

Maine Department of Education Maine Learning Technology Initiative 2020 MLTI Advisory Board Recommendation Report

October 2020

The Maine Department of Education formed the [Maine Learning Technology Initiative \(MLTI\) Advisory Board](#) in January 2020. The MLTI project has experienced only minor changes in the nineteen years since the plan was first introduced in 2001. Therefore, the 31-member Advisory Board was charged with developing a recommendation to carry MLTI into the next phase of its life cycle, the *MLTI 2.0 Program*.

Advisory Board members were nominated from among sixteen different education organizations and represented the diverse needs of the State.

The MLTI Advisory Board met eleven times over an eight-month period, concluding in August 2020 by submitting a recommendation to the Education Commissioner for the next phase of the MLTI Project.

The Advisory Board's work culminated in a recommendation for a learning technology plan that focuses on the future and establishes a program that proposes a thoughtful phased-in implementation strategy. The program recommendation creates a plan with inter-dependent elements and forms a community with systems of continuous process improvement and accountability. The redesigned program aligns and compliments Maine's Economic Development Strategy, 2020-2029, and focuses on methods, systems, plans, and processes that will provide Maine students with the knowledge, skills and abilities needed to lead in a digital economy.

The plan focuses on developing a foundation for innovation and invests deeply in educator preparation and professional learning.

This report summarizes the work completed during the eleven board meetings, and provides an overview of the board's vision, work, processes, barriers, and concessions that resulted in a final program/plan recommendation in August 2020.



I think we're going to demonstrate the power of one-to-one computer access that's going to transform education. The economic future will belong to the technologically adept. -Senator Angus King

MLTI Advisory Board

Developing MLTI 2.0 Primary considerations

Program vision, history, original task force report, guiding principles, needs assessment

In January 2020 the MLTI Advisory Board undertook the task to re-envision the 2001 Maine Learning Technology Initiative plan. The board unified their vision and the program's re-development around a focus on students and educators and within several primary considerations including a program vision, reflection on the initiative's history, a review of MLTI's original task force report, guiding principles, and a needs assessment.

Program Vision

MLTI 2.0 will be a state-level program promoting and supporting the intentional use of researched-based educational technology practices in student learning. The program will work toward closing the digital learning divide by providing equitable access to technology and support for all students so that they can create, problem-solve, and innovate for a global economy. In order to achieve this vision, the program will support equitable access for all to technology equipment and software tools meeting specified standards. The program will be an inter-related dependent system of components that include supports, measures, services and activities that provide the foundation for a State and local partnership focused on the equitable integration of technology into engaging and effective educational experiences. The program will be guided by advisory groups with membership that includes state-level staff, school leaders and educators in order to ensure continuity and consistency of the implementation strategy.

Program History and Original Task Force Report

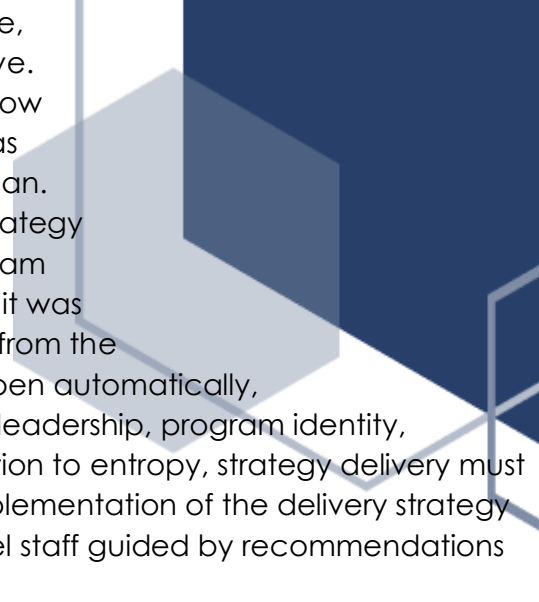
Board members reviewed the program's original vision by reading and discussing the 2001 original task force report, *Teaching and Learning for Tomorrow: A Learning Technology Plan for Maine's Future*. Additionally, the Maine DOE staff provided a summary of highlights of the program's nineteen-year history. The historical reflection revealed what the initiative was intended to be, what it was, how it developed over time, and moreover where it needed to move in the future.

The historical review revealed that the concepts outlined in the original task force report remained relevant. However, the history also showed varying degrees of program implementation at the local school district level and inconsistent follow through at the state level. The cause was presumably a scarcity of resources necessary to implement the program with fidelity. Therefore, it was clear that the execution of the redesigned program would need to consider equalizing access to all resources and that the development of the program would need to emphasize community identity, a focus on students, and include a monitoring and support program grounded in continuous process improvement.

Guiding Principles

Members reviewed the original plan's guiding principles and a range of relevant policies during the first meetings.

The group then developed a set of MLTI 2.0 guiding principles.



