



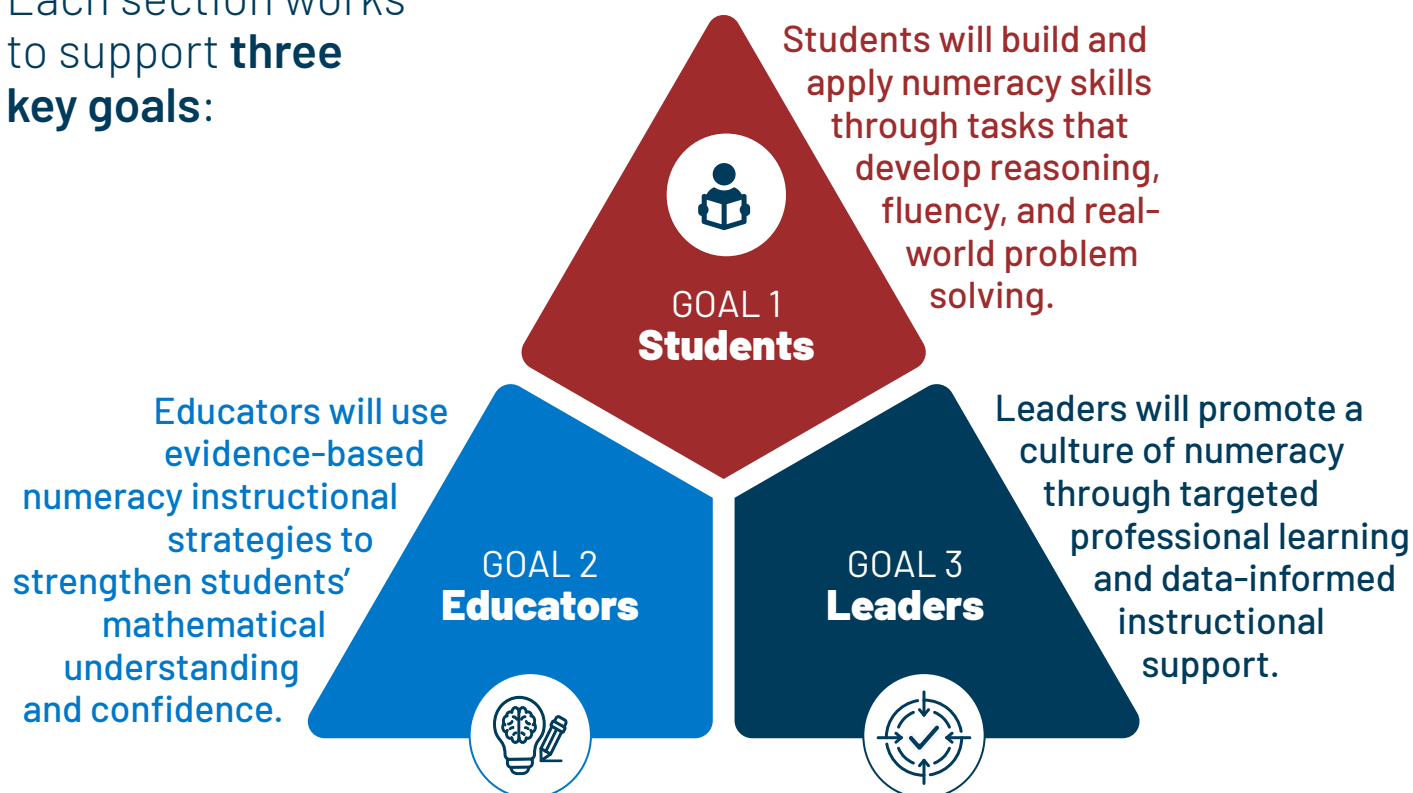
ILLINOIS
STATE BOARD OF
EDUCATION

VISION AND PURPOSE

ISBE's Commitment to Equitable Numeracy Instruction

The Illinois Comprehensive Numeracy Plan (ICNP) is founded on the principle that every student, in every classroom, deserves instruction that empowers them to be confident and capable mathematical thinkers. The Illinois State Board of Education is committed to ensuring equitable access to high-quality numeracy instruction for all students, including culturally, linguistically, and academically diverse student populations. This commitment requires intentionally designing instruction that recognizes and responds to the unique strengths and needs of each learner. This plan aims to strengthen teaching and learning by building cohesive systems of support for students, educators, and leaders.

