



ILLINOIS
STATE BOARD OF
EDUCATION

TOOLS AND RESOURCES



This section of the Illinois Comprehensive Numeracy Plan provides a list of tools and resources designed to support educational partners as they work to enhance numeracy instruction across the state of Illinois. The Illinois State Board of Education sets the Illinois Learning Standards for each content area and delegates the responsibility to the local school district to choose the curricular programs and instructional methods that best fit the needs of their students.

The Illinois State Board of Education does not endorse or recommend any specific curricular program or paid resources. Instead, the tools and resources provided in this section are a compilation of materials that complement the Illinois Comprehensive Numeracy Plan.

It is important to note that this section is dynamic. ISBE will continue to expand and update the list of tools and resources on the [Illinois Comprehensive Numeracy Plan webpage](#).

A Note on Equity

Equity and inclusivity must be embedded from the start in every aspect of teaching and learning. It is important for educators and educational partners to recognize that tools and resources used for instruction should meet the needs of all learners, including those with specialized needs, multilingual learners, and gifted students. Tools should also be equitable for students at all socioeconomic levels, in all geographic locations, and across all cultural backgrounds. Therefore, ISBE encourages school districts, educators, and parents to select resources that not only align with local educational goals but also take into account the individual needs and identities of students. All students must have access to tools and resources that affirm their cultural identities, experiences, and languages.

School districts should frequently evaluate their practices, tools, and resources to ensure equity for all students and take ongoing action to promote fair and inclusive educational opportunities for all learners. [ISBE's Equity Journey Continuum](#) is a tool designed to assist districts in tracking their progress toward closing gaps in student achievement, opportunities, and supports. Districts are encouraged to utilize this tool to better view their data through a lens of equity and better support their equity journey.



The resources listed below are organized by plan section and provide additional information, support, and guidance related to the content discussed in each section.

Vision and Purpose Resources

The federal [Every Student Succeeds Act \(ESSA\)](#) requires states to assess their learning standards for English language arts (ELA), mathematics, and science. Each state also may have a general assessment for the majority of its students and an alternate assessment for the 1% of students with the most significant cognitive disabilities. ESSA also requires that multilingual learners (MLs) be assessed in four domains (reading, writing, speaking, and listening) each year until they reach proficiency.

From the [Illinois ESSA Plan](#): “In Illinois, we believe that a universal culture of high expectations is fundamental to creating and supporting the conditions that provide the best opportunities for all students. ESSA fosters the conditions for Illinois to implement a holistic, comprehensive, and coordinated system of support that prepares each and every student for academic excellence and postsecondary success. Illinois is using the opportunities provided through ESSA to reduce barriers to learning in order to achieve fair access to high-quality educational opportunities for each and every child.” The [ISBE Assessment Department](#) oversees the assessment of students in Illinois.

The [Illinois Report Card](#) is published annually by the Illinois State Board of Education. It shows how the state as a whole, each school, and every public school district are progressing on a wide range of educational goals. The Report Card offers a complete picture of student and school performance to inform and empower families and communities as they support their local schools.

[My Data Dashboard](#) is a tool that provides administrators and teachers with detailed data related to critical performance metrics. The goal of this tool is to support data-driven decision-making and deepen understandings of how data can be used within the state, districts, schools, and classrooms.

Resources for Section 1: Framework for the Evidence-Based Development of Numeracy Skills

Supports provided by the Illinois State Board of Education

- The [ISBE Standards and Instruction Department](#) is committed to supporting Illinois schools and educators by providing tools, resources, and professional learning on the identification and utilization of high-quality instructional materials to increase student achievement and equitable learning outcomes. The Standards and Instruction Department also provides guidance pertaining to [advanced learners](#). Additionally, the [Illinois Learning Compass](#) is housed on the ISBE Standards and Instruction webpage. It is designed to share what all students should know and be able to do by the end of each school year. Educators, students, families, and others can use the Illinois Learning Compass to explore the Illinois Learning Standards. It allows for searching and filtering and enables the extraction of information to an Excel document.
- The ISBE [Special Education Department](#) ensures compliance with Part B of the Individuals with Disabilities Education Act (IDEA) and drives continuous improvement through Local Education Agencies. It oversees district performance to enhance educational outcomes for children with disabilities.