The revised guiding principles were essentially, at their core, the same principles adopted as part of the original initiative. This demonstrated that regardless of the environment or how complex issues become, principles are lasting, and this was a testament to the value and values of the original MLTI plan. This exercise also revealed that attention and loyalty to strategy delivery is essential to program implementation. The program experienced high state-level staff turnover and as a result it was acknowledged that implementation may have diverged from the intent of the original plan. Strategy delivery does not happen automatically, and state-level staff play a critical role in providing visible leadership, program identity, and the realization of strategic goals. To avoid the dissolution to entropy, strategy delivery must be intentional, regularly monitored, and adjusted. The implementation of the delivery strategy toward the program vision is the responsibility of state-level staff guided by recommendations from advisory groups.

MLTI Advisory Board

Work, process, barriers, and concessions

The board convened in January 2020 and held eleven meetings, nine of which were held virtually due to the pandemic. Board meetings were facilitated by Maine Department of Education staff and adhered to protocols that guided the group toward a consensus decision on the design of MLTI 2.0. The original membership was comprised of representatives that included technology directors, technology integrators/coaches, classroom teachers, computer science teachers, superintendents of schools, principals, curriculum coordinators, librarians, school board members, directors of special services, State of Maine Office of Information Technology personnel, and Network Maine Council members. Due to the pandemic, the superintendents, business managers, and school board members were not able to regularly attend Advisory Board meetings as they had to prioritize their time for their own local school's operational needs. The 21 members that remained in August consisted primarily of staff working in school technology, including technology directors, librarians, technology integrators/coaches, classroom teachers, and computer science teachers. Membership during the eight-month period decreased from a high of the 31 members to 21 members that, as a group by consensus, submitted the final recommendation to the Education Commissioner.

The February and March meetings focused on a review and analysis of available Maine DOE and MLTI program data. The analysis included an assessment of past participation levels, total number of students in the program, total number of educators, districts with technology integrators, and an assessment of each school's free/reduced lunch percentage. The lack of program data available presented a challenge, particularly regarding professional learning and outcome and perception data. As a result, the board focused two meetings on developing a needs assessment survey to obtain data that would be helpful in designing the program. In March the group finalized the needs survey. However, the survey distribution was placed on hold and eventually cancelled as the pandemic forced schools across the state to close school buildings and moved to fully remote learning.

During the April meeting a special appearance was made by U.S. Senator Angus King. The Senator related his experience 19 years ago with bringing MLTI's innovative programming

to schools. He applauded the board's work and challenged the board to think innovatively in the second iteration of the MLTI program, to push limits and think outside the box.

A significant portion of the Advisory Board's work took place in the eight meetings between April and August 2020. The sequence of eight meetings began a shift from a historical perspective toward the future development of MLTI 2.0. During these meetings the group, through member consensus, innovation activation, and synthesis arrived at a final recommendation for the transformational program, MLTI 2.0.

In May, members participated in a visioning protocol/process designed to spark new and innovative ideas. The result of the process was a list of program elements that members felt were important in the design of MLTI 2.0. Members then prioritized potential elements using a scale from highest to lowest. The survey showed professional learning as the group's top priority.



Members received a review of the existing program's elements to help better understand the current program and its challenges. The review included an overview of MLTI's budget, including the amount of spending for each program element, an overview of the device management processes, and a recap of the professional learning programs.

In June, five months into the pandemic, the group was asked to think about how MLTI 2.0 could be designed to help address the challenges experienced as schools moved from in-person to remote learning. Board members were asked to consider and respond to the following prompts: What are the challenges you are facing right now regarding the COVID-19 crisis? What, if any, of those challenges have been mitigated by the existing MLTI infrastructure? How so? The informal assessment revealed that most challenges were presented at the PreK – 6 level because MLTI has primarily focused on the 7-12 grade levels. As a result, it was determined that expanding MLTI to that grade range, if funding was available, would be the beneficial. Additionally, the group identified a need to increase educator professional learning programs to build educator skills in delivering remote learning. Other challenge areas were student privacy, availability of broadband, access to practical levels of WiFi, device access for a larger percentage of student body, access to quality learning materials for remote learning, and inequity of opportunities in at-risk populations.

The pandemic revealed, not only gaps in strong instructional technology programs, but exposed, even more clearly, the significant differences in the availability of technology resources for student learning across the state's geographic regions,

commonly referred to as the digital divide. The gap in technology resources exposed by the pandemic ranged from broadband connectivity to lack of equipment. Using this experience to learn how MLTI 2.0 might be designed to address the divide members worked in small groups to discuss equity vs equality. Members responded to “How should Maine DOE redesign the MLTI program to best address the student digital divide?” The group’s consensus was, Equity as Equalization of Opportunity – Maine DOE should establish a minimum requirement for the state and prioritize money and services to bring each SAU up to that minimum requirement. Members synthesized the group’s stance which is incorporated in MLTI 2.0.

In July, members began a review of six potential plans. Each plan was vetted through a SWOT (strengths, weaknesses, opportunities, threats) analysis. The SWOT analysis moved the group closer to the final program design recommendation.