Each section works to support **three key goals**:



What is Numeracy?

As defined in this guidance, numeracy is the ability for all students to confidently understand, interpret, and apply mathematical concepts across all domains of mathematics in a variety of real-world and academic contexts.

Numeracy IS...

- ✓ Encompassing of all grade levels and domains of mathematics
- ✓ Sustaining mastery of essential skills to make connections across domains
- ✓ Understanding mathematical concepts
- ✓ Interpreting mathematical information
- ✓ Applying math in real-world contexts
- ✓ Applying math in academic contexts
- ✓ Communicating mathematical thinking
- ✓ Choosing and using appropriate mathematical tools
- ✓ Problem solving in unfamiliar situations using mathematical reasoning
- ✓ For everyone

Numeracy IS NOT...

- ✗ Solely computation/arithmetic
- ✗ Rote memorization
- ✗ Restricted to the math classroom
- ✗ Reserved for advanced math learners/courses
- ✗ Reserved only for students who plan to attend college or enter STEM fields
- ✗ Disconnected from lived experiences
- ✗ A reflection of innate talent or fixed ability
- ✗ Solely for “math people”

Numeracy supports the development of a positive mathematical identity where students see themselves as capable, persistent, and confident problem solvers. Developing these abilities requires a strong mathematical foundation across the full K-12 continuum and supports the development of mathematically literate citizens. All students have the capacity to develop numeracy when they are provided with equitable access to high-quality instruction, culturally relevant learning experiences, and opportunities to engage meaningfully in mathematics.

Why is This Guidance Important?

The [2025 Illinois Assessment of Readiness](#) results indicate that 38.5% of students in Grades 3–8 and 39.3% of high school students met grade-level proficiency standards in mathematics. This data is not a reflection of student potential. Instead, it highlights the need to closely examine and realign the systems and structures that guide mathematics instruction.