- The [ISBE Multilingual/Language Development Department](#) provides leadership, advocacy, and support to districts, parents, and policymakers by promoting equitable access to language support services for students from culturally and linguistically diverse backgrounds who have been identified as English learners.
- The [Early Childhood Department](#) provides leadership and technical assistance to support state programs serving children from prenatal to age 8 and their families. State Prevention Initiative, Preschool for All, and Preschool for All Expansion grants, and a variety of resources for parents, teachers, and administrators, are among services that are provided.
- The [ISBE Career and Technical Education \(CTE\) Department](#) is a dedicated team of education professionals working to provide high-quality educational programs, resources, and training for all Illinois students, teachers, and administrators. The CTE Department provides a blend of academic and CTE educational guidance, leadership, and technical assistance to local districts and regional staff that is designed to support and enhance opportunities for students to be ready for future careers.
- The [Illinois Educator Preparation Profile](#) (IEPP) offers a glimpse into the strength and quality of educator preparation programs across the state. The IEPP is a valuable tool for prospective educators, preK-12 administrators involved in teacher hiring, current higher education faculty and staff, parents, and others interested in learning more about educator preparation programs in Illinois. The IEPP includes program data across several key program performance indicators.

Current educators can find resources to support professional advancement and the maintenance of their Professional Educator License on the ISBE [Educator Licensure webpage](#).

Additional information and resources

- The [What Works Clearinghouse](#) is an investment of the [Institute of Education Sciences](#) (IES) within the [U.S. Department of Education](#) (ED) that was established in 2002. The work of the What Works Clearinghouse is managed by a team of staff at IES and conducted under a set of contracts held by several leading firms with expertise in education, research methodology, and the dissemination of education research.
- The [Illinois MTSS Network](#) provides high-quality professional learning and coaching for schools and districts to develop and sustain a Multi-Tiered System of Supports (MTSS). MTSS is a framework for continuous improvement that is systemic, prevention-focused, and data-informed, providing a coherent continuum of supports to meet the needs of all learners.
- The [Multitiered System of Supports for English Learners](#) provides model demonstration research sponsored by the ED Office of Special Education Programs.



- [The Center: Resources for Teaching and Learning](#) is a not-for-profit organization that serves as the umbrella organization for specific programs that address different, but often related, aspects of high-quality education for students who may be at risk of academic failure. This includes students of all ages from linguistically and culturally diverse backgrounds, including multilingual learners, young children at risk of failure because of poverty, family issues, disabilities, or other circumstances; refugee and immigrant populations; and others.
- The [Self-Assessment of MTSS Implementation](#) is a needs assessment tool that helps leadership teams understand the status of MTSS implementation at the school level. The tool supports teams to engage in active discussions to identify strengths and challenges in current MTSS implementation. It is designed to help the local system identify current practices, areas of strength, and areas for growth and refinement, and enable faculty and staff to prioritize and focus resources on those areas in need of the most attention or support.
- The [Newcomer Toolkit](#), provided by ED, is a comprehensive resource designed to assist educators and community members in supporting immigrant and refugee students, referred to as multilingual learners. This toolkit is particularly valuable for state, local, and school leaders, as well as general education educators who work directly with newcomers.
- The [Dyscalculia Handbook](#), written by the [Illinois Specific Learning Disability Support Project](#), helps educators, families, and students understand dyscalculia by explaining its characteristics, impact on learning, and effective approaches to screening, data-based decision making, MTSS, and practical interventions that support improved math achievement for all students.
- [Achieve the Core](#), developed by [Student Achievement Partners](#), provides free, high-quality resources to educators. Key tools include the [Materials Alignment Toolkit](#), a suite of tools used to evaluate the alignment of instructional and assessment materials to the Shifts and major features of the Common Core, and the [Coherence Map](#), an interactive resource that shows how math standards connect within and across grade levels to support coherent instructional planning.
- The [National Council of Teachers of Mathematics](#) (NCTM) and the [Illinois Council of Teachers of Mathematics](#) (ICTM) are professional organizations focused on advancing high quality mathematics teaching and learning. NCTM is a national professional organization that supports math educators through instructional guidance, research based resources, publications, professional learning, and advocacy. ICTM is a state affiliate of NCTM that offers Illinois specific professional development, resources, conferences, and networking opportunities to support educators in implementing effective and equitable math instruction.
- The [National Association for Gifted Children](#) (NAGC) and the [Illinois Association for Gifted Children](#) (IAGC) are professional organizations dedicated to supporting the identification and education of gifted and talented children. The NAGC provides research based resources, professional learning, standards, and advocacy to advance effective gifted education nationwide. The IAGC is a state affiliate that offers Illinois specific guidance, professional development, conferences, and networking to support educators and families serving gifted learners.

