

MEMORANDUM

To: Indiana State Board of Education

From: Office of Academics, Indiana Department of Education

Date: January 24, 2020

Re: Elementary Mathematics Specialist Standards Approval

Pursuant to IC 20-28-5-19.5 the Indiana State Board of Education shall adopt rules under IC 4-22-2 to establish elementary school content area licenses that include an elementary mathematics specialist license and an elementary mathematics teacher's license or an elementary mathematics and science teacher's license. The elementary mathematics specialist license must consist of graduate work that would be added on to an existing license. The elementary mathematics teacher's license and the elementary mathematics and science (STEM) teacher's license would consist of undergraduate work and result in an initial practitioner's license.

A committee of stakeholders, including representatives from higher education, administrators, and teachers, was convened to write the standards for the elementary mathematics specialist license. Feedback on the elementary mathematics specialist standards was received from national organizations, such as the Association of Mathematics Teachers Educators and the Benjamin Banneker Association. Work is continuing on the elementary mathematics teacher's license and the elementary mathematics and science (STEM) teacher's license.

Having met the parameters established by Indiana Code, the Department recommends the Board approve the standards for the elementary mathematics specialist license.

Memorandum

To: State Board of Education

From: Risa A. Regnier, Director of Educator Licensing

Date: December 9, 2019

Re: Adoption of Updated REPA Educator Standards in Three Content Areas

Background:

The Indiana Educator Standards that underpin educator preparation programs and the CORE licensure assessments were initially adopted by the Indiana Professional Standards Board in December 2010. Beginning in 2015, the Indiana Department of Education (IDOE) and its licensure test vendor, Evaluation Systems of Pearson, undertook a process to review the Educator Standards and prioritize the revision/updating of standards on an ongoing basis, including the redevelopment of the respective licensure tests as necessary. Initially, seven content area standards were identified for updating, and that work was divided into two phases: Phase One revisions and adoption concluded in September 2019. Phase Two includes Elementary Generalist, Middle School Social Studies, and Secondary Historical Perspectives.

The process for updating the educator standards was facilitated by Pearson personnel and observed by IDOE's Director of Educator Licensing, the Director of Higher Education and Educator Preparation Programs, and the Educator Preparation Program and P12 Partnership Specialist. The process actively engaged IDOE subject matter experts (SMEs), Pearson SMEs, committees of Indiana licensed teachers and teacher educators from each content area, and included a public comment period. The standards revision and adoption process for Phase One concluded in September 2019. The revised standards for Phase Two: Elementary Generalist, Middle School Social Studies, and Secondary Historical Perspectives are now ready to be adopted. Following adoption, IDOE will undertake a communication plan with the educator preparation programs and the public to disseminate and post the updated Educator Standards and to establish a timeline for EPPs to ensure ongoing program alignment.

The following documentation is attached for reference:

- Timeline for key redevelopment activities completed for the Phase Two content areas.
- Final draft versions of the updated Educator Standards eligible for adoption
- Summary of revisions for Elementary Generalist and Middle School Social Studies and track changes post-public comment for Historical Perspectives. The other standards had no changes based on public comment.

Recommendation:

The Indiana Department of Education recommends adoption of the updated Educator Standards for Elementary Generalist, Middle School Social Studies, and Secondary Historical Perspectives.

Indiana Content Standards for Educators

Elementary Mathematics Specialist

January 2020



The Elementary Mathematics Specialist standards reflect current research on effective teaching and learning of mathematics. The standards define knowledge, skills, and dispositions that Elementary Mathematics Specialists must possess to produce greater levels of mathematical success for all students, while also serving as teacher leaders, bringing significant improvement to student achievement and teacher effectiveness.

The standards provide a basis for professional preparation in mathematical content, pedagogy, and leadership. However, the standards should not be viewed as ends in themselves; rather, they provide clarity for building leaders about the actions they are expected to take in order to drive student achievement and teacher effectiveness outcomes.

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Elementary Mathematics Specialist Educator Standards

Standard 1: Mathematical Content

Elementary mathematics specialists must know and understand deeply the mathematics of elementary school, the progressions of mathematics topics across several grade levels, as well as how mathematics concepts and skills develop prior to kindergarten and through middle school. Additionally, elementary mathematics specialists must not only understand mathematics for themselves, but also know how understanding is developed in both students and adults.

Standard 2: Mathematical Processes

Elementary mathematics specialists must use mathematical practices such as precision in language, construction and comparison of mathematical representations, conjecturing, problem solving, reasoning, and proving within the context of the P-8 mathematics content. Additionally, they must create opportunities for learners of all ages to develop these mathematical practices.

Standard 3: Learners and Learning

Elementary mathematics specialists are expected to have a foundation in pedagogical content knowledge and mathematical processes, applying to both students and educators-as-learners. Elementary mathematics specialists must foster positive mathematics dispositions and understand how multiple identities shape teachers and students as mathematics learners, presenting learning opportunities that connect to learners' lived experiences.

Standard 4: Teaching

Elementary mathematics specialists are expected to utilize equitable, evidence-based teaching strategies that validate one's knowledge and experiences as mathematics learners, applying to both students and educators-as-learners.

Standard 5: Curriculum and Assessment

Elementary mathematics specialists are expected to understand curriculum (e.g. academic standards, instructional materials, processes, experiences) and equitable assessment practices, choosing learning tasks that reflect the multiple identities of learners.

Standard 6: Leadership Knowledge and Skills

Elementary mathematics specialists take on collegial, non-evaluative leadership roles within their schools and districts. They must have a broad view of the many aspects and resources needed to support and facilitate effective instruction and professional growth. They act professionally to assure that all students have equitable access to opportunities to learn important mathematics.

Elementary Mathematics Specialist Educator Standards

Standard 1: Mathematical Content

Elementary mathematics specialists must know and understand deeply the mathematics of elementary school, the progressions of mathematics topics across several grade levels, and how mathematics concepts and skills develop prior to kindergarten and through middle school. Additionally, elementary mathematics specialists must not only understand mathematics for themselves, but also know how understanding is developed in both students and adults in the following domains:

1.1 Number and Operations

- 1.1.1 Pre-number concepts: Understand and apply non-quantified comparisons (less than, more than, the same), containment (e.g., 5 contains 3), 1-to-1 correspondence, cardinality, meaningful counting, and ordinality.
- 1.1.2 Understand and utilize a comprehensive repertoire of interpretations (i.e., joining and separating, part-whole relationships, additive and multiplicative comparisons, partitive and quotative division), representations, and properties of the four operations of arithmetic.
- 1.1.3 Place value: Understand and apply the structure of place-value notation in general and base-10 notation in particular; how place-value notations (both standard and exponential form) are used to efficiently represent quantities; use of these notations to order numbers, estimate, and represent order of magnitude (e.g., using scientific notation).
- 1.1.4 Understand and apply multi-digit arithmetic, including informal reasoning, visual representations, mental math, non-standard algorithms, and the way that each might be connected; standard algorithms must be drawn from and connected to other techniques/representations and understood on a conceptual basis.
- 1.1.5 Basic number systems: Understand and apply whole numbers, integers, non-negative rational numbers, rational numbers, and real numbers; relationships among them, and locations of numbers in each system on the number line; conceptual understanding of standard and non-standard algorithms; what is involved in extending operations from each system (e.g., whole numbers) to larger systems (e.g., rational numbers).
- 1.1.6 Multiplicative arithmetic: Factors, factorization, multiples, primes, prime factorization, composite numbers, least common multiple, and greatest common factor.

1.2 Proportional Reasoning

- 1.2.1 Represent and reason about how quantities vary together in a proportional relationship, using tables, double number lines, tape diagrams, and other

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models.

- 1.2.2 Distinguish proportional relationships from other relationships, such as additive relationships and inversely proportional relationships.
- 1.2.3 Use unit rates to solve problems and to formulate equations for proportional relationships.
- 1.2.4 Recognize that unit rates make connections with prior learning by connecting ratios to fractions.
- 1.2.5 Connect the concept of proportional relationship to linear relationships.