In August, through a synthesis of the group’s SWOT analysis, the MLTI 2.0 program design was determined. The recommendation for MLTI 2.0 transforms the project into a Department program. This distinction is important because it changes the MLTI project, which represented a single, focused endeavor, to a program of related components that run as a group toward producing a common benefit aligned to the Department’s strategic plan. MLTI 2.0 has a defined program goal with multiple defined outcomes and several interrelated projects running simultaneous to deliver benefits, over time, to the State, schools, educators and students. The program is aligned to Maine DOE’s strategic priorities and will be coordinated by a full-time program manager. The program will be flexible enough to respond to unexpected events and will maintain contingencies for future occurrences to maximize opportunities and create greater value and benefits. The program will be guided by advisory groups that will provide stakeholder input. The stakeholder relationships will be carefully developed and maintained to maximize the program’s responsiveness and therefore it’s long-term value to the State, schools, educators, and students.

MLTI Advisory Board

Plan Goal MLTI 2.0

The goal of MLTI 2.0 is to close Maine’s digital learning gap by creating, developing, and continuously improving the redesigned program’s inter-related dependent components into supports, measures, services and activities that build a foundation of a State and local partnership focused on the equitable integration of technology into engaging and effective educational experiences.



MLTI Advisory Board MLTI 2.0 Recommendation

The Advisory Board's final recommendation to the Commissioner of Education was made in August 2020. The innovative program redesign strikes a balance between proven elements of MLTI and updated program components that will transform teacher and educator technology use in schools and, through this transformation, close Maine's digital learning gap.

Beginning in September 2021 units with attending students educated at public expense will be eligible to participate in MLTI 2.0. The program will impact approximately 56,000 students and 5,700 educators each year.

MLTI 2.0 will be administered and managed by the Maine DOE MLTI staff, in alignment with the Department's strategic priorities and the program's guiding principles. In addition, the new design includes advisory groups that will provide recommendations to the MLTI program staff.

Recognizing that SAUs want the autonomy to select devices that best meet the needs of their community, but also recognizing the advantage of state contracts for pricing and to ensure that all options meet adequate device specifications, MLTI 2.0 will provide a per pupil annual allocation based on a qualifying units' eligible student population to be used to purchase devices from a menu of state contracts. SAUs will also be able to purchase additional devices for non-MLTI grades from these contracts at local expense. In addition to the allocation for devices, there will also be a per pupil allocation for teaching and learning software purchases.

Additionally, the advisory board recommended expanding the program to additional grade levels. The MLTI 2.0 program will provide a per pupil annual allocation based on eligible student population to be used to purchase 1:1 personal computing devices for students and educators in 7&8th grade and two contiguous grades, either 5&6, 6&9, or 9&10. The program expansion will be phased in over two years: funding for 7&8th grade devices in school year 2021-2022 and funding for the two additional grades in school year 2022-2023.

Perhaps the area where the Advisory Board identified opportunities for the most modifications was in the design of the professional learning provided through the MLTI program. Professional learning will be uncoupled from the device contract to ensure a focus on teaching and learning. The Maine DOE will develop a state plan for professional learning which will include a renewed commitment to high quality, teacher-led professional learning in both the implementation of the state computer science plan as well as support for digital learning and technology integration. The State Computer Science and Secondary Digital Learning Specialist and Elementary Digital Learning Specialist, will provide state and regional professional learning as well as provide asynchronous

learning modules that will focus on developing educator skills, abilities, knowledge and their application to teaching and learning.

In addition to these state level positions, MLTI 2.0 will employ five distinguished educators. These distinguished educators will provide classroom-level coaching support to increase local capacity to integrate technology and create engaging educational experiences and to focus on identified high-need areas as determined by the MLTI 2.0 professional learning plan.

Maine DOE will also host regional and statewide best-practice convenings where representatives from each participating SAU will share how they are integrating technology and computer science into their curriculum. The Department will also continue to host the annual MLTI student conference which will focus on technology and innovation for a global economy.

In additional recommendations, Board members determined 2.0 will include a rigorous monitoring and support component. Therefore, the program will be overseen by an independent evaluator who will provide an ongoing evaluation of program processes, program implementation, impact assessment, and progress toward the program's stated goals and outcomes. Moreover, that the program will have a formalized monitoring and support component focused on program management of the inter-related dependent program elements, tracking impact, progress, implementation, and continuous process improvement.

The advisory board's recommendation also included the addition of a state-level Technology Infrastructure Specialist who will provide SAUs support to increase local technical capacity, device management, and develop student hardware engineering training opportunities. Over the last 18 years of MLTI most SAUs have chosen to update their WiFi network equipment and assume responsibility for their own WiFi network, providing increased security and control. Since the majority of SAUs have upgraded their WiFi infrastructure and assumed responsibility for their WiFi, the technology specialist will work with the remaining schools to transfer WiFi responsibility from MLTI to local SAUs. The specialist will also aid SAUs in building out their infrastructure and working with contractors, as well as securing the maximum e-rate funding available.

In summary, the advisory board's MLTI 2.0 recommendation provides a foundation for a holistic state-level technology program that includes an allocation for 1:1 computing devices and state-level contracts that maximize purchasing power, delivers a teaching and learning software allocation, adds state-level technology support, and embraces a rigorous state plan for professional learning. The program's monitoring and support component supports the advancement and continuous process improvement of these inter-related dependent components.