training	Concern that CTE is only for specific job training, while Ocean Program is aimed at broader career and education preparation. Concern that academically high-achieving students are not the CTE target audience. Signficant effort would be
7	Maine Ocean Program	Individual CTE (one or more,)	Alternative Program Model (Notes 2, 3) + 350 hours marine industry job certification	Certificates for Grade 11/12 + Marine Job Certification	Individual CTE	Maine State Board of Education	Alternate Program(s). CTE funding only for students in a marine- themed skills/job training certification (350 hours) programs at participating CTE locations.	10 (at 1 coastal CTE location, depends on regional student interest)	Yes. LD1389 for program continuity. Additional legislation & appropriation. CTE funds may be available	N	Y	Y, Limited	?	Y	Limited	Y: Requires teacher training	required to create state-wide program and individual ocean- themed training. Concern that required job training will discourage students interested in general ocean careers if the available job trainings are limited or too specific.
8	Unknown	JMG Collaboration or Self-Selected Participating Schools.	Unknown	Unknown	JMG oversight	Maine State Board of Education	Unknown	Unknown	Yes. LD1389 for program continuity. Additional legislation & appropriation. JMG funds may be available	N	Y	Limited	N	?	Likely	?	Efforts to contact JMG leaders unsuccessful. Concern that high- achieving students are not the JMG target audience. Concern that full program may not be able to be implemented.

Notes: 1. Existing Program Plan can be found at: http://www.maineoceanschool.org/bylaws---policies.html

2. Admissions Policies can be found at: http://www.maineoceanschool.org/bylaws---policies.html

MOS Criteria Color Key: Met

Mostly met

Met on a limited basis, additional options needed Not met, additional options needed

3. Alternative Program Plan summary provided with this table.