1.3 Algebra and Functions

- 1.3.1 Axioms: Recognize commutativity, associativity, and distributivity, and 0 and 1 as identity elements in the basic number systems; understand how these may be used in computations and to deduce the correctness of algorithms. Understand the relationships that exist among addition, subtraction, multiplication and division; the need for order-of-operations conventions.
- 1.3.2 Algebraic notation, equations, and inequalities: Understand meanings for and the use of variables, equal sign, and inequality symbols; the process of substituting particular numbers into variable expressions; the solution set of algebraic equations and inequalities; transformations of equations that do not change the solution set; solutions of systems of linear equations.
- 1.3.3 Model mathematical problems, both contextualized and decontextualized, using algebraic equations and inequalities.
- 1.3.4 Understand the concept of a function as defining one variable uniquely in terms of another. Identify functions to model various relationships, including constant, linear, exponential and quadratic. Produce and interpret representations and partial representations of functions (e.g., equation, graph, table, or verbal description). Utilize functional language such as independent and dependent variables, domain (inputs), and range (outputs).

1.4 Geometry and Measurement

- 1.4.1 Visualization: Understand that geometric objects are pictured on a 2-dimensional page; for 3-dimensional objects this requires perspective or projection renderings. Develop mathematical, spatial, and drawing skills to produce and interpret 2- and 3-dimensional representations.
- 1.4.2 Composition and decomposition: Understand that a geometric figure can be assembled by joining together various component figures. Conversely, understand that a geometric figure may be decomposed into pieces (for

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example decomposing a polygon into an assemblage of triangles).

1.4.3 Congruence and similarity: Understand that congruence is the basic concept of geometric "sameness." Similarity has to do with rescaling: Understand that two figures are similar if one of them is congruent to a rescaling of the other. For example, all circles are similar, as are all squares and all isosceles right triangles.

1.4.4 Geometric measurement: Understand measurement as a way of attaching a numerical quantity to a geometric figure. Doing this involves choosing a standard or non-standard unit, and then the measurement is a ratio of the given geometric figure to the unit (how many copies of the unit does it take to compose the given figure?). It follows that if a geometric figure is decomposed, then its measure is the sum of the measures of its components. Changing the unit has the effect of multiplying all measurements by a constant (relating the two units), for example, relating feet to inches, or square centimeters to square meters.

1.4.5 Identify basic geometric figures and relationships in each dimension.
Dimension 1: Line segments, rays, parallel and perpendicular
Dimension 2: Polygons, circles;
Dimension 3: Polyhedral solids, cylinders, cones, spheres.
Use parts (e.g., vertex, edge, face) and properties (e.g., regularity, symmetry) of these figures to classify them.

1.4.6 Develop and use formulas for measurement of 2- and 3-dimensional figures (e.g., area, surface area, volume, and perimeter).

1.4.7 Plane coordinates: Understand how they are introduced, and how they support algebraic expression of geometric objects and relationships. Reciprocally, understand how they afford geometric interpretation of algebraic relations.

1.4.8 Transformations: Understand and apply reflections, rotations, translations, dilations, glide reflections; composition of transformations; symmetry and its expression in terms of transformation (e.g., reflection through a line of symmetry); develop and express congruence and similarity in terms of transformations.

1.4.9 Axiomatic reasoning and proof: Make and prove conjectures about geometric shapes and relations.

1.5 Data Analysis and Probability

1.5.1 Understand and use the statistical investigative process of posing questions, collecting data, analyzing data, and interpreting results.

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- 1.5.2 Understand the nature and uses of data to gain insight into and measure variation: Differentiate between statistical and non-statistical questions.
- 1.5.3 Distinguish between categorical and numerical data. Classify numerical data as either discrete or continuous.
- 1.5.4 Create appropriate types of representations of univariate and bivariate data, with and without technology, and critique the benefits and limitations of different representations. Determine numerical summaries of data (e.g., relative frequencies for categorical data; measures of shape, center, and spread for numerical data).
- 1.5.5 Understand basic concepts of probability and ways to represent them; make judgments under conditions of uncertainty; measure likelihood; become familiar with the concept of randomness; and understand the relationship between experimental and theoretical probability.
- 1.5.6 Conclusions: Understand which representations best support communication of inferences from data, use probability models when appropriate, and account for variability. Understand how the notion of randomness and the methodology of selecting a sample from the population contribute to the limits of generalizability.
- 1.5.7 Understand that statistics and data are non-neutral and designed to serve a particular interest. Analyze the possibilities for whose interest might be served and how the representations might be misleading.

Standard 2: Mathematical Processes

Elementary mathematics specialists must use mathematical practices such as precision in language, construction and comparison of mathematical representations, conjecturing, problem solving, reasoning, and proving within the context of the P-8 mathematics content. Additionally, they must create opportunities for learners of all ages to develop these mathematical practices:

- 2.1** Make sense of problems and persevere in solving them, attending to precision.
- 2.2** Reason abstractly and quantitatively and create explanations by constructing viable arguments and critiquing the reasoning of others.
- 2.3** Model with mathematics and use appropriate tools strategically.
- 2.4** Look for and make use of mathematical structure and look for and express regularity in repeated reasoning.

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Standard 3: Learners and Learning

Elementary mathematics specialists are expected to have a foundation in pedagogical content knowledge and mathematical processes, applying to both students and educators-as-learners. Elementary mathematics specialists must foster positive mathematics dispositions and understand how multiple identities shape teachers and students as mathematics learners, presenting learning opportunities that connect to learners' lived experiences:

- 3.1 Engage learners in rich mathematical tasks that help to develop mathematical proficiency as characterized by the integration and balance of conceptual understanding, procedural fluency, strategic competence, adaptive reasoning, and productive disposition
- 3.2 Organize and deliver instruction that is developmentally appropriate and responsive to individual learners, acknowledging cultural and linguistic differences.
- 3.3 Draw on student's mathematical strengths to create inclusive, social learning contexts that engage all learners in discussions and mathematical explorations among all members of the learning community in order to motivate and extend learning opportunities, connecting to lived experiences.
- 3.4 Cultivate positive mathematical identities and promote positive dispositions toward mathematics, mathematics teaching and learning; demonstrate and encourage equitable and ethical treatment of students and have high expectations for all students.
- 3.5 Understand the roles of power, privilege, and oppression in the history of mathematics education and be equipped to question existing educational systems that produce inequitable learning experiences and outcomes for students.

Standard 4: Teaching

Elementary mathematics specialists are expected to utilize equitable, evidence-based teaching strategies that validate one's knowledge and experiences as mathematics learners, applying to both students and educators-as-learners.

- 4.1 Design, select and/or adapt worthwhile mathematics tasks and sequences of examples that support a particular learning goal.
- 4.2 Support the learning of appropriate technical language associated with mathematics, attending to both mathematical integrity and usability by all learners.
- 4.3 Construct and evaluate multiple representations of mathematical

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ideas or processes, establish correspondences between representations, and understand the purpose and value of doing so.

- 4.4 Facilitate meaningful mathematics discourse by posing purposeful questions, using and connecting mathematical representations, eliciting and using evidence of learners' thinking, and supporting productive struggle in learning mathematics.
- 4.5 Develop learners' abilities to give clear and coherent public mathematical communications in a classroom setting.
- 4.6 Model effective problem solving and mathematical practices--questioning, representing, communicating, conjecturing, making connections, reasoning and proving, self-monitoring--and cultivate the development of such practices in learners.
- 4.7 Use various instructional tools, purposefully, in ways that are mathematically and pedagogically grounded.
- 4.8 Elicit and use evidence of learners' mathematical thinking.
- 4.9 Develop skillful and flexible use of different instructional formats--whole group, small group, partner, and individual--in support of learning goals.
- 4.10 Understand and support the equitable learning of mathematics by embracing and incorporating diversities of the classroom and school--cultural, racial, ethnic, ability, linguistic, gender, socioeconomic, developmental, etc.; utilize this knowledge to motivate and extend learning opportunities.
- 4.11 Provide learners with opportunities to communicate and make connections between mathematics and other content areas, everyday life, and the workplace.