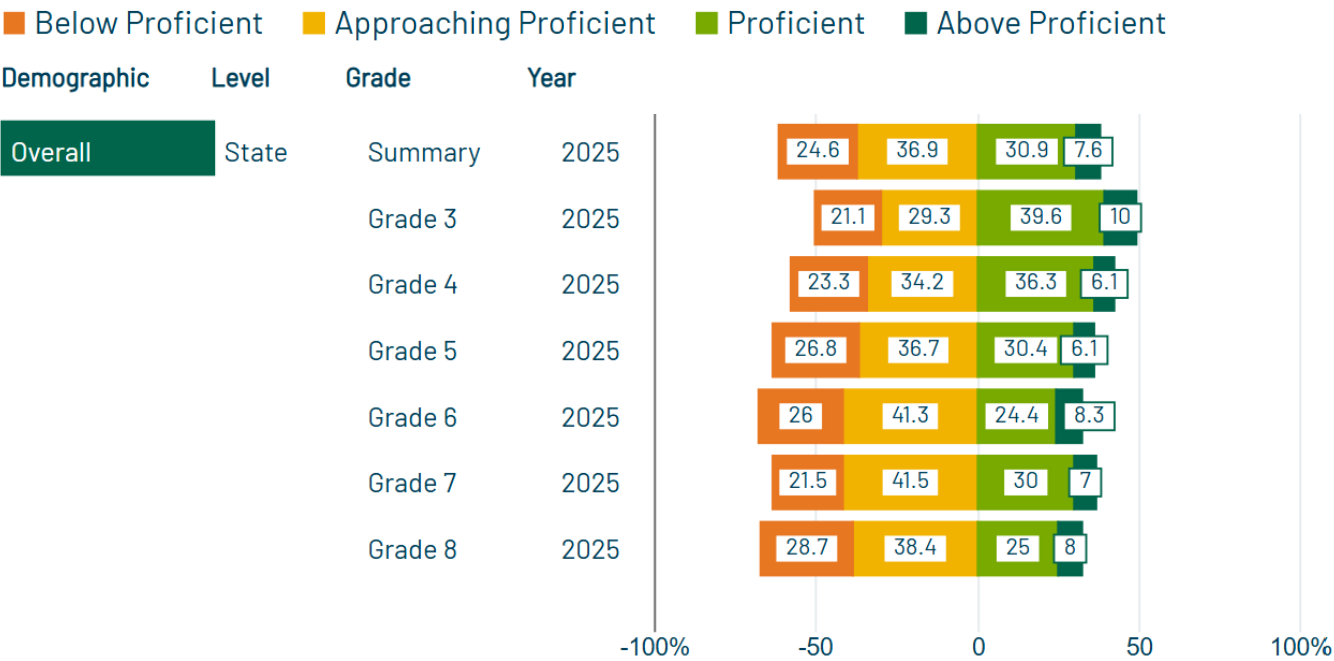


Figure 1: Percentage of students scoring at each of the performance levels for the Illinois Assessment of Readiness by year in 2025

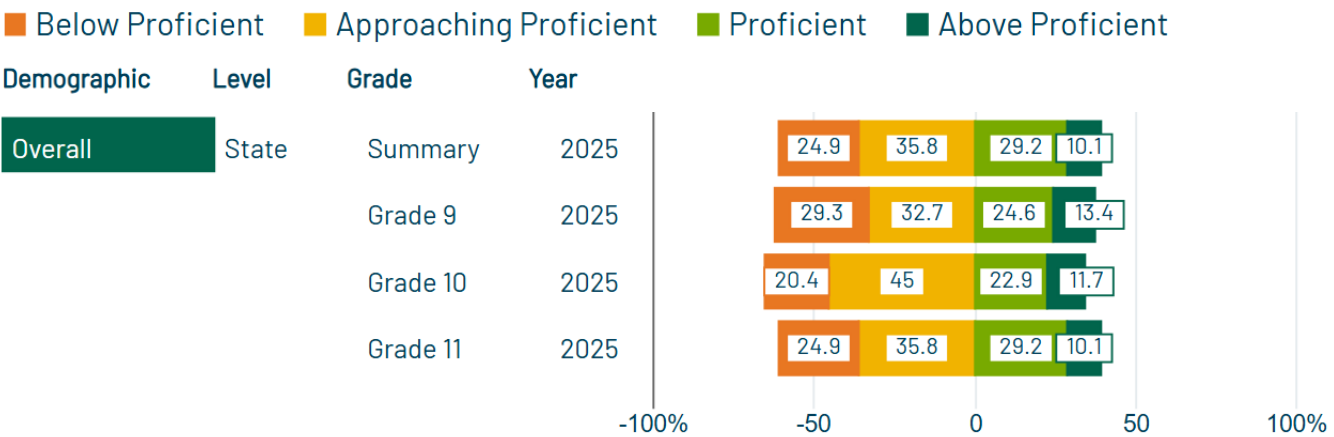


Figure 2: Percentage of students scoring at each of the performance levels in the ACT Suite by grade level in 2025

Recovery in mathematics continues to lag behind literacy, and persistent disparities endure across race, income, English proficiency, and disability status. Results from NAEP, Illinois SAT, and local benchmark assessments confirm these deficits and reflect systemic inequities in access to high-quality instruction, rigorous coursework, and culturally relevant learning opportunities. Math anxiety and negative perceptions of mathematics further compound the challenge for learners to succeed. Many people tend to either identify as “a math person” or as “not a math person,” an alarming classification given the significant role numeracy plays in long-term success and well-being.¹



Test scores do not capture the full range of student strengths such as creativity, perseverance, character, or potential, but they do provide a starting point for action and must inform meaningful change. Numeracy extends far beyond academic success; it is a foundational life skill that shapes how individuals reason, solve problems, and make informed financial, health, and civic decisions. When students lack these skills, the consequences extend into adulthood, limiting access to opportunities and long-term well-being.² As renowned mathematician Andreas Schleicher states, “Good numeracy is the best protection against unemployment, low wages, and poor health,” while civil rights activist and educator Bob Moses reminds us that mathematics is a civil right that is essential for full participation in a democratic society, underscoring the critical role numeracy plays in shaping personal and societal well-being.