Organizations that provide support to educators include:

- The [National Education Association](#) (NEA) and [Illinois Education Association](#) (IEA)
- The [American Federation of Teachers](#) (AFT) and [Illinois Federation of Teachers](#) (IFT)
 - The NEA, IEA, AFT, and IFT are labor organizations representing educators and school related professionals at the state and national levels. Together, they provide advocacy, professional learning, research, and resources to support teaching and learning, promote strong public education systems, and advance policies and working conditions that support educators, students, and communities.

Resources for Section 2: Educator Professional Learning and Development

ISBE partners with stakeholders such as ROEs and ISCs to foster a robust [district and school leadership](#) pipeline that reflects the diversity of Illinois students. ISBE also supports stakeholders as they recruit, coach, and retain high-quality, equity-minded education leaders who support and reflect the diversity of students.

[Regional Offices of Education \(ROEs\) and Intermediate Service Centers \(ISCs\)](#) help ensure that every school district has a locally based point of access to numerous supports and services.

Organizations that provide support to administrators include:

- The [Illinois Principals Association](#) (IPA) provides high-quality professional development, networking opportunities, leadership support, and advocacy at the state and federal levels. Through training, collaboration, legal guidance, and access to experienced school leaders, IPA works to strengthen leadership practices that positively impact educators, students, and school communities.
- The [Illinois Association of School Administrators](#) (IASA) is a professional organization that supports superintendents and other districtlevel leaders across Illinois. IASA provides professional learning, leadership development, resources, and advocacy to strengthen district leadership and promote effective governance, instruction, and operations. Through networking opportunities and engagement with state agencies and policymakers, IASA helps school administrators address complex challenges and advance high-quality public education for all students.
- The [Illinois Association of School Business Officials](#) (IASBO) is a professional organization that supports school business leaders and district staff responsible for finance, operations, and management. IASBO provides professional learning, certification programs, resources, and networking opportunities to strengthen effective stewardship of district resources. Through training, collaboration, and advocacy, IASBO helps districts operate efficiently and sustainably in support of student learning and organizational success.
- The [Illinois Association of Regional Superintendents of Schools](#) (IARSS) is a professional organization that supports regional superintendents, assistant regional superintendents, and Regional Offices of Education across Illinois. IARSS provides leadership development, professional support, and advocacy to strengthen the delivery of educational services, influence public policy, and promote high-quality education for students and communities statewide.



- The [Association of Illinois Rural and Small Schools](#) (AIRSS) is the statewide organization focused on policy and advocacy for Illinois rural and small preK–12 school districts. AIRSS represents the unique needs and perspectives of rural and small schools by advocating for effective policy, legislation, and funding; elevating educator and student access to high-quality educational opportunities; and serving as a voice to state and federal policymakers to ensure the rural context is included in education discussions.
- The [Superintendents' Commission for the Study of Demographics and Diversity](#) is a regional organization of elementary and secondary superintendents and school districts from suburban Cook and the collar counties. The commission provides high-quality educational opportunities for all students by strengthening instructional practices, supporting leadership development, and offering parent education. Through researchbased professional development, partnerships with businesses and higher education institutions, and regional seminars and workshops, the commission promotes academic achievement and equity.
- The [Illinois Alliance of Administrators of Special Education](#) (IAASE) is a professional organization that supports special education administrators across Illinois. IAASE provides professional learning, leadership development, resources, and advocacy to strengthen special education programs and services. The organization promotes effective practices and collaboration to improve outcomes for students with disabilities and to support the administrators who lead and manage special education systems.
- The [Ed Leaders Network \(ELN\)](#) is grounded in the belief that educational leaders impact student performance. With this foundational belief at ELN's core, multiple state principal associations have partnered together to provide administrators with high-quality, on-demand professional development to enhance educational leadership. A dynamic professional networking community also has been created so administrators can learn and interact with their peers and leadership experts from across the country. ELN's mission is to provide educators with the professional development and capacity-building professional network needed to do what's best for students and the learning community.
- The [Association of Mathematics Teacher Educators](#) (AMTE) is a professional organization that supports the preparation and ongoing development of mathematics teachers. Its membership includes professors, researchers, teacher-leaders, school mathematics coordinators, policy experts, graduate students, and others who are focused on strengthening math teacher education from K-12.
- The [Collaboration for Effective Educator Development, Accountability, and Reform \(CEEDAR\) Center](#), in partnership with the University of Florida and the [American Institutes for Research](#) (AIR), supports improved outcomes for students with disabilities by strengthening educator preparation systems. CEEDAR works with states, educator preparation programs, and Local Education Agencies to build capacity for preparing teachers and leaders to implement evidence-based practices within multitiered systems of support (MTSS), with a focus on collaboration, datainformed continuous improvement, and sustainable system level reform.