Standard 5: Curriculum and Assessment

Elementary mathematics specialists are expected to understand curriculum (e.g. academic standards, instructional materials, processes, experiences) and equitable assessment practices, choosing learning tasks that reflect the multiple identities of learners.

- 5.1 Understand the connections between mathematical concepts (P-8) as well as the developmental progressions within these mathematical concepts.
- 5.2 Use knowledge of the P-8 content to sequence activities and design instructional tasks in order to establish appropriate benchmarks in grades K-6.
- 5.3 Use multiple strategies (e.g., asking probing questions, listening to learners) to assess mathematical knowledge and to understand thinking processes.

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- 5.4 Determine the suitability of mathematics curricula and teaching materials (e.g., curricular resources, technology, manipulatives) to select, use, and adapt those materials appropriately for particular learning goals.
- 5.5 Evaluate state and national standards, curricular materials, and assessment tools in order to identify gaps in alignment and recommend appropriate adjustments.
- 5.6 Know the different formats, purposes, uses, and limitations of various types of assessment of student learning in order to choose, design, and/or adapt assessment tasks.
- 5.7 Use the formative assessment cycle (administer a formative assessment task, analyze responses to the task, and design and reteach lessons based on this analysis) in order to inform teaching and benefit learning.
- 5.8 Analyze formative and summative assessment results and make appropriate interpretations; communicate results to appropriate and varied audiences.

Standard 6: Leadership Knowledge and Skills

Elementary mathematics specialists take on collegial, non-evaluative leadership roles within their schools and districts. They must have a broad view of the many aspects and resources needed to support and facilitate effective instruction and professional growth. They act professionally to assure that all students have equitable access to opportunities to learn important mathematics:

- 6.1 Take an active role in their own professional growth by participating in evidence-based professional development experiences that directly relate to ambitious and equitable teaching and learning of mathematics and to their development as a mathematics instructional leader.
- 6.2 Engage in and facilitate continuous and collaborative learning that draws upon research in mathematics education to:
 - 6.2.1 Inform practice, make decisions, manage conflict, and promote meaningful change.
 - 6.2.2 Enhance learning opportunities for all students' and teachers' mathematical knowledge development.
 - 6.2.3 Involve teachers, school and district administrators, other school professionals, families, community members, and other stakeholders in discussions about curriculum, teaching, learning, and assessment.
 - 6.2.4 Advance the development in themselves and others as reflective practitioners as they utilize group processes to collaboratively solve problems.
- 6.3 Plan, develop, implement, and evaluate professional development

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programs at the school and/or district level:

- 6.3.1 Use - and assist teachers in using - resources from professional mathematics education organizations, teacher/leader discussion groups, teacher networks, print, digital, and virtual resources/collections.
- 6.3.2 Support teachers in systematically reflecting and learning from practice through one-on-one observation, coaching cycle, video analysis, and/or lesson study.
- 6.4** Evaluate educational structures and policies that affect students' equitable access to advancement in high quality mathematics learning:
 - 6.4.1 Evaluate the alignment of mathematics curriculum standards, curricular resources, and required assessments and make recommendations for addressing learning and achievement gaps.
 - 6.4.2 Collaborate with school-based professionals to develop ambitious and equitable instruction for all students.
 - 6.4.3 Advocate for the rights and/or needs of all students to secure resources and promote advancement as needed.
- 6.5** Use mathematics-focused instructional leadership skills to improve mathematics programs at the school and district levels:
 - 6.5.1 Serve as coach/mentor/content facilitator – providing feedback to colleagues to strengthen practice and improve student learning.
 - 6.5.2 Develop equitable and accessible classroom- or school-level learning environments.
 - 6.5.3 Build relationships with teachers, administrators and the community.
 - 6.5.4 Collaborate to create a shared vision and develop an action plan for school improvement.
 - 6.5.5 Establish and maintain learning communities.
 - 6.5.6 Partner with school-based professionals to improve each student's achievement.
 - 6.5.7 Mentor new and experienced teachers to better serve students.
- 6.6** Select from a repertoire of methods to communicate professionally about students, curriculum, instruction, and assessment to educational constituents—parents and other caregivers, school administrators, and school boards.

- Association of Mathematics Teacher Educators. (2017). *Standards for Preparing Teachers of Mathematics*. Available online at amte.net/standards.
- Association of Mathematics Teachers Educators. (2013). *Standards for elementary mathematics specialists: A reference for teacher credentialing and degree programs*. San Diego, CA: AMTE.
- Carpenter, T.P., Fennema, E., Franke, M.L., Levi, L., & Empson, S.B. (2015). *Children's mathematics: Cognitively guided instruction* (2nd ed). Portsmouth, NH: Heinemann
- Cobb, P., Jackson, K., Henrick, E., Smith, T.M., & the MIST Team, (2018). *Systems for instructional improvement: Creating coherence from the classroom to the district office*. Cambridge, MA: Harvard Education Press.
- Conference Board of the Mathematical Sciences. (2012). *The mathematical education of teachers II*. Washington, DC: The American Mathematical Society.
- Franklin, C., Kader, G., Mewborn, D., Moreno, J., Peck, R., Perry, M., & Scheaffer, R. (2007). *Guidelines for Assessment and Instruction in Statistics Education (Gaise) Report*. Alexandria, VA: American Statistical Society.
- Huinker, D. & Bill, V. (2017). *Taking action: Implementing effective mathematics teaching practices*. Reston, VA: NCTM.
- Jackson, K., & Cobb, P. (2010, April). Refining a vision of ambitious mathematics instruction to address issues of equity. Paper presented at the Annual Meeting of the American Educational Research Association, Denver, CO.
- Kilpatrick, J. (2001). *Adding it up: how children learn mathematics*. Washington: National Acad. Press.
- McCallum, W. (2011). Retrieved from https://static.pdesas.org/content/documents/M3-grouping_mathematical_practices.pdf.
- National Council of Teachers of Mathematics. (2012). *NCTM CAEP Standards Elementary mathematics specialist (Advanced preparation)*. Retrieved from https://www.nctm.org/uploadedFiles/Standards_and_Positions/CAEP_Standards/NCTM%20CAEP%20Standards%202012%20-%20Elementary%20Mathematics%20Specialist.pdf.
- National Council of Teachers of Mathematics. (2014). *Principles to actions: Ensuring mathematics success for all*. Reston, VA: Author.

REDEVELOPMENT OF REPA EDUCATOR STANDARDS
Description of Revisions to the Elementary Generalist Mathematics Standard 4

Revisions to the REPA Standards for Elementary Generalist Mathematics (Standard 4) were guided by recommendations made during the alignment study, by Indiana state educator reviewer comments, [Indiana State Academic Standards for Mathematics](#), [National Council of Teachers of Mathematics Principles and Standards for School Mathematics 2000](#), and [CAEP 2018 K-6 Elementary Teacher Preparation Standards](#).

Revisions include:

- adding topics to reflect updated national standards (e.g., communication of assessment results)
- including formulaic use to reflect content-specific instructional components (Standards 4.4 and 4.5)
- adding i.e. list for clarity and uniformity with other standards
- reordering fundamental skills to match classroom instructional sequence

REDEVELOPMENT OF REPA EDUCATOR STANDARDS
Description of Revisions to the Elementary Generalist Reading and English Language Arts Standards

Revisions to the REPA Standards for Elementary Generalist Reading and English Language Arts (Standards 1, 2, and 3) were guided by recommendations made during the alignment study, by Indiana state educator reviewer comments, and by review of [the Indiana State Academic Standards for English Language Arts](#), [ILA Standards for the Preparation of Literacy Professionals 2017 \(Classroom Teachers\)](#), and [CAEP 2018 K–6 Elementary Teacher Preparation Standards](#).