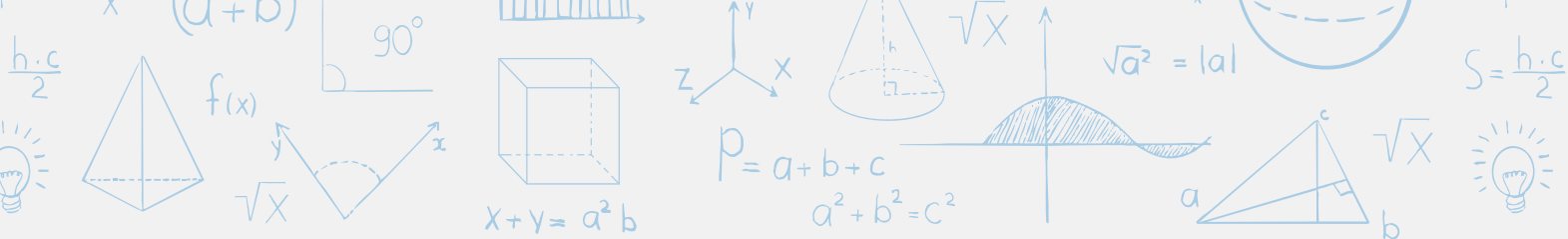
Prioritizing equitable, high-quality math instruction, culturally responsive teaching, and equitable access to resources is essential to ensure all students in Illinois can succeed in mathematics and in life. This guidance, rooted in evidence-based practices and data-driven decision making, aims to strengthen and align core mathematics instruction across the state.

Building Conditions for Success

As the Why Math, Why Now? report highlights, mathematics serves as a gatekeeper to postsecondary success, career opportunities, and economic mobility, making systemic improvement essential.³ Improving mathematics outcomes requires creating the right conditions for learning.



Research emphasizes that these systemic conditions play a vital role in advancing student success in mathematics.⁴ The Illinois Comprehensive Numeracy Plan calls for statewide capacity-building, the expansion of evidence-based strategies, and assessment practices that value both conceptual understanding and procedural fluency. Additionally, this guidance provides an opportunity to chart a new course for numeracy in Illinois: one rooted in evidence, equity, and the belief that all students can develop the skills, habits of mind, and confidence needed to thrive mathematically. By focusing on proficiency, growth, and equity, Illinois can transform mathematics from a barrier into a pathway of opportunity for every learner.

