

TITLE 23: EDUCATION AND CULTURAL RESOURCES
SUBTITLE A: EDUCATION
CHAPTER I: STATE BOARD OF EDUCATION
SUBCHAPTER b: PERSONNEL

PART 20
STANDARDS FOR ENDORSEMENTS IN ELEMENTARY EDUCATION

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AUTHORITY: Implementing Article 21B and authorized by Section 2-3.6 of the School Code [105 ILCS 5/Art. 21B and 2-3.6].

SOURCE: Adopted at 37 Ill. Reg. 16664, effective October 2, 2013; amended at 40 Ill. Reg. 12342, effective August 9, 2016; amended at 41 Ill. Reg. 6958, effective June 2, 2017.

SUBPART A: GENERAL

Section 20.10 Purpose and Effective Dates of Standards

- a) This Part establishes the standards that, together with the standards set forth in Standards for All Illinois Teachers (23 Ill. Adm. Code 24), shall apply to the issuance of endorsements for elementary education (i.e., grades 1 through 6) on professional educator licenses pursuant to Article 21B of the School Code [105 ILCS 5]. The standards set forth in this Part shall apply both to candidates for an endorsement in elementary education and to the programs that prepare them. That is:
- 1) beginning July 1, 2013, approval of any teacher preparation program or course of study in elementary education, whether currently approved or newly proposed, pursuant to the State Board's rules for Educator Licensure (23 Ill. Adm. Code 25, Subpart C) shall be based on the congruence of that program's or course's content with the standards identified in this Part;
 - 2) on or before February 1, 2017, the examinations required for issuance of an endorsement in elementary education shall be based on the standards identified in this Part;
 - 3) on or before February 1, 2017, each elementary education program seeking approval for the first time or re-approval of an existing program shall work in consultation with one or more community colleges to ensure the articulation of coursework between the two institutions and, as applicable, the alignment of community college coursework relevant to elementary education to the standards set forth in this Part.
- b) In addition to demonstrating congruence with the standards set forth in this Part, each elementary education program or course of study shall meet the requirements set forth in 23 Ill. Adm. Code 25.97 (Endorsement for Elementary Education (Grades 1 through 6)).
- c) Beginning October 1, 2015, no candidate shall be admitted to an elementary education program that has not been approved under this Part. Any candidate who is enrolled in an elementary program not approved under this Part shall complete the program on or before September 1, 2018 and be entitled (i.e., receive verification by the candidate's institution of higher education that the candidate has completed an approved elementary education program and has met the testing and experience requirements for licensure) for that endorsement by September 1, 2019. Applicants undergoing the State Board's transcript evaluation process must submit their application for the endorsement by September 1, 2019.

(Source: Amended at 41 Ill. Reg. 6958, effective June 2, 2017)

SUBPART B: STANDARDS

Section 20.100 General Standards

Effective elementary education teachers possess the knowledge and skills articulated in the "Elementary Standards and Supporting Explanation" (2007) published by the Association for Childhood Education International, 1101 16th St., NW, Suite 300, Washington DC 20036 and posted at <http://acei.org/programs-events/ncate.html>. (No later amendments to or editions of these standards are incorporated.)

Section 20.110 Literacy Standards for Elementary Teachers

- a) The Language and Literacy Curriculum
Effective elementary teachers:
- 1) understand and use the scientific basis of teaching to plan, evaluate and modify instruction (i.e., use of appropriate research in identifying and implementing effective instructional practices);
 - 2) know the developmental sequence of language and literacy skills, along with age-level or grade-level benchmarks of development;
 - 3) understand the Illinois Learning Standards for English Language Arts and Literacy in History/Social Studies, Science and Technical Subjects (23 Ill. Adm. Code 1.Appendix D, State Goals for Learning), their organization, progressions and the interconnections among the skills;
 - 4) understand and evaluate the components of a comprehensive curriculum that develops students' literacy skills and strategies and ensures that instructional goals and objectives are met;
 - 5) understand the role of early, systematic and explicit teaching of the foundational literacy skills;
 - 6) understand and use research-based instructional strategies that have been demonstrated to be particularly successful for supporting struggling readers; and
 - 7) understand a wide range of developmentally appropriate literacy assessments (i.e., standardized assessments, diagnostic measures, universal screening, curriculum-based assessments and progress monitoring), recognizing their purposes, strengths and limitations.
- b) Foundational Knowledge
- 1) Language
Effective elementary teachers understand:
 - A) the nature and communicative role of various features of language, including semantics, syntax, morphology and pragmatics;