Revisions include:

- adding topics to reflect updated national standards (e.g., knowledge of emergent literacy skills, interdisciplinary learning and appropriate writing tasks, appropriate material selection for a literacy program including technology, communication of assessment results to stakeholders)
- including the Multi-Tiered Systems of Support (MTSS) intervention program to reflect current educational trends
- removing e.g. lists for clarity and uniformity with other standards
- consolidating information about providing reading instruction into one substandard (2.6)
- modifying English language arts content to align more closely with grade-level appropriate texts by focusing on children's literature and nonfiction texts from a range of diverse perspectives
- updating English language arts standard to include digital communication

REDEVELOPMENT OF REPA EDUCATOR STANDARDS
Description of Revisions to the Elementary Generalist Science Standards

Revisions to the REPA Standards for Elementary Generalist Science (Standard 5) were guided by recommendations made during the alignment study, by Indiana state educator reviewer comments, and by review of the [Indiana State Academic Standards for Science](#) and the [Next Generation Science Standards](#).

Revisions include:

- adding topics to reflect updated national standards (e.g., engineering design, thermodynamics, human impacts on the environment)
- adding descriptors and e.g. lists for clarity and uniformity with other standards
- altering language for uniformity with other standards

REDEVELOPMENT OF REPA EDUCATOR STANDARDS
Description of Revisions to the Elementary Generalist Fine Arts Standard 7

Revisions to the REPA Standards for Elementary Generalist Fine Arts were guided by recommendations made during the alignment study, by Indiana state educator reviewer comments, [Indiana State Academic Standards for Fine Arts](#) and [CAEP 2018 K-6 Elementary Teacher Preparation Standards](#).

Revisions include:

- matching terminology to the Indiana state academic standards and core subject areas
- reducing focus on mastery and increasing emphasis on integration based on changes to the CAEP standards
- removal of specific sub-topics that can be covered or interpreted in other statements for clarity and uniformity with other standards

REDEVELOPMENT OF REPA EDUCATOR STANDARDS

Description of Revisions to the Elementary Generalist Social Studies Standard 6

Revisions to the REPA Standards for Elementary Generalist Social Studies were guided by recommendations made during the alignment study, by Indiana state educator reviewer comments, [the Indiana State Academic Standards for the Social Studies](#), [National Council for the Social Studies 2014 College, Career, and Civic Life \(C3\) Framework for Social Studies State Standards](#), and [CAEP 2018 K-6 Elementary Teacher Preparation Standards](#).

Revisions include:

- matching terminology to the Indiana state academic standards and core subject areas
- adding topics to reflect updated state and national standards (e.g., major historical periods, places, people, and events and movements in the United States and the world)
- modifying topics to reflect updated state and national standards (e.g., major concepts, and processes of civics and government in Indiana, the United States, and the world, the role of supply and demand, and personal budgets)
- updating social studies standards to include principles and methods of inquiry in social studies



Working Together for Student Success

Indiana Content Standards for Educators

ELEMENTARY EDUCATION GENERALIST

Elementary teachers are expected to have a broad and comprehensive understanding of the knowledge and skills needed for this educator license, and to use that knowledge to help students prepare for the challenges and opportunities of the twenty-first century. This requires the ability to identify, comprehend, analyze, synthesize, and evaluate the basic principles, fundamental concepts, and essential content defined in these standards, and to apply that knowledge to the tasks of planning and delivering effective instruction and assessment.

DRAFT

November 2019

Elementary Education Generalist Educator Standards

Standard 1: Foundations of Scientifically Based Reading Instruction

Elementary teachers have a broad and comprehensive understanding of foundations of reading development and effective reading instruction grounded in scientifically based reading research (SBRR).

Standard 2: Components of Scientifically Based Reading Instruction

Elementary teachers have a broad and comprehensive understanding of the major components of reading development and demonstrate the ability to provide assessment, instruction, intervention, extension, and ongoing progress monitoring in reading.

Standard 3: English Language Arts

Elementary teachers have a broad and comprehensive understanding of fundamental concepts and processes of English language arts and demonstrate the ability to provide content-specific instruction in English language arts.

Standard 4: Mathematics

Elementary teachers have a broad and comprehensive understanding of fundamental computation skills and concepts and processes of mathematics and demonstrate the ability to provide content-specific instruction in mathematics.

Standard 5: Science

Elementary teachers have a broad and comprehensive understanding of fundamental concepts and processes of the science and engineering disciplines and demonstrate the ability to provide content-specific instruction in science.

Standard 6: Social Studies

Elementary teachers have a broad and comprehensive understanding of fundamental concepts and processes of social studies and demonstrate the ability to provide content-specific instruction in social studies.

Standard 7: Fine Arts

Elementary teachers have a broad and comprehensive understanding of fundamental concepts and processes of the fine arts and demonstrate the ability to provide content-specific instruction in the fine arts.

Standard 8: Health, Wellness, and Physical Education

Elementary teachers have a broad and comprehensive understanding of fundamental concepts and processes of health, wellness, and physical education and demonstrate the ability to provide content-specific instruction in health, wellness, and physical education.

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Standard 1: Foundations of Scientifically Based Reading Instruction

Elementary teachers have a broad and comprehensive understanding of foundations of reading development and effective reading instruction grounded in scientifically based reading research (SBRR), including:

- 1.1** major theoretical, conceptual, and evidence-based components of reading development, including concepts of print, phonemic awareness, phonics, fluency, vocabulary, and text comprehension
- 1.2** foundations of language acquisition and literacy development, including cognitive, linguistic, cultural, social, and motivational factors that affect language acquisition and literacy development
- 1.3** principles of scientifically based and evidence-based reading instruction and intervention, including applying data-based decision making, setting individual student learning goals, and using instruction grounded in SBRR
- 1.4** essential components of effective reading instruction, including explicit explanation, teacher modeling, guided practice, and independent practice, and the ability to plan and implement reading instruction that incorporates these components
- 1.5** the role of reading assessment in guiding standards- and evidence-based reading instruction, intervention, and extension in the classroom
- 1.6** the ability to select, administer, interpret, and communicate to stakeholders the results of reading assessments in the major components of reading for various instructional purposes, including screening, diagnosis, instructional planning, progress monitoring, and measuring outcomes
- 1.7** key dimensions of effective differentiated reading instruction in the elementary setting, including modifying digital and print materials and the pacing and/or complexity of instruction; and the ability to plan and implement differentiated instruction to match students' evidence-based strengths and needs in reading
- 1.8** components of effective evidence-based intervention and extension programs, including Response to Instruction (RtI) model and the ability to implement RtI elements
- 1.9** knowledge of and the ability to select and use high-quality literary, multimedia, and informational texts to provide a coherent, integrated, and motivating literacy program
- 1.10** knowledge of and the ability to use evidence-based approaches to integrate the components of literacy and interdisciplinary learning and to support writing appropriate to task
- 1.11** knowledge of and the ability to use instructional practices, approaches, and methods for eliciting students' engagement in and motivation for reading
- 1.12** the ability to use evidence-based practices effectively to create a literacy-rich classroom environment that fosters and supports the literacy development of all students, reflects and values cultural diversity, promotes respect for all readers, promotes the involvement of families and members of the community at large in students' literacy development, and engages all students as agents in their own literacy development

Elementary Education Generalist Educator Standards

Standard 2: Components of Scientifically Based Reading Instruction

Elementary teachers have a broad and comprehensive understanding of the major components of reading development and demonstrate the ability to provide assessment, instruction, intervention, extension, and ongoing progress monitoring in reading, including:

- 2.1** knowledge of key concepts and scientifically based reading research (SBRR) in emergent literacy skills, including book-handling skills, basic concepts of print, letter recognition and formation, and alphabetic principle and letter-sound correspondence
- 2.2** knowledge of key concepts and SBRR in phonemic awareness, including the critical role of phonemic awareness in learning to read an alphabetic language; the distinction between phonological awareness and phonemic awareness; and knowledge of the continuum of phonological- and phonemic-awareness skill development
- 2.3** the ability to provide SBRR-based, evidence-based, and developmentally appropriate assessment, instruction, intervention, extension, and ongoing progress monitoring in emergent literacy skills, phonemic awareness, phonics, fluency, vocabulary, and academic language
- 2.4** knowledge of key concepts and SBRR in phonics, including the role of phonics in developing accurate decoding and automaticity in word recognition; the importance of sequencing phonics instruction according to the increasing complexity of linguistic units; the reciprocity between decoding and encoding; and the continuum of phonics skills
- 2.5** knowledge of key concepts and SBRR in reading fluency including the role of automaticity, key indicators of fluency (i.e., accuracy, rate, and prosody), the importance of explicit instruction, distinctions between oral and silent reading fluency, and the importance of ensuring accountability for comprehension when promoting silent reading fluency
- 2.6** knowledge of key concepts and SBRR in the development of vocabulary and academic language, including the correlation between vocabulary knowledge and academic achievement; the essential role of wide and varied reading in the development of vocabulary knowledge; different levels of vocabulary knowledge; different tiers of vocabulary words; and the importance of early, robust, and explicit language and content experiences to promote young children's development of vocabulary and academic language
- 2.7** knowledge of key concepts and SBRR in comprehension and analysis of informational, persuasive, and literary texts, including levels of reading comprehension as applied to these texts; comprehension strategies; critical and close reading; text-based and non-text-based factors that affect reading comprehension; genres, text structures, characteristics, and graphic, textual, and organizational features of informational and persuasive texts; and genres, key elements, and characteristics of literary texts
- 2.8** the ability to provide SBRR-based, evidence-based, and developmentally appropriate assessment, instruction, intervention, extension, and ongoing progress monitoring in comprehension and analysis of informational, persuasive, and literary texts, including response to literature

Elementary Education Generalist Educator Standards

Standard 3: English Language Arts

Elementary teachers have a broad and comprehensive understanding of fundamental concepts and processes of English language arts and demonstrate the ability to provide content-specific instruction in English language arts, including:

- 3.1** the ability to comprehend, interpret, and analyze children's literature from a variety of genres, time periods, and cultures
- 3.2** the ability to comprehend, interpret, and analyze nonfiction texts from a variety of genres that represent a range of diverse perspectives
- 3.3** major developmental stages of emergent writing and factors that affect the development of writing skills
- 3.4** major forms and functions of writing for various purposes, tasks, and audiences (e.g., informative, persuasive, argumentative, narrative)
- 3.5** steps in the writing process (e.g., drafting, revising, editing, proofreading, publishing) and methods of completing each step, including use of contemporary technologies to interact and collaborate with others to generate, revise, edit, produce, and publish writing
- 3.6** methods of inquiry and research, including methods of finding, selecting, and refining research topics; and methods of locating, evaluating, and citing sources
- 3.7** skills and strategies for active, critical listening and for engaging in a range of collaborative conversations
- 3.8** strategies for presentation of information and ideas
- 3.9** characteristics and components of media literacy, including analysis and interpretation of media and use of media to present information and ideas
- 3.10** digital citizenship and safe and ethical practices in social and personal media communications
- 3.11** state academic standards and state and national teacher standards for instruction and assessment
- 3.12** methods for planning and delivering evidence-based English language arts instruction that fosters students' understanding and mastery of concepts and skills related to English language arts and the development of critical- and creative-thinking, reasoning, problem-solving, and performance skills
- 3.13** strategies and skills for effectively assessing students' understanding and mastery of essential English language arts concepts and skills, using ongoing assessment to monitor progress and inform instruction, and applying Response to Instruction (RTI) procedures

Elementary Education Generalist Educator Standards

Standard 4: Mathematics

Elementary teachers have a broad and comprehensive understanding of fundamental computation skills and concepts and processes of mathematics and demonstrate the ability to provide content-specific instruction in mathematics, including:

- 4.1** number sense, number representations, number systems, and number theory
- 4.2** properties of mathematical operations and patterns, strategies for estimating and computing solutions, and methods and resources for modeling mathematical operations
- 4.3** functions; algebraic expressions, equations, and inequalities; and quantitative relationships between dependent and independent variables
- 4.4** measurement systems and units; concepts related to geometric measurement; and tools, techniques, and formulas used to solve measurement problems
- 4.5** attributes of geometric figures and the relationships between them; similarity, symmetry, formulas, and other geometric concepts used to solve geometry problems; and coordinate systems
- 4.6** principles related to statistical variability and data distribution, methods for representing and analyzing data and making predictions, and methods for determining probabilities
- 4.7** ratios, proportional thinking, and other methods for representing and solving mathematical and real-world problems and for evaluating solutions
- 4.8** processes and skills related to reasoning and proof (i.e., representing mathematical information, using mathematical language to communicate relationships and concepts, adaptive reasoning, strategic competence, procedural fluency, and productive disposition)
- 4.9** the ability to select, administer, interpret, and communicate the results of assessments in major components of mathematics for various instructional purposes and for planning, progress monitoring, and measuring outcomes
- 4.10** state academic standards and state and national teacher standards for instruction and assessment
- 4.11** methods for planning and delivering evidence-based mathematics instruction that fosters students' understanding and mastery of concepts and skills related to mathematics and the development of critical- and creative-thinking, reasoning, problem-solving, and performance skills
- 4.12** strategies and skills for effectively assessing students' understanding and mastery of essential mathematics concepts and skills, using ongoing assessment to monitor progress and inform instruction, and applying Response to Instruction (RTI) procedures

Elementary Education Generalist Educator Standards

Standard 5: Science

Elementary teachers have a broad and comprehensive understanding of fundamental concepts and processes of the science and engineering disciplines and demonstrate the ability to provide content-specific instruction in science, including:

- 5.1** fundamental concepts and application of the nature of science, scientific inquiry, computer science, and the engineering design process
- 5.2** unifying concepts of science, engineering, computer science, and technology; the social, cultural, and ethical aspects of science; and the interactions between science, computer science, technology, and society
- 5.3** fundamental concepts and processes of physical science, including atomic and molecular structure; the structures, properties, and states of matter; knowledge of physical and chemical properties and changes; principles of force and motion; collision; concepts of weight, volume, and mass; thermodynamics; energetics; properties and characteristics of waves (e.g., sound, light); and concepts of electricity and magnetism
- 5.4** fundamental concepts and processes of life science, including cells; photosynthesis and respiration; characteristics, classification, and life cycles of organisms; genetics and inheritance of characteristics; evolution over time; the relationships of organisms to each other and to their environment; and major characteristics of and factors affecting ecosystems and biomes
- 5.5** fundamental concepts and processes of Earth and space science, including characteristics of and relationships between celestial bodies, the sun-moon-Earth system, properties of rocks and minerals, factors that change Earth over time, features and patterns of weather and climate, the characteristics and interactions of Earth systems, the use of natural resources, and the impact of humans on the environment
- 5.6** fundamental concepts and processes of engineering and technology, including properties and uses of natural and human-made materials; the use of computer science and technology to meet human needs and solve problems; and the design, testing, and evaluation of practical solutions to real-world situations (e.g., building a structure to achieve a goal, optimizing a system, using simple mechanical devices)
- 5.7** principles and procedures for using tools, materials, and technology in scientific investigations; considering multiple perspectives and sources of information in scientific inquiry; using critical-thinking, computational thinking, and mathematical skills to evaluate scientific information; and organizing, analyzing, and communicating results of scientific investigations
- 5.8** procedures and guidelines for establishing and maintaining a safe science learning environment that provides opportunities for multisensory exploration and ensures the humane and ethical treatment of living organisms and the safe handling and disposal of chemicals
- 5.9** state academic standards and state and national teacher standards for instruction and assessment
- 5.10** methods for planning and delivering evidence-based science instruction that fosters students' understanding and mastery of concepts and skills related to science and the development of critical- and creative-thinking, reasoning, problem-solving, and performance skills
- 5.11** strategies and skills for effectively assessing students' understanding and mastery of essential science concepts and skills, using ongoing assessment to monitor progress and inform instruction, and applying Response to Instruction (RTI) procedures

Elementary Education Generalist Educator Standards

Standard 6: Social Studies

Elementary teachers have a broad and comprehensive understanding of fundamental concepts and processes of social studies and demonstrate the ability to provide content-specific instruction in social studies, including:

- 6.1** concepts and processes related to social studies and social studies inquiry, including skills related to chronological thinking and spatial awareness
- 6.2** concepts related to communities at the family, neighborhood, school, town or city, and regional levels
- 6.3** major historical periods, places, people, events, and movements in the development of Indiana, including relationships with regional, national, and world communities
- 6.4** major historical periods, places, people, events, and movements in U.S. history from Paleo-Indian cultures to the present
- 6.5** major historical periods, places, people, events, and movements in world history from early civilizations to the present
- 6.6** major concepts and processes of civics and government in Indiana, the United States, and the world, including foundations and functions of government and roles of citizens
- 6.7** major concepts and processes of geography, including locations and characteristics, places, and regions of the world; characteristics of human and physical systems; and interactions between the environment and society
- 6.8** basic concepts and theories of economics, including the role of supply and demand in a market economy, examples and benefits of trade, and purposes and methods of developing savings plans and personal budgets
- 6.9** principles and methods of inquiry in social studies, including analysis and evaluation of information in primary and secondary sources, analysis of cause-and-effect relationships, and applying decision-making processes
- 6.10** state academic standards and state and national teacher standards for instruction and assessment
- 6.11** methods for planning and delivering evidence-based social studies instruction that fosters students' understanding and mastery of concepts and skills related to social studies and the development of critical- and creative-thinking, reasoning, problem-solving, and performance skills
- 6.12** strategies and skills for effectively assessing students' understanding and mastery of essential social studies concepts and skills, using ongoing assessment to monitor progress and inform instruction, and applying Response to Instruction (RTI) procedures

Elementary Education Generalist Educator Standards

Standard 7: Fine Arts

Elementary teachers have a broad and comprehensive understanding of fundamental concepts and processes of the fine arts and demonstrate the ability to provide content-specific instruction in the fine arts, including:

- Z.1** developmental foundations of learning in the fine arts, including ways in which the development of fine arts skills is related to and influences the development of social, physical, cognitive, and academic skills and supports creativity and innovative thinking
- Z.2** significant elements, forms, works, and creators of dance, music, theatre, and visual art
- Z.3** basic skills and processes for creating, refining, and presenting works of dance, music, theatre, and visual art and for integrating these processes and works with learning experiences across other content areas
- Z.4** principles, skills, and criteria related to viewing, interpreting, analyzing, and responding to works of dance, music, theatre, and visual art
- Z.5** the ways in which works of dance, music, theatre, and visual art can be used as forms of communication, self-expression, and social expression
- Z.6** roles and functions of the fine arts in various cultures and the ways in which works of dance, music, theatre, and visual art reflect and express diverse cultural perspectives
- Z.7** relationships between dance, music, theatre, and visual art and connections between the fine arts and other disciplines
- Z.8** state academic standards and state and national teacher standards for instruction and assessment
- Z.9** methods for planning and delivering evidence-based fine arts instruction that fosters students' understanding and mastery of concepts and skills related to the fine arts and the development of critical- and creative-thinking, reasoning, problem-solving, and performance skills
- Z.10** strategies and skills for effectively assessing students' understanding and mastery of essential fine arts concepts and skills, using ongoing assessment to monitor progress and inform instruction, and applying Response to Instruction (RTI) procedures

Elementary Education Generalist Educator Standards

Standard 8: Health, Wellness, and Physical Education

Elementary teachers have a broad and comprehensive understanding of fundamental concepts and processes of health, wellness, and physical education and demonstrate the ability to provide content-specific instruction in health, wellness, and physical education, including:

- 8.1** basic functions and structures of human body systems and processes of human growth and development, including basic principles of human nutrition and common human diseases and illnesses
- 8.2** basic motor skills; movement forms and patterns; and concepts, principles, strategies, and tactics related to movement and performance
- 8.3** fitness activities, games, and sports; adventure and recreational lifetime activities; rules, etiquette, and safety; and responsible personal and social behaviors related to participation in physical activities and games
- 8.4** major components of health-related fitness and developmentally appropriate strategies and skills for promoting health and fitness
- 8.5** concepts and processes related to health promotion and to disease and injury prevention; dimensions of wellness and personal behaviors; practices that have positive effects on lifelong health and wellness; and strategies for making, implementing, and evaluating health-related decisions
- 8.6** characteristics of interpersonal relationships, interpersonal communication skills, and strategies for maintaining healthy interpersonal relationships to enhance health and avoid or reduce health risks
- 8.7** the influence of various factors, including family, peers, culture, media, and technology, on health behaviors; the effects of social and cultural values and belief systems on family and community perspectives related to physical activity; and issues related to health and wellness
- 8.8** the use of decision-making, goal-setting, critical-thinking, problem-solving, and advocacy skills to promote personal, family, and community health and fitness and to evaluate health- and fitness-related information, products, and services
- 8.9** state academic standards and state and national teacher standards for instruction and assessment
- 8.10** methods for planning and delivering evidence-based health, wellness, and physical education instruction that fosters students' understanding and mastery of concepts and skills related to health, wellness, and physical education and the development of critical- and creative-thinking, reasoning, problem-solving, and performance skills
- 8.11** strategies and skills for effectively assessing students' understanding and mastery of essential health, wellness, and physical education concepts and skills; using ongoing assessment to monitor progress and inform instruction; and applying Response to Instruction (RTI) procedures

REDEVELOPMENT OF REPA EDUCATOR STANDARDS

Description of Revisions to Middle School Social Studies

Revisions to the REPA Standards for Middle School Social Studies were guided by recommendations made during the alignment study, by Indiana state educator reviewer comments, and by review of the [Indiana Academic Standards for social studies \(5-12\)](#) and the National Council for the Social Studies' [National Standards for the Preparation of Social Studies Teachers](#).

Revisions include:

- updating language for consistency;
- updating language to match terminology used in the Indiana state student standards and NCSS NSPSST standards;
- clarifying topics to remove ambiguity (e.g., specifying issues that had been implied by "strategies and skills for effectively assessing student understanding");
- removing topics to better match relevant standards (e.g., the operation of the U.S. legal system, international relations, and the formation of U.S. foreign policy);
- adding topics including the development of nation states and absolute and constitutional monarchies and the impact of technological innovations and environmental changes in world history;
- adding topics including Jacksonian Democracy and immigration, urbanization, and industrialization in U.S. history;
- adding topics including factors that influence climates and biomes and the distribution and importance of natural resources in geography;
- adding topics including the functions of international political organizations and citizens' participation in the political process in government and citizenship;
- adding topics including technological developments, productivity, and the standard of living and international trade and economic interdependence in economics; and
- adding topics including the development of evidence-based claims and reasoned arguments in literacy and research skills.



Working Together for Student Success

Indiana Content Standards for Educators

MIDDLE SCHOOL SOCIAL STUDIES

Middle school social studies teachers are expected to have a broad and comprehensive understanding of the knowledge and skills needed for this educator license, and to use that knowledge to help students prepare for the challenges and opportunities of the twenty-first century. This requires the ability to identify, comprehend, analyze, synthesize, and evaluate the basic principles, fundamental concepts, and essential content defined in these standards, and to apply that knowledge to the tasks of planning and delivering effective instruction and assessment.

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Middle School Social Studies Educator Standards

Standard 1: World History

Middle school social studies teachers have a broad and comprehensive understanding of historical concepts and major events and developments in world history.

Standard 2: U.S. and Indiana History

Middle school social studies teachers have a broad and comprehensive understanding of major events and developments in U.S. and Indiana history.

Standard 3: Geography

Middle school social studies teachers have a broad and comprehensive understanding of geographic concepts and systems, places and regions, human-environment interactions, and the uses of geography.

Standard 4: Government and Citizenship

Middle school social studies teachers have a broad and comprehensive understanding of political science terms and concepts; the foundations of government around the world; federal, state, and local government, and international political organizations in the United States; the U.S. election process; and U.S. citizenship and participation.

Standard 5: Economics

Middle school social studies teachers have a broad and comprehensive understanding of economics concepts and systems, the national and international economies, and consumer economics.