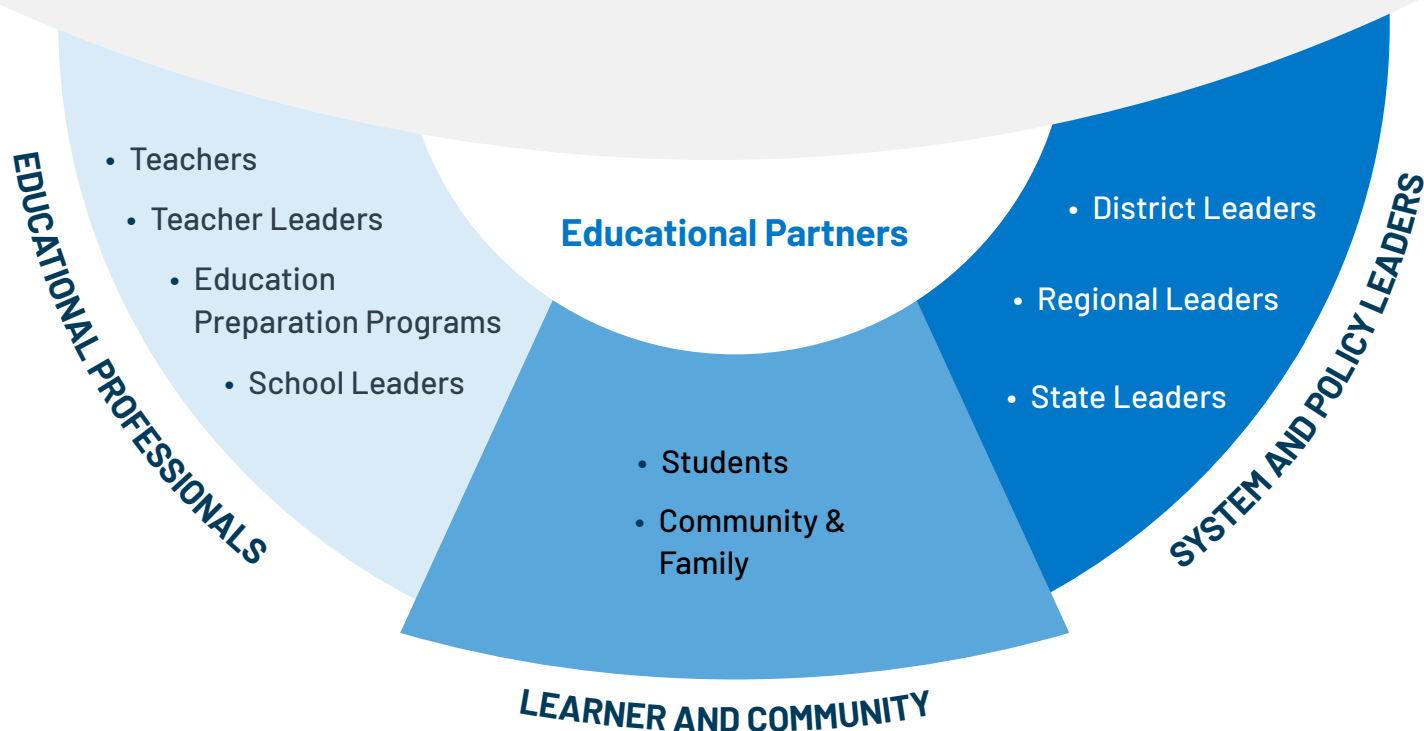


Flexibility and Local Autonomy

ISBE provides guidance to districts rather than governance, imploring districts to either adopt the Numeracy Plan or create a local plan customized to their unique needs. The Numeracy Plan avoids prescribing specific materials or assessments while instead promoting data-informed choices by districts. This plan cannot address all district-specific contexts and challenges, and, therefore, ISBE encourages each district to carefully consider district and school-level data as it makes decisions related to numeracy instruction.

Educational Partners

ISBE recognizes that each stakeholder group plays a pivotal role in numeracy education. ISBE believes in the shared responsibility of schools, families, and communities to help every student grow in mathematics and recognizes the value of working together with clear goals, a common language, and consistent practices. When all educational partners work in tandem, students benefit from a cohesive support network that promotes both academic and personal growth.



The following pages provide descriptions of educational partners and corresponding sections of note to support navigation of the plan.



Educational Partner Descriptions

Students

Students represent a wide range of mathematical experiences, backgrounds, and identities. They develop numeracy through opportunities to reason, explore, and make sense of mathematical ideas. As they grow, students build confidence by engaging in real-world problem solving and expressing their mathematical thinking in multiple ways.

Specific sections of note include:

- Vision and Purpose
- Section 1: Framework for the Evidence-Based Development of Numeracy Skills

Take an active role by exploring suggested resources, engaging in recommended instructional practices, and collaborating with educators to support individual learning needs.

Teachers

Teachers include classroom educators, interventionists, and specialists who design daily learning experiences that build numeracy. They support students in developing conceptual understanding, procedural fluency, and mathematical reasoning. Teachers foster positive math identities and ensure equitable access to grade-level content.

Specific sections of note include:

- Vision and Purpose
- Section 1: Framework for the Evidence-Based Development of Numeracy Skills
- Section 2: Educator Professional Learning and Development
- Section 4: Tools and Resources

Teacher Leaders

Teacher leaders include math coaches, department chairs, bilingual specialists, and instructional leaders who support classroom teachers. They use data and content expertise to guide educators in implementing strong mathematics instruction. Teacher leaders help maintain coherence across grade levels and strengthen schoolwide numeracy practices.