- B) major theories and stages of first and second literacy acquisition and the role of native language in learning to read and write in a second language;
 - C) the theories, principles and practices of emergent literacy, including the development of oral language and its relationship to the developmental process of reading and writing acquisition;
 - D) language, reading and writing development across the elementary years, using supporting evidence from theory and research;
 - E) the role of academic language in developing students' understanding of concepts, content, skills and processes; and
 - F) conventions of standard English grammar and usage (e.g., irregular plural nouns, past tense of irregular verbs, subject-verb agreement, pronoun-antecedent agreement, conjunctions, prepositions, interjections, perfect verb tenses).
- 2) Alphabetic Code
Effective elementary teachers understand:
- A) phonological awareness (sound structure of words, including syllables, onsets and rimes, phonemes), its development (from word and syllable separations to phonic segmentation) and relationship to reading and writing proficiency;
 - B) the orthographic-phonological system, including sound-letter relationships, and common English spelling patterns and their relationship to pronunciation; and
 - C) structural analysis (i.e., syllabication, affixes, root words) for decoding unknown words.
- 3) Text
Effective elementary teachers understand:
- A) the quantitative, qualitative and individual factors that affect text complexity, including how to estimate text readability;
 - B) the organizational structures, literary devices, rhetorical features, text features and graphics commonly used in literary and informational texts;

- C) the characteristics of various genre or forms of literary and informational text;
 - D) a variety of textual and programmatic resources for addressing the needs of struggling readers, including resources that are high-interest, low-readability; and
 - E) the role, perspective and purpose of text in specific disciplines.
- c) Using Research-Based Instructional Approaches
- 1) Decoding and Fluency
Effective elementary teachers:
 - A) assist students in developing basic print and text concepts (e.g., alphabet, high-frequency words, directionality, book formats, spaces);
 - B) implement phonological awareness instruction, including the teaching of segmentation and blending;
 - C) provide explicit and systematic phonics instruction, including the teaching of letter-sound relationships, common spelling patterns, irregular forms and affixes; and
 - D) use a variety of approaches for teaching students to read text fluently (i.e., with sufficient accuracy, rate and expression).
 - 2) Reading Comprehension
Effective elementary teachers:
 - A) select high-quality texts that match student needs and educational goals;
 - B) identify text features that may impede comprehension (e.g., author's assumption of prior knowledge, use of unusual key vocabulary, complexity of sentences, unclear cohesive links, subtlety of relationships among characters or ideas, sophistication of tone, complexity of text structure, use of literary devices or data);

- C) scaffold reading to enable students to understand and learn from challenging text (e.g., re-reading, pre-teaching of vocabulary or key information not provided in the text);
- D) introduce texts efficiently, providing a clear purpose for reading (and without revealing information the students can learn from reading the text);
- E) guide close reading discussions that require students to identify the key ideas and details of a text, to analyze the text's craft and structure (including the tone and meaning of words), and critically evaluate the text;
- F) provide instruction in interpreting graphic features (e.g., tables, charts, illustrations, tables of contents, captions, headings, indexes) and their relationship to text;
- G) ask high-level, text-dependent questions;
- H) guide the reading of multiple texts to enable students to comparatively analyze and evaluate information and to synthesize information from the texts into a coherent understanding of a topic;
- I) teach students to use reading strategies to improve comprehension (e.g., predicting, purpose setting, sequencing, connecting, visualizing, monitoring, questioning, summarizing, synthesizing, making inferences, evaluating);
- J) teach students to recognize literary elements and devices across literature genres and forms of informational text;
- K) provide instruction in the use of note-taking, previewing, identifying main idea and supporting details, and reviewing strategies to clarify and solidify comprehension;
- L) teach students to trace and evaluate the argument and specific claims in a text and to distinguish claims that are supported by reasons and evidence from claims that are not supported;
- M) teach students to analyze the organizational structure of texts (e.g., sequentially, causally, comparatively), and how specific sentences, paragraphs and larger portions of the text relate to each other and the whole; and

