Maine State Numeracy Action Plan

Empowering All Learners Through Meaningful Mathematical Understanding
Maine Department of Education | August 2025

Introduction

Numeracy is more than performing calculations; it is the ability to make sense of the world through mathematical thinking. It empowers learners to reason, solve problems, and make informed decisions. The Maine State Numeracy Action Plan outlines a comprehensive strategy to strengthen numeracy from early childhood through adult learning by embedding it across disciplines, providing professional learning, and engaging families and communities in authentic, relevant ways.

Vision

Every learner in Maine develops strong, flexible numeracy — the ability to confidently apply mathematical thinking in real-world contexts — supported by high-quality instruction, engaging learning experiences, and a statewide culture of mathematical curiosity.

Guiding Principles

- Numeracy is foundational for all learners, not limited to math classrooms.
- Every educator is a numeracy educator.
- Numeracy should be integrated across disciplines and all stages of learning.
- High-quality instructional materials, professional learning, and interdisciplinary collaboration are essential to strong numeracy education.
- Families, communities, and industries play a vital role in fostering numeracy learning.

Strategic Focus Areas and Implementation Priorities

Strategic Focus Areas	Implementation Priorities
1. Early and Foundational Numeracy *Ensure students develop deep number sense and flexible thinking early in their education.*	• Embed early numeracy in pre-K–3 systems and resources. • Provide targeted support for educators in early learning settings.
2. Numeracy as Equity and Access	• Develop public messaging around

Position numeracy as essential for civic life, economic opportunity, and informed decision-making.	numeracy's relevance. • Center marginalized learners in numeracy supports.
3. Interdisciplinary and Real-World Application *Highlight numeracy across content areas and in authentic contexts.*	• Curate MOOSE modules and interdisciplinary units that center numeracy. • Partner with CTE and workforce initiatives.
4. Diverse and Flexible Pathways *Support multiple ways for students to engage in meaningful math learning that reflects their interests and goals.*	• Develop/pilot modern math courses. • Lift up nontraditional pathways like PBL and CTE-aligned math.
5. High-Impact Professional Learning *Invest in sustained, collaborative, and classroom-connected support for educators.*	• Fund coaching and embedded PD models. • Expand regional networks and teacher leader initiatives.
6. Instructional Leadership and Systems Coherence *Ensure administrators and system leaders can support effective numeracy instruction.*	• Align math vision and scheduling to support effective instruction. • Provide tools for leadership teams.
7. Family and Community Engagement *Partner with families and communities to promote numeracy confidence and visibility.*	• Offer family-friendly resources that demystify numeracy. • Highlight community applications and supports through the Numeracy Hub.
8. Numeracy Confidence for All Educators *Support all teachers—regardless of content area—in developing confidence and skill with numeracy.*	• Provide interdisciplinary PD, focused on numeracy integration. • Offer tools, models, and language that empower all educators to see themselves as numeracy teachers.

Call to Action

We invite all educators, school leaders, families, and community partners to join us in creating a culture of numeracy in Maine. By working together across disciplines, regions, and roles, we can ensure that every learner builds the numeracy skills needed to thrive in an increasingly complex world.

Thank You:

This plan has been informed by the collective work, insight, and ongoing efforts of educators and leaders across Maine.
It reflects the priorities, challenges, and ideas surfaced through work groups, professional learning sessions, collaborative initiatives, field conversations, and the day-to-day experiences of those working to support mathematical thinking in classrooms, schools, and communities. We are deeply grateful to all who have contributed—directly and indirectly—to the shared vision reflected in this plan.