Resources for Section 3: Framework for Effective Leadership, Systems of Support, and Implementation Considerations

- ISBE's [Curriculum Evaluation Tool](#) was designed to support best practices and continuous quality improvement, including an emphasis on equity and diversity, and the selection of high-quality instructional materials. ISBE encourages districts to use this tool to help evaluate their curriculum, foster meaningful discussions, and make decisions about the selection of new materials, as appropriate.
- [ISBE's Family and Community Engagement Framework](#) was designed to guide the work of school and district staff to implement equitable family engagement strategies. It is also useful for families and the community at large to review expectations when engaging with their school.
- The [Prevention Initiative program](#), which is funded by the Early Childhood Block Grant, provides intensive, research-based, and comprehensive child development and family support services for expectant parents and families with children from birth to age 3 to help them build a strong foundation for learning and to prepare children for later school success.
- [Birth to Five Illinois Councils](#) support local stakeholders in coming together to identify the strengths and determine the early childhood needs within their own communities. Ensuring all children and families have access to the services they need requires a wide range of stakeholders (parents and families, school district officials, child care providers, Head Start leaders, early learning advocates, county and municipal officials, and the business community) working together in every community in Illinois to determine what families need to thrive and then creating new and enhanced services in response. Local leaders may consider utilizing Birth to Five Councils to collaborate and share the importance of early numeracy with communities and families.
- The Illinois Department of Human Services (IDHS) [Division of Early Childhood](#) administers community-based prevention and intervention programs to strengthen capacity of children, adolescents, and adults to make healthy decisions, utilize support systems, access opportunities, and achieve self-sufficiency.
- The [Large Unit District Association](#) (LUDA) is an Illinois organization representing preK–12 unit school districts with enrollments of 3,500 or more. LUDA supports district leaders through collaboration, professional learning, conferences, and advocacy. It promotes innovative educational and management practices, engages in state legislative processes, and provides timely information on policy and best practices to address the shared educational, operational, and organizational needs of large unit districts.
- The [Illinois Association of School Boards](#) (IASB) is a statewide organization that supports local school boards and district leaders. It provides guidance, professional learning, policy resources, and advocacy to help boards govern effectively and promote high-quality educational opportunities for students across Illinois.



- Overseen by IDHS, [All Our Kids Early Childhood Networks](#) (AOK Networks) promote healthy pregnancies and the positive growth and development of all children birth to 5 and their parents/caregivers by assuring a well-coordinated, easily accessible, equitable, and just system of services and supports that engages parents as partners in making the system work for them. AOK Networks use a data-driven approach to understand disparities and root causes of locally identified priority issues. The goal of the initiative is to improve outcomes for children and families through the implementation of evidence-based strategies that promote an effective local early childhood system. AOK Networks are a collaborative effort of the IDHS Division of Family and Community Services; the Illinois State Board of Education; health departments and other lead agencies representing health, early care and education, human services, and other service systems; and local stakeholders who care about the health and well-being of very young children and their parents/caregivers. It is the most comprehensive, long-standing, community-based systems development initiative in the state of Illinois.
- [Regional or local health departments](#) may also be a resource for communities.

Glossary of Key Terms

This glossary provides definitions of terms included in the Illinois Comprehensive Numeracy Plan. Entries indicated by one asterisk (*) were taken from the [International Literacy Association](#), and entries indicated by two asterisks (**) were taken from the [Literacy Information and Communication System](#).