- N) teach students to recognize features of text common to individual disciplines.
- 3) Writing
Effective elementary teachers:
- A) provide opportunities for students to write for authentic purposes in multiple forms and genres to demonstrate the power and importance of writing throughout their lives;
 - B) engage students in using writing to develop an understanding of content area concepts and skills;
 - C) provide feedback to written work to guide students' revisions;
 - D) provide instruction in producing coherent and clear writing with organization, development, substance and style appropriate to the task, purpose and audience;
 - E) provide instruction in creating a text that introduces an opinion on a topic, supports the opinion with information and reasons based on facts and details, uses appropriate transitional devices and concludes with a statement supporting the opinion;
 - F) provide instruction in creating an informative and explanatory text that introduces a topic supported by logically ordered facts, definitions, details, examples, quotations and other types of information; uses precise language, academic vocabulary and appropriate transitional devices; and concludes with a statement related to the topic;
 - G) provide instruction in creating a narrative text based on real or imagined experiences or events that introduces a narrator and/or characters; uses dialogue, description and pacing to develop and organize a sequence of events; uses concrete words, phrases, sensory details and transitional devices; and uses a conclusion that follows from the experiences or events;
 - H) provide instruction in writing arguments to support claims in an analysis of substantive topics or texts using valid reasoning and relevant and sufficient evidence;

- I) teach students to conduct research projects using evidence drawn from multiple sources, including how to select and develop topics; gather information from a variety of sources, including the Internet; synthesize information; and paraphrase, summarize and quote/cite sources;
 - J) provide instruction in the conventions of standard English grammar and usage (e.g., irregular plural nouns, past tense of irregular verbs, subject-verb agreement, pronoun-antecedent agreement, conjunctions, prepositions, interjections, perfect verb tenses);
 - K) provide instruction in the conventions of standard English capitalization, punctuation and spelling;
 - L) provide instruction in using technology to produce and publish writing and to interact and collaborate with others; and
 - M) use "conferencing" to motivate and scaffold students' development throughout the writing process.
- 4) Speaking and Listening
Effective elementary teachers:
- A) engage students in a variety of oral language activities, including whole and small group collaborative discussion, asking questions, reporting on a topic and recounting experiences;
 - B) teach students to listen actively and critically in order to understand, evaluate and respond to a speaker's message;
 - C) instruct students in presenting ideas and information using facts and relevant details to support main ideas and using presentation software, media and visual displays appropriate to the purpose and audience; and
 - D) provide instruction in the conventions of standard English grammar and usage.
- 5) Vocabulary
Effective elementary teachers:

- A) for the instructional focus, select appropriate words central to the meaning of the text and likely to be unknown, academic vocabulary, meaning families and word relationships;
 - B) introduce students to forms of language that enhance vocabulary and understanding of language (e.g., idioms, figurative language, poetic devices, synonyms, antonyms, homonyms, adages, proverbs);
 - C) introduce word-solving strategies for clarifying the meaning of unknown words, including contextual analysis, structural analysis and the use of reference materials;
 - D) plan lessons that promote oral and written language development and the use of newly acquired vocabulary across disciplines;
 - E) understand and implement the forms and functions of academic language to help students develop and express content understandings;
 - F) utilize authentic text to help students develop word consciousness; and
 - G) actively engage students in using a wide variety of strategies for developing and expanding vocabularies.
- d) Using Materials, Texts and Technology
Effective elementary teachers:
- 1) use a wide range of high-quality literature and informational texts;
 - 2) select literature and informational texts that address the interests, backgrounds and learning needs of each student;
 - 3) use research-based criteria for selecting and evaluating instructional materials for use in teaching English language arts;
 - 4) estimate the difficulty level of text using readability measures and qualitative factors and make text accessible to students;
 - 5) use culturally responsive texts to promote students' understanding of their lives and society; and

- 6) use a variety of technology to support literacy instruction (e.g., computers, cameras, interactive websites, blogs, online research).
- e) Monitoring Student Learning through Assessment
Effective elementary teachers:
- 1) use a variety of developmentally appropriate literacy assessments, including standardized assessments, diagnostic tools, universal screening, curriculum-based assessments and progress monitoring tools;
 - 2) monitor student progress in meeting developmental benchmarks in literacy;
 - 3) assess students' interest, engagement and response to instruction to guide teaching;
 - 4) use assessment data, student work samples and observations from continuous monitoring of student progress to plan and evaluate literacy instruction;
 - 5) provide feedback to students on their work to help them understand their own progress and how to improve performance;
 - 6) communicate results of assessments appropriately;
 - 7) engage students in self-assessment;
 - 8) recognize how to maintain and use accurate records of students' performance and progress in meeting literacy standards; and
 - 9) interpret and use assessment data to analyze individual, group and classroom literacy performance and progress.
- f) Meeting the Needs of Diverse Learners
Effective elementary teachers:
- 1) understand the impact of cultural, linguistic, cognitive, academic, physical, social and emotional differences on language development and literacy;
 - 2) plan and implement targeted literacy instruction that is responsive to the strengths and needs of each student (i.e., English language learners, struggling learners, gifted learners) to ensure high rates of success;

- 3) seek appropriate assistance and support for struggling readers and writers;
 - 4) collaborate and plan with other professionals to deliver a consistent, sequenced and supportive instructional program for each student;
 - 5) differentiate strategies, materials, pace, levels of text and language complexity to introduce concepts and skills to meet the diverse learning needs of each student;
 - 6) make content accessible in appropriate ways to English language learners;
 - 7) deliver literacy instruction within a multi-tier system of support in order to meet the needs of all students;
 - 8) use data-based decision making to target interventions to the needs of struggling readers; and
 - 9) deliver instruction explicitly to struggling readers (i.e., modeling, prompting, guided practice, response and corrective feedback).
- g) Constructing a Supportive Language and Literacy Environment
Effective elementary teachers:
- 1) understand motivation and engagement and the use of the "gradual release of responsibility" approach to design learning experiences that build student self-direction and ownership of literacy learning;
 - 2) establish classroom routines that promote independence, self-direction, collaboration and responsibility for literacy learning;
 - 3) use a strategic combination of flexible groupings (individual, group and whole class) to meet the learning needs of each student efficiently and effectively;
 - 4) incorporate student choices in determining reading and writing materials and activities; and
 - 5) build collaborative classroom communities that support and engage all students in reading, writing, listening, speaking, viewing and visually representing.

Section 20.120 Mathematics Standards for Elementary Teachers

- a) Core Content Area Knowledge
 - 1) College Algebra
Effective elementary teachers:
 - A) identify, solve and apply linear and absolute value equations and inequalities;
 - B) identify and interpret the domain, inverse (if it exists) and graph polynomial, rational, exponential and logarithmic equations;
 - C) identify the sum, difference, quotient, product of two functions and the resulting domain;
 - D) identify the composition of two functions and the resulting domain;
 - E) identify and solve polynomial, rational, exponential and logarithmic equations and inequalities, and apply these methods in solving word problems;
 - F) solve systems of linear equations using the augmented matrix method;
 - G) recognize and graph conic sections; and
 - H) input and interpret data and use technology to find the appropriate regression.
 - 2) Statistics
Effective elementary teachers:
 - A) construct, identify and interpret frequency distributions, histograms, cumulative frequency tables, ogives and box plots;
 - B) identify, calculate and interpret measures of central tendency and dispersion;
 - C) identify, calculate and apply the methods of counting;
 - D) identify, calculate and interpret probabilities and expected value;

- E) define random variables as well as analyze and interpret the probability distributions they generate;
 - F) identify and describe the sampling distribution of sample means and sample proportions;
 - G) create and interpret confidence intervals for single population means and proportions;
 - H) identify, analyze and perform formal tests of hypotheses concerning single population means and single population proportions; and
 - I) identify, calculate and interpret the correlation coefficient and regression equations.
- b) The Mathematics Curriculum
Effective elementary teachers:
- 1) understand the Illinois Learning Standards for Mathematics (see 23 Ill. Adm. Code 1.Appendix D), their organization, progressions and the interconnections among the domains; and
 - 2) know the developmental sequence of mathematics skills, along with age-level or grade-level benchmarks of development.
- c) Foundational Knowledge
- 1) Standards for Mathematical Practice
Effective elementary teachers enable students to acquire the skills necessary for strong mathematical practice in that they are able to:
 - A) make sense of problems and persevere in solving them;
 - B) reason abstractly and quantitatively;
 - C) construct viable arguments and critique the reasoning of others;
 - D) model with mathematics;
 - E) use appropriate tools strategically;