Specific sections of note include:

- Vision and Purpose
- Section 1: Framework for the Evidence-Based Development of Numeracy Skills
 - Cohesive Continuum of Learning
 - Six Components of Numeracy
 - Assessment
- Section 2: Educator Professional Learning and Development
- Section 4: Tools and Resources

Educational Partner Descriptions

School Leaders

School leaders, including principals and assistant principals, shape the conditions that support effective mathematics instruction. They guide curriculum implementation, professional learning, and collaborative planning. School leaders analyze data, promote equitable access to grade-level math, and ensure a positive culture for numeracy.

Specific sections of note include:

- Vision and Purpose
- Section 1: Framework for the Evidence-Based Development of Numeracy Skills
 - Cohesive Continuum of Learning
 - Six Components of Numeracy
 - Assessment
- Section 2: Educator Professional Learning and Development
- Section 3: Framework for Effective Leadership, Systems of Support, and Implementation Considerations
- Section 4: Tools and Resources

District Leaders

District leaders such as school boards, superintendents, curriculum directors, and instructional administrators oversee systemwide numeracy efforts. They support curriculum adoption, assessment planning, and professional learning. District leaders analyze student data to guide decision-making and promote coherent, equitable mathematics instruction across schools.

Specific sections of note include:

- Vision and Purpose
- Section 1: Framework for the Evidence-Based Development of Numeracy Skills
 - Instructional Considerations
- Section 2: Educator Professional Learning and Development
- Section 3: Framework for Effective Leadership, Systems of Support, and Implementation Considerations
- Section 4: Tools and Resources

Regional Leaders

Regional leaders, including ROEs and ISCs, provide multi-district support for improving numeracy. They offer professional learning, assist with curriculum review, and analyze regional data to identify needs. Regional leaders help ensure consistent, aligned implementation of evidence-based math practices across communities.

Specific sections of note include:

- Vision and Purpose
- Section 1: Framework for the Evidence-Based Development of Numeracy Skills
 - Evidence-Based Instruction
 - Cohesive Continuum of Learning
 - Six Components of Numeracy
 - Instructional Considerations
- Section 2: Educator Professional Learning and Development
- Section 3: Framework for Effective Leadership, Systems of Support, and Implementation Considerations
- Section 4: Tools and Resources



Educational Partner Descriptions

Educator Preparation Programs

Educator preparation faculty prepare future teachers to understand mathematical development and evidence-based instruction. They introduce candidates to learning progressions, content knowledge, and strategies that promote reasoning and conceptual understanding. These programs help develop confident, well-prepared mathematics educators.

Specific sections of note include:

- Vision and Purpose
- Section 1: Framework for the Evidence-Based Development of Numeracy Skills
- Section 2: Educator Professional Learning and Development

State Leaders

State leaders, including ISBE and statewide agencies, establish the structures and guidance that support effective numeracy instruction. They monitor statewide data, develop aligned resources, and promote equity across districts. State leaders help create coherent systems that advance mathematics achievement for all students.

Specific sections of note include:

- Vision and Purpose
- Section 2: Educator Professional Learning and Development

Community & Family

Families and community partners such as child care and tutoring centers are students' first and most enduring mathematical teachers. They connect numeracy to daily life, reinforce positive attitudes about learning math, and collaborate with schools to strengthen student success. When families and educators share a common language around numeracy, students benefit from a coherent system of support.

Specific sections of note include:

- Vision and Purpose
- Section 1: Framework for the Evidence-Based Development of Numeracy Skills

Vision and Purpose End Notes

¹ Parsons, Samantha, and John Bynner. [Does numeracy matter more?](#) 2005.

² Organisation for Economic Co-operation and Development. [Skills Matter: Additional Results from the Survey of Adult Skills](#). Paris: OECD Publishing, 2019.

³ Bill & Melinda Gates Foundation. [Why Math, Why Now?](#) Seattle, WA: Gates Foundation, 2022.

⁴ Learning Policy Institute. [Positive Conditions for Mathematics Learning: An Overview of the Research](#). Palo Alto, CA: Learning Policy Institute, 2025.