Term	Definition
Adaptive reasoning	Adaptive reasoning is the ability to think logically about the connections among concepts and situations, evaluate alternative approaches to problem solving, and justify solutions. (From Adding It Up: Helping Children Learn Mathematics .)
Assessment	Assessment refers to the wide variety of methods or tools that educators use to evaluate, measure, and document the academic readiness, learning progress, skill acquisition, or educational needs of students. (From The Glossary of Education Reform .)
Automaticity	Automaticity is the ability to recall facts or perform skills accurately and efficiently with little conscious effort. In mathematics, automaticity allows students to focus their attention on problem solving and reasoning rather than on basic calculations or procedures.
Benchmark assessment	Benchmark assessment is a process of using a screening tool multiple times across the school year to assess the effectiveness of the core curriculum and identify students at risk for failure.
Cognitive load	Cognitive load is the relative demand imposed by a particular task, in terms of mental resources required. (From the American Psychological Association .)
College and career readiness	College and career readiness is the academic preparation that would be sufficient to allow a student to participate successfully in postsecondary education or a career without the need for remedial academic support.*
Conceptual understanding	Conceptual understanding is the comprehension of mathematical concepts, operations, and relations. (From Adding It Up: Helping Children Learn Mathematics .)
Culturally responsive education	Culturally responsive education is the deliberate recognition and inclusion of all forms of student diversity as a pool of resources from and toward which curriculum, instruction, and all aspects of school policy should be designed. In practice, it means the alignment of curriculum and instruction with students' backgrounds, life experiences, and cultures.*
Curriculum	Curriculum is the overall design of instruction or opportunities provided for learning. A curriculum may include materials and textbooks, planned activities, lesson plans, lessons, and the total program of formal studies or educational experiences provided by a teacher or school. (Note: Definitions of curriculum vary widely because of alternative perceptions held by theorists about the nature and organization of formal schooling; adj. curricular.)*



Term	Definition
Diagnostic screening	Diagnostic screenings are administered at the beginning of the year to all students and serve to identify pre-grade and grade-level skill gaps as well as students who demonstrate readiness for acceleration.
Differentiated instruction	Differentiated instruction occurs when the teacher provides multiple options for learners to take information, make sense of ideas, and express what they learn. In providing diverse avenues for learners to access information, the teacher ensures that each learner learns effectively. The components of differentiated instruction include the following: (1) what to teach, or content; (2) how to teach it, or process; (3) how to find out whether learners have learned it; and (4) the environment in which the instruction occurs.**
Direct instruction	Direct instruction is a teacher-centered instructional approach that emphasizes the use of carefully sequenced steps that include demonstration, modeling, guided practice, and independent application. It is characterized by high rates of teacher control during the initial stages of information acquisition, followed by careful performance monitoring as the learner gradually assumes control over application. The instruction is structured, modular, and sequential (simple to complex and concrete to abstract). The teacher provides the learners with much of the information they need, often through lectures, explanations, examples, and problem solving. Most direct instruction techniques allow for only minimal learner-teacher interaction, and they need to be supplemented by review, practice, and group discussions.**
Discourse structures	Discourse structures are intentional routines, norms, and facilitation strategies that shape how students and teachers communicate during instruction. Discourse structures support equitable participation, clarify expectations for talk, and promote mathematical reasoning by encouraging students to explain, question, and build on one another's ideas.
Dyscalculia	Dyscalculia is specific learning disability affecting number sense, mathematical reasoning, and numerical processing. (From The Dyscalculia Handbook.)
Equity vs. equality	Equity and equality are two strategies used in an effort to produce fairness. Equity is giving everyone what they need to be successful. Equality is treating everyone the same. Equality aims to promote fairness, but it can work only if everyone starts from the same place and needs the same help.*
Evidence-based practices	Evidence-based practices refer to individual practices (e.g., single lessons or in-class activities) or programs (e.g., year-long curricula) supported by scientific evidence. This evidence exists within a continuum of rigor, in which some well-studied practices are highly supported while others may be promising or emerging.

Term	Definition
Explicit instruction	Explicit instruction is a structured, systematic approach to teaching in which the teacher clearly models concepts or skills, provides guided practice, and offers timely feedback to support accurate understanding and learning.
Fluency	Fluency is the ability to perform skills and use knowledge accurately, efficiently, and flexibly
Formative assessment	Formative assessment is the continuing study of student learning in an instructional program as it moves toward its goals and objectives by monitoring the learning progress of its participants. Diagnostic testing and various formal and informal assessment procedures can be used to identify needed adjustments to the teaching and learning activities.*
Guided inquiry	Guided inquiry is an instructional approach that engages students in structured exploration and critical thinking, where learners ask questions, investigate ideas, and construct understanding with intentional guidance and support from the teacher such as modeling, questioning, or scaffolding.
Guided strategic development	Guided strategic development is a structured form of discovery learning in which teachers use carefully sequenced, highly scaffolded instruction to guide students in developing mathematical strategies. Compared to guided inquiry, it is more intentional and more scaffolded in its design, while still preserving students' responsibility for reasoning and sense making. (From Rethinking Disability and Mathematics by Rachel Lambert)
Inclusion	In education, inclusion is the placement of students of all abilities in the same classroom. The term captures, in one word, an all-embracing societal ideology that involves securing opportunities for students with disabilities to learn alongside their peers without disabilities in general education classrooms.*
Instructional coherence	Instructional coherence is the intentional alignment of curriculum, instruction, assessments, and interventions to create a connected progression of learning that advances shared priorities and grade-level goals for all students.
Intervention	Intervention is additional small group or individualized instruction that is tailored to children's needs so they can make progress and be on track to meet grade-level learning goals.*
Mathematical discourse	Mathematical discourse is the purposeful communication of mathematical ideas, including the tools and practices that make thinking visible. It involves students articulating their reasoning, engaging with peers' ideas, and collaboratively constructing mathematical understanding.

Term	Definition
Mathematical knowledge for teaching	Mathematical knowledge for teaching is the specialized knowledge of mathematics that teachers use to effectively plan, teach, assess, and respond to student thinking. Mathematical knowledge for teaching includes understanding mathematical concepts, procedures, and relationships, as well as knowing how students learn mathematics, anticipate misconceptions, select representations, explain ideas clearly, and make instructional decisions that support deep mathematical understanding. (From “Effects of Teachers’ Mathematical Knowledge for Teaching on Student Achievement” by Heather Hill et al. and “Content Knowledge for Teaching: What Makes It Special?” by Deborah Loewenberg Ball et al.)
Mathematics identity	Mathematics identity is a person’s attitude and beliefs toward mathematics. It can be shaped by relationships, classroom experiences, cultural messages, etc.
Metacognition	Metacognition refers to higher-order thinking that involves active control over the cognitive processes engaged in learning: knowledge about one’s own information processing and strategies that influence one’s learning. By prompting learners to reflect on and identify the successful learning strategies that they used to solve a problem, teachers encourage learners to act on this awareness to choose appropriate learning strategies that optimize future learning. Successful learners monitor their own thought processes to decide whether they are learning effectively. Metacognitive activities include planning how to approach a given learning task, monitoring comprehension, and evaluating progress toward the completion of a task.**
Multi-Tiered System of Support	A Multi-Tiered System of Supports (MTSS) is a proactive and preventative framework that integrates data and instruction to maximize student achievement and support students’ social, emotional, and behavior needs from a strengths-based perspective. MTSS offers a framework for educators to engage in data-based decision making related to program improvement, high-quality instruction and intervention, social and emotional learning, and positive behavioral supports necessary to ensure positive outcomes for districts, schools, teachers, and students. See Multi-Tiered Systems of Support .
Number talk	A number talk is a brief, structured classroom discussion in which students mentally solve a numerical problem and share their reasoning. Number Talks emphasize multiple strategies, mathematical reasoning, and discourse to build number sense, flexibility, and conceptual understanding.
Numeracy	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.

Term	Definition
Parallel tasks	Parallel tasks are pairs or sets of related mathematical tasks designed around the same learning goal but varying in complexity or representation, allowing all students to engage in meaningful thinking while working toward a common mathematical understanding.
Problem string	A problem string is a purposeful sequence of related problems designed to highlight patterns, relationships, and underlying mathematical concepts. Problem strings build understanding by allowing students to connect strategies, reason flexibly, and deepen conceptual learning through carefully structured progression.
Procedural fluency	Procedural fluency extends beyond the ability to perform standard algorithms and involves understanding mathematical processes and procedures, knowing when and how to apply them effectively, and being able to execute them with flexibility, accuracy, and efficiency. (From Adding It Up: Helping Children Learn Mathematics .)
Productive disposition	Productive disposition is a positive belief that mathematics makes sense, is valuable, and can be mastered through perseverance. It also includes confidence in students' capacity to learn and use mathematics correctly. (From Adding It Up: Helping Children Learn Mathematics .)
Professional learning	Professional learning is ongoing learning provided to teachers and staff pertaining to specific strategies and skills and often based on a grade level/building/district student learning goal.*
Professional learning community	A professional learning community (PLC) is a collaborative group of educators who work together to improve teaching and learning. A PLC is driven by a shared focus on student learning, collective inquiry into instructional practice, the use of evidence to guide decisions, and a commitment to continuous improvement and shared responsibility for student success.
Progress monitoring	Progress monitoring is administered frequently throughout instruction and is aligned to the results of students' diagnostic screener. An assessment is used to determine whether students are making adequate progress toward mastery of key predecessor skills and grade-level skills gaps and to determine whether instruction should be adjusted.
Retrieval practice	Retrieval practice is a learning strategy that strengthens memory and understanding by having students actively recall information or skills from memory rather than re-reading or reviewing material.



Term	Definition
Scaffolded instruction	Scaffolded instruction is a process that involves the frequent use of connected questions and collaboratively constructed explanations to create a context for learning based on a learner's prior knowledge. Broad terms refer to various methods of supporting learners as they learn; gradually, these supports are withdrawn as they become capable of independent performance of a task or a skill. Supports may include clues, clarifying questions, reminders, encouragement, or breaking the problem down into steps. This temporary support from a teacher enables learners to take on and understand new material and tasks that they are not quite ready to do independently. The teacher models, assists, or provides necessary information, building on what learners already know; this should eventually lead to independence.**
Standards	Standards are the learning goals promulgated by a state documenting what students should know or be able to do at each grade level.
Standards for Mathematical Practice	The Standards for Mathematical Practice are a set of eight standards that describe the habits of mind, behaviors, and ways of thinking that students should develop to be proficient in mathematics.
Strategic coaching	Strategic coaching is a just in time instructional approach in which a teacher provides focused, individualized support, often one on one, to help a student develop mathematical or metacognitive strategies. Strategic coaching is responsive to what a student knows and does not yet know, offering only the level of guidance needed at the moment to move learning forward. (From Rethinking Disability and Mathematics by Rachel Lambert)
Strategic competence	Strategic competence is the capacity to formulate, represent, and solve mathematical problems effectively. (From Adding It Up: Helping Children Learn Mathematics.)
Summative assessment	A summative assessment is the final evaluation, usually quantitative, of the degree to which the goals and objectives of a program have been attained. Different types of evidence, such as the final test score of students and the statistical analysis of program results, may enter into summative evaluation. (See formative assessment.)*
Targeted professional learning	Targeted professional learning is professional learning that is intentionally designed to address specific teacher needs, instructional goals, or student outcomes. It is guided by data, aligned to teachers' roles and contexts, and focused on relevant, actionable strategies that can be applied directly to classroom practice over time.
Unassisted discovery	Unassisted discovery is an instructional approach in which students learn new concepts or skills through exploration with minimal guidance or scaffolding from the teacher, relying primarily on their own problem solving and inference.

Term	Definition
Universal Design for Learning	Universal Design for Learning is a framework for designing the educational environment so that it offers flexible learning environments that can accommodate individual learning differences. It is a key to helping all learners achieve. This environment is accomplished by simultaneously reducing or removing barriers from teaching methods and curriculum and providing rich supports for learning.**
Universal screening	Universal screening is the systematic assessment of all students within a given class, grade, school building, or school district on critical academic and/or social-emotional indicators.
Zone of Proximal Development	The Zone of Proximal Development refers to Lev Vygotsky’s “zone of readiness,” including the actions or topics a learner is ready to learn. It refers to the gap between a learner’s current and potential levels of development. This is the set of knowledge that the learner does not yet understand but has the ability to learn with guidance.**