Standard 6: Social Studies Literacy and Research Skills

Middle school social studies teachers have a broad and comprehensive understanding of social studies research skills.

Standard 7: Social Studies Instruction and Assessment

Middle school social studies teachers have a broad and comprehensive understanding of content-specific instruction and assessment in social studies.

Middle School Social Studies Educator Standards

Standard 1: World History

Middle school social studies teachers have a broad and comprehensive understanding of historical concepts and major events and developments in world history, including:

- 1.1** historical terms, concepts, sources, and perspectives
- 1.2** the beginnings of human civilization and the emergence of agricultural societies around the world
- 1.3** origins, structures, and development of early civilizations in Eurasia and North Africa; the classical Mediterranean world; and major empires and civilizations of Asia, Africa, and the Americas to 600 CE
- 1.4** principal beliefs, key concepts, sacred texts, and historical development of Hinduism, Judaism, Confucianism, Buddhism, Christianity, Islam, and indigenous religious traditions
- 1.5** the rise of the Byzantine Empire, the expansion of Islam, the spread of feudalism in Europe, the Crusades, and the Mongol conquests
- 1.6** historical development and key achievements of Asian, Middle Eastern, and African civilizations, 600–1400 CE
- 1.7** causes and consequences of European exploration, conquest, and colonization during the first global age, 1400–1750 CE
- 1.8** critical ideas and transformative effects of the Renaissance, Reformation, Scientific Revolution, and Enlightenment
- 1.9** the emergence of nation-states and the development of absolute and constitutional monarchies
- 1.10** causes and consequences of the American and French Revolutions and the Latin American wars for independence
- 1.11** historical development and key achievements of Asian, Middle Eastern, and African civilizations, 1400–1900
- 1.12** the Industrial Revolution and its technological, economic, social, and political influence on the development of the modern world
- 1.13** the rise of nationalism and the emergence, expansion, and consequences of European imperialism
- 1.14** origins and consequences of World War I; the causes and major developments of the Russian Revolution; major political, economic, social, and cultural developments of the interwar period; and the causes and major events of World War II
- 1.15** major events and developments of the post–World War II period related to the Cold War, creation of the United Nations, decolonization in Asia and Africa, changing international power relations, the global expansion of democracy, and economic globalization
- 1.16** the impact of technological innovations and environmental changes on the peoples and nations of the world

Middle School Social Studies Educator Standards

Standard 2: U.S. and Indiana History

Middle school social studies teachers have a broad and comprehensive understanding of major events and developments in U.S. and Indiana history, including:

- 2.1** characteristics of Native American cultures prior to European settlement and the interaction, cooperation, and conflict between Native Americans and Europeans
- 2.2** motives for European settlement and colonization of the Americas; the political, economic, social, and cultural institutions established in Great Britain's North American colonies; and similarities and differences between the colonies
- 2.3** causes, major events, and consequences of the American Revolution; the creation of national and state governments; and the rise of political parties
- 2.4** Jacksonian democracy and the evolution of the U.S. political system
- 2.5** the concept of Manifest Destiny and westward expansion and its impact on Native American peoples
- 2.6** early industrialization, the growth of slavery, and efforts to reform U.S. society
- 2.7** origins, major events, and consequences of the Civil War and Reconstruction
- 2.8** immigration, urbanization, and industrialization: the transformation of U.S. society
- 2.9** the emergence of the United States as a world power, including U.S. participation in the Spanish-American War and World War I
- 2.10** prosperity, depression, recovery, and war from 1920 to 1945
- 2.11** the Cold War and the evolving U.S. role in the world after World War II
- 2.12** political, social, economic, cultural, and technological developments in the United States during the second half of the twentieth century, and their effects on U.S. society and individual Americans
- 2.13** the United States in a global age

Middle School Social Studies Educator Standards

Standard 3: Geography

Middle school social studies teachers have a broad and comprehensive understanding of geographic concepts and systems, places and regions, human-environment interactions, and the uses of geography, including:

- 3.1** geographic terms, concepts, themes, and elements
- 3.2** absolute and relative location of countries and capital cities and the use of locational technology such as Global Positioning System (GPS) and Geographic Information Systems (GIS)
- 3.3** major physical characteristics of world regions and places and the natural processes that shape physical features
- 3.4** factors that influence different climates and biomes, and the limitations that they place on people
- 3.5** characteristics and patterns of population distribution in world regions and countries
- 3.6** changes in culture arising from migration, cultural diffusion, invention, and innovation
- 3.7** distribution and importance of natural resources
- 3.8** interactions and relationships between humans and the environment
- 3.9** ways in which geographic knowledge can be applied to the study of historical and contemporary developments and issues to solve problems and plan for the future

Standard 4: Government and Citizenship

Middle school social studies teachers have a broad and comprehensive understanding of political science terms and concepts; the foundations of government around the world; federal, state, and local government, and international political organizations in the United States; the U.S. election process; and U.S. citizenship and participation, including:

- 4.1** political science terms and concepts
- 4.2** purposes of government and the distinguishing characteristics of historical and contemporary forms of government
- 4.3** fundamental values, essential ideas, and foundational documents of U.S. constitutional government
- 4.4** the structure, functions, and powers of the U.S. federal government
- 4.5** the structure, functions, and powers of state and local government in Indiana
- 4.6** the operation of governments of other countries and functions of international political organizations
- 4.7** the U.S. election process at the national, state, and local levels
- 4.8** rights and responsibilities of U.S. citizenship and citizens' participation in the political process in the United States and in other times and places

Middle School Social Studies Educator Standards

Standard 5: Economics

Middle school social studies teachers have a broad and comprehensive understanding of economics concepts and systems, the national and international economies, and consumer economics, including:

- 5.1** economics terms, concepts, and systems
- 5.2** characteristics and operation of market economies
- 5.3** institutions and operation of the national economy
- 5.4** ways in which governments influence economic development and attempt to correct market failures
- 5.5** effects of technological developments and inventions on productivity and standard of living
- 5.6** international trade and economic interdependence
- 5.7** consumer economics and personal finance

Standard 6: Social Studies Literacy and Research Skills

Middle school social studies teachers have a broad and comprehensive understanding of social studies research skills, including:

- 6.1** methods and procedures used in social studies research
- 6.2** basic reference sources used in social studies research
- 6.3** uses and limitation of various types of primary and secondary sources of social studies information
- 6.4** acquisition of social studies information and the use of electronic technologies in social studies research
- 6.5** how to identify purpose, point of view, and central questions in social studies documents
- 6.6** how to analyze underlying assumptions and bias and evaluate the nature and adequacy of evidence in social studies documents and narratives
- 6.7** how to distinguish fact from opinion in social studies documents, accounts, and arguments
- 6.8** how to interpret social studies issues and information presented in diverse formats and media, and develop evidence-based claims and reasoned arguments on social studies topics
- 6.9** how to recognize and consider multiple perspectives and interests informing social studies sources and accounts
- 6.10** how to communicate social studies information, analysis, and interpretation in effective written forms and critique claims and conclusions based on evidence, credibility, and reasoning

Middle School Social Studies Educator Standards

Standard 7: Social Studies Instruction and Assessment

Middle school social studies teachers have a broad and comprehensive understanding of content-specific instruction and assessment in social studies, including:

- 7.1** Indiana Academic Standards for Social Studies Grades 5–9, United States History, World History and Civilization, Geography and History of the World, Indiana Studies, and Content Area Literacy: History/Social Studies
- 7.2** NCSS National Curriculum Standards for Social Studies and the College, Career, and Civic Life (C3) Framework for Social Studies State Standards
- 7.3** instructional strategies and resources that engage learners with disciplinary concepts, facts, and tools related to social studies, and require learners to create disciplinary forms of representation that convey historical knowledge and civic competency
- 7.4** strategies and skills for planning and designing social studies instruction that engages learners in disciplinary inquiry, including the use of techniques and approaches that support individualized learning, meet the needs of diverse learners, and demonstrate alignment with state-required content standards
- 7.5** instructional strategies that draw on knowledge of learners' sociocultural assets, learning demands, and individual identities to promote student learning and foster the development of critical-thinking, problem-solving, and performance skills in social studies, and engage learners in ethical reasoning to deliberate social, political, and economic issues, communicate conclusions, and take informed action toward achieving a more inclusive and equitable society
- 7.6** instructional strategies that facilitate collaborative, interdisciplinary learning environments in which learners use disciplinary facts, concepts, and tools to engage in disciplinary inquiry and create disciplinary forms of representation
- 7.7** communication methods that promote student learning and foster active inquiry, interaction, and collaboration in the social studies classroom
- 7.8** strategies and skills for selecting, adapting, and using technological resources to enhance teaching and learning about social studies and to foster civic competence
- 7.9** strategies and skills for designing and implementing authentic assessments of student understanding and mastery of essential social studies concepts and skills, and using assessment data to guide instructional decision-making and reflect on student learning outcomes related to disciplinary knowledge, inquiry, and forms of representation



Working Together for Student Success

Indiana Content Standards for Educators

SOCIAL STUDIES—HISTORICAL PERSPECTIVES

History teachers are expected to have a broad and comprehensive understanding of the knowledge and skills needed for this educator license, and to use that knowledge to help students prepare for the challenges and opportunities of the twenty-first century. This requires the ability to identify, comprehend, analyze, synthesize, and evaluate the basic principles, fundamental concepts, and essential content defined in these standards, and to apply that knowledge to the tasks of planning and delivering effective instruction and assessment.

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Social Studies—Historical Perspectives Educator Standards

Standard 1: Historical Concepts and Perspectives

History teachers have a broad and comprehensive understanding of historical concepts, terms, sources, and perspectives.

Standard 2: Historical Sources and Research Skills

History teachers have a broad and comprehensive understanding of historical sources and research skills.

Standard 3: Historical Analysis and Interpretation

History teachers have a broad and comprehensive understanding of how to analyze, interpret, and present historical information.

Standard 4: World History

History teachers have a broad and comprehensive understanding of major events and developments in world history.

Standard 5: U.S. History

History teachers have a broad and comprehensive understanding of major events and developments in U.S. history.

Standard 6: Indiana History

History teachers have a broad and comprehensive understanding of major events and developments in Indiana history.

Standard 7: History Instruction and Assessment

History teachers have a broad and comprehensive understanding of content-specific instruction and assessment in history.

Social Studies—Historical Perspectives Educator Standards

Standard 1: Historical Concepts and Perspectives

History teachers have a broad and comprehensive understanding of historical concepts, terms, sources, and perspectives, including:

- 1.1** basic historical terms and concepts
- 1.2** time, sequence, and chronological thinking, and patterns of succession and duration in history
- 1.3** continuity and change across historical eras
- 1.4** multiple causation of historical events and causal relationships between historical events and developments
- 1.5** major historical interpretations and how they change over time
- 1.6** historical issues and events as seen from diverse regional, racial, ethnic, religious, class and gender perspectives and interests

Standard 2: Historical Sources and Research Skills

History teachers have a broad and comprehensive understanding of historical sources and research skills, including:

- 2.1** basic reference sources used in historical research
- 2.2** differences between primary and secondary sources of historical information
- 2.3** strengths and limitations of various types of primary and secondary sources of historical information
- 2.4** formulation of questions for historical inquiry
- 2.5** acquisition and organization of historical information
- 2.6** use of electronic technologies and media in historical research

Standard 3: Historical Analysis and Interpretation

History teachers have a broad and comprehensive understanding of how to analyze, interpret, and present historical information, including:

- 3.1** how to identify and examine the underlying factors contributing to historical events and developments
- 3.2** how to understand-contextualize the perceptions of past events as they were experienced by people at the time
- 3.3** how to identify purpose, point of view, and central questions in historical documents, narratives, and analyses
- 3.4** how to analyze bias and underlying assumptions in historical documents
- 3.5** how to distinguish fact from opinion in historical documents, accounts, and arguments
- 3.6** how to develop historical claims and arguments, evaluate the nature and adequacy of evidence, and use textual evidence to support the analysis of primary and secondary sources
- 3.7** how to interpret, integrate, and evaluate historical information presented in diverse formats and media
- 3.8** how to evaluate various explanations for and multiple perspectives on historical events and developments

Social Studies—Historical Perspectives Educator Standards

- 3.9** how to communicate historical information, analysis, and interpretation in effective written forms and critique claims and conclusions based on evidence, credibility, and reasoning

Standard 4: World History

History teachers have a broad and comprehensive understanding of major events and developments in world history, including:

- 4.1** the beginnings of human civilization and the emergence of agricultural societies around the world
- 4.2** origins, structures, and development of early civilizations in Eurasia and North Africa; the classical Mediterranean world; and major empires and civilizations of Asia, Africa, and the Americas to 600 CE
- 4.3** principal beliefs, key concepts, sacred texts, and historical development of Hinduism, Judaism, Confucianism, Buddhism, Christianity, Islam, and indigenous religious traditions
- 4.4** the rise of the Byzantine Empire, the expansion of Islam, the spread of feudalism in Europe, the Crusades, the Mongol conquests, and the Ottoman Empire
- 4.5** historical development and key achievements of Asian, Middle Eastern, and African civilizations 600–1400 CE
- 4.6** causes and consequences of European exploration, conquest, and colonization during the first global age, 1400–1750 CE
- 4.7** critical ideas and transformative effects of the Renaissance, Reformation, Scientific Revolution, and Enlightenment
- 4.8** the emergence of nation-states and the development of absolute and constitutional monarchies
- 4.9** causes and consequences of the American and French revolutions and Latin American wars for independence
- 4.10** the Industrial Revolution and its technological, economic, social, and political influence on the development of the modern world
- 4.11** the rise of nationalism and the emergence, expansion, and consequences of European imperialism
- 4.12** origins and consequences of World War I; causes and major developments of the Russian Revolution; major political, economic, social, and cultural developments of the interwar period; and causes and major events of World War II
- 4.13** major events and developments of the post–World War II period related to the Cold War, creation of the United Nations, independence movements in Asia and Africa, changing international power relations, global expansion of democracy, and economic globalization
- 4.14** the impact of technological innovations and environmental changes on the peoples and nations of the world

Social Studies—Historical Perspectives Educator Standards

Standard 5: U.S. History

History teachers have a broad and comprehensive understanding of major events and developments in U.S. history, including:

- 5.1** characteristics of Native American cultures prior to European settlement and the interaction, cooperation, and conflict between Native Americans and Europeans
- 5.2** motives for European exploration, settlement, and colonization of the Americas; the political, economic, religious, and social institutions established in Great Britain’s North American colonies; and similarities and differences between the colonies
- 5.3** influence of physical and cultural characteristics on national origins, growth, and development, ~~and the emergence of a distinctly American culture~~
- 5.4** causes, major events, and consequences of the American Revolution, including contributions of women and minorities; the creation of national and state governments; and the rise of political parties
- 5.5** Jacksonian democracy and the evolution of the U.S. political and economic system
- 5.6** the concept of Manifest Destiny and westward expansion and its impact on Native American peoples
- 5.7** early industrialization, the growth of slavery, and efforts to reform U.S. society
- 5.8** origins, major events, and consequences of the Civil War and Reconstruction
- 5.9** development of the West and the effects of settlement on the land and peoples who lived there
- 5.10** effects of and responses to ~~immigration, urbanization, and~~ industrialization, urbanization, and immigration on both coasts
- 5.11** the emergence of the United States as a world power, including U.S. participation in the Spanish-American War and World War I
- 5.12** prosperity, depression, recovery, and war from 1920 to 1945
- 5.13** the Cold War and the evolving role of the United States in the world
- 5.14** social movements and political, economic, and technological developments from 1945 to 1990
- 5.15** major events in contemporary U.S. history, including the growth of the Internet, economic globalization, foreign and domestic terrorism, political division, and environmental challenges

Social Studies—Historical Perspectives Educator Standards

Standard 6: Indiana History

History teachers have a broad and comprehensive understanding