- F) attend to precision;
 - G) look for and make use of structure; and
 - H) look for and express regularity in repeated reasoning.
- 2) Counting and Cardinality
Elementary teachers are prepared to develop student proficiency and address common misconceptions related to counting and cardinality and:
- A) Demonstrate an understanding of the intricacy of learning to count, assisting students to:
 - i) know the names of numbers and orally present them in order, starting from the numeral 1 and from various other numbers; being able to recognize written numerals and the quantity each represents; and knowing the names of numbers, starting with eleven, with special attention paid to helping students understand the differences between numbers ending in "teen" and those ending in "ty";
 - ii) count the number of objects using one-to-one correspondence, regardless of the way in which the object is arranged, and understand cardinality (connecting number name to quantity, the last number of the count, and nesting of numbers) to counting out a given number of objects; and
 - iii) compare numbers by matching quantity represented with objects or pictures or written numerals; and
 - B) recognize the role of ten and the difficulties English language learners face because the base-ten structure is not evident in all of the English words for numbers.
- 3) Operations and Algebraic Thinking
Elementary teachers are prepared to develop student proficiency and address common misconceptions related to operations and algebraic thinking and:
- A) solve addition, subtraction, multiplication and division problems with unknowns in any position;
 - B) demonstrate an understanding of addition and subtraction

- relationships and multiplication and division relationships, including the use of properties of operations (i.e., the field axioms);
- C) demonstrate an understanding of the equal sign as meaning "the same amount as" rather than "calculate the answer";
 - D) demonstrate an understanding of the meaning of 0 and why division by 0 leads to an undefined answer;
 - E) understand and apply the meaning and uses of remainders, factors, multiples, parentheses and prime and composite numbers;
 - F) recognize the following strategies when using the operations of addition and subtraction: counting all, counting on and converting to an easier problem by composing or decomposing ten;
 - G) recognize extensions of the strategies enumerated in subsection (c)(3)(F) of this Section in multiplication, division and beginning work in expressions and equations;
 - H) strategically use algebraic tools, such as tape diagrams, number lines, bar models, math racks and double number lines;
 - I) extend understanding of arithmetic and operations to algebraic expressions and equations, and solve one-step and two-step equations and inequalities; and
 - J) view numerical and algebraic expressions as "calculation recipes", describing them in words, parsing them into their component parts, and interpreting the components in terms of a context.
- 4) Numbers and Operations in Base Ten
Elementary teachers are prepared to develop student proficiency and address common misconceptions related to numbers and operations in base ten and:
- A) understand how the place value system relies on repeated groupings of any fixed natural number quantity (including ten) and can demonstrate how to use oral counting, objects, drawings, layered place value cards and numerical expressions to help reveal place value structure;

- B) understand how to compare numbers, fractions and decimals using the symbols for "greater than", "less than" and "equal to";
 - C) understand composing and decomposing numbers using the commutative, associative and distributive properties to efficiently use place value methods for addition, subtraction, multiplication and division;
 - D) extend place value system knowledge to decimals and view decimals as numbers that can be placed on number lines and explain the rationale for decimal computation methods;
 - E) understand and distinguish between the appropriate use of computation strategies and computation algorithms, as defined in the Illinois Learning Standards for Mathematics, recognizing the importance of "mental math" and derive various algorithms and recognize these as summaries of reasoning, rather than rules;
 - F) extend place value system knowledge to negative, rational and irrational numbers; and
 - G) use mathematical drawings, manipulative materials or mathematical properties to reveal, discuss and explain the rationale behind, as well as validate or dismiss, any computational algorithm that a student might present.
- 5) Number and Operations – Fractions
Elementary teachers are prepared to develop student proficiency and address common misconceptions related to numbers and operations involving fractions and:
- A) understand and apply fractions as numbers that can be modeled from a length perspective (number line), an area perspective (pattern blocks, geoboards, etc.), and a discrete perspective (set of dots or circles);
 - B) understand and apply the concept of unit fractions, benchmark fractions and the whole (referent unit) as defined in the Illinois Learning Standards for Mathematics;
 - C) extend the associated meanings of the properties of operations from whole numbers to fractions;

- D) understand and use equivalent fractions, including those of whole numbers, to reveal new information and as a tool for comparison or to perform operational procedures;
 - E) understand and apply the connection between fractions and division, and demonstrate how fractions, ratios and rates are connected via unit rates;
 - F) demonstrate an understanding of decimal notation for fractions, and compare decimal fractions;
 - G) represent ratios and equivalent ratios as an application of equivalent fractions, and solve ratio and rate problems using tables, tape diagrams, number lines and double number lines;
 - H) understand the connection between a proportional relationship and a linear relationship, and recognize the connection between an inversely proportional relationship and a reciprocal relationship;
 - I) defend the ordering of a list of fractions using common denominators, using common numerators, comparing to benchmark fractions or using reasoning; and
 - J) understand the connection between fractions and decimals, particularly with regard to decimal computations.
- 6) Measurement and Data
Elementary teachers should be prepared to develop student proficiency and address common misconceptions related to measurement and data and:
- A) understand and apply the general principles of measurement; that is, measurement requires a choice of measurable attribute, that measurement is a comparison with a unit and how the size of a unit affects measurements, and the iteration, additivity and invariance used in determining measurement;
 - B) recognize and demonstrate the relationship of different units;
 - C) connect the number line to measurement;
 - D) demonstrate an understanding of area and volume and give rationales for area and volume formulas that can be obtained by

- compositions and decompositions of unit squares or unit cubes;
 - E) use data displays to ask and answer questions about data;
 - F) understand the measures used to summarize data, including the mean, median, interquartile range and mean absolute deviation, and use these measures to compare data sets;
 - G) examine the distinction between categorical and numerical data and reason about data displays; and
 - H) recognize the connection of categorical and measurement data to statistical variability and distributions.
- 7) Geometry
Elementary teachers should be prepared to develop student proficiency and address common misconceptions related to geometry and:
- A) compose and decompose shapes and classify shapes into categories, and justify the relationships within and between the categories;
 - B) understand geometric concepts of angle, parallel and perpendicular, and use them to describe and define shapes;
 - C) describe and reason about spatial locations (including the coordinate plane);
 - D) reason about proportional relationships in scaling shapes up and down;
 - E) describe the connections (relationships) between geometric properties and arithmetic and algebraic properties, and adapt a problem in one domain to be solved in the other domain;
 - F) summarize and illustrate the progression from visual to descriptive to analytic to abstract characterizations of shapes; and
 - G) use the coordinate plane to graph shapes and solve problems.
- d) Using High-Leverage Instructional Practices
Effective elementary teachers:

- 1) choose and use mathematical tasks that entail complex mathematical work, build basic skills and allow for multiple answers or methods;
 - 2) teach and use the content-specific language of mathematics;
 - 3) lead whole-class math discussions (e.g., number talks) that engage all learners;
 - 4) respond productively to students' "errors" by probing the underlying thinking and providing targeted feedback;
 - 5) appraise, choose and modify tasks and texts for a specific learning goal;
 - 6) use specific mathematically focused positive reinforcement;
 - 7) use public recording (posters, whiteboard) to collect and probe mathematical thinking (e.g., demonstrating multiple answers and methods; exploring when an algorithm may be the best solution and when another approach may provide an easier solution);
 - 8) diagnose common (and not so common) patterns of student thinking; and
 - 9) assess students' mathematical proficiency and teach responsively.
- e) Using Materials, Tools and Technology
Effective elementary teachers:
- 1) apply mathematical content and pedagogical knowledge to select and use instructional tools, such as manipulatives and physical models, drawings, virtual environments, spreadsheets, presentation tools, websites and mathematics-specific technologies (e.g., graphing tools and interactive geometry software), recognizing both the insight to be gained and any limitations;
 - 2) empower students to make sound decisions about the appropriate use of mathematical tools;
 - 3) when making mathematical models, recognize that technology can enable one to visualize the results of varying assumptions, explore consequences, examine characteristics and compare predictions with data;
 - 4) select mathematical examples that address the interests, backgrounds and learning needs of each student; and

- 5) evaluate curricular materials for appropriate level and depth of content, focus on and relevance to required learning goals, and incorporation of the Illinois Learning Standards for Mathematics.
- f) Monitoring Student Learning through Assessment
Effective elementary teachers:
- 1) engage in purposeful classroom assessment aligned to appropriate learning expectations for every student and monitor student progress in meeting developmental benchmarks in mathematics;
 - 2) provide a variety of well-designed one-step, two-step and complex multi-step assessment items and performance tasks, incorporating real-life situations to allow students to demonstrate their learning;
 - 3) ensure that assessments are responsive to, and respectful of, cultural and linguistic diversity and exceptionalities, and are not influenced by factors unrelated to the intended purposes of the assessment;
 - 4) guide students in developing the skills and strategies to assess their work and set appropriately ambitious goals for their progress as mathematicians;
 - 5) analyze student work to determine misunderstandings, misconceptions, predispositions and newly developing understandings, and use the results of this analysis to guide instruction and provide meaningful feedback; and
 - 6) communicate the purposes, uses and results of assessments appropriately and accurately to students, parents and colleagues.
- g) Meeting the Needs of Diverse Learners
Effective elementary teachers:
- 1) understand the impact of cultural, linguistic, cognitive, academic, physical, social and emotional differences on mathematics development and progression of knowledge;
 - 2) plan and implement mathematics instruction that capitalizes on strengths and is responsive to the needs of each student;
 - 3) use a variety of approaches and classroom-based intervention strategies to respond to the needs of struggling and/or advanced learners;

- 4) seek appropriate assistance and support for struggling and/or advanced learners;
 - 5) collaborate and plan with other professionals to deliver a consistent, sequenced and supportive instructional program for each student;
 - 6) differentiate strategies, materials, pace and levels of cognitive complexity to introduce concepts and skills to meet the learning needs of each student; and
 - 7) make content accessible in appropriate ways to English language learners and students with exceptionalities.
- h) Constructing a Supportive Mathematics Environment
Effective elementary teachers:
- 1) create an environment that empowers every student to engage in the practice set forth in subsection (c)(1) of this Section;
 - 2) motivate and engage students by designing learning experiences that build self-direction, perseverance and ownership of mathematics;
 - 3) guide students to work productively and collaboratively with each other to achieve mathematics learning goals by using a strategic combination of individual, group and whole class instruction to meet the learning needs of each student efficiently and effectively;
 - 4) provide tools that are accessible and developmentally appropriate;
 - 5) establish norms and routines for classroom discourse that allow for the respectful analysis of mistakes and the use of mathematical reasoning for mindful critique and argument; and
 - 6) create opportunities and expectations that all students use appropriate written and oral mathematical language, including English language learners and students with exceptionalities.
- i) Professionalism, Communication and Collaboration
Effective elementary teachers:
- 1) continually engage in intensive, ongoing professional growth opportunities that serve to increase mathematical knowledge for teaching, such as lesson study or continuing coursework;

- 2) analyze instruction for the purpose of self-reflection and making improvements and make use of strategies such as journal writing, video self-analysis and peer observation;
- 3) communicate and collaborate with other professionals, such as within a professional learning community, to plan teaching, discuss student needs, secure special services for students and manage school policies; and
- 4) communicate and collaborate with families to support student needs and discuss student progress.

Section 20.130 Dispositions

Elementary education teachers are committed to building the capacity of every student to reach his or her highest potential as a learner. The development of the learner is shaped by not only the content and pedagogical knowledge of the teacher but also by the professional and technical dispositions that are consistently exhibited. Effective elementary teachers:

- a) value and promote the importance of math, science, literacy and the social studies, and demonstrate how these content areas interrelate with all areas of educational content currently and in the future;
- b) exhibit high levels of self-efficacy related to core content areas of math, science and literacy, and seek to develop beliefs of self-efficacy in their students;
- c) demonstrate the ability to be thoughtful and responsive listeners and observers;
- d) demonstrate the ability to persevere, appropriately seeking out resources and support when presented with personal or professional challenges; and
- e) embody the Code of Ethics for Illinois Educators (23 Ill. Adm. Code 22) and the Standards for All Illinois Teachers (23 Ill. Adm. Code 24), as applicable to the educator, in the learning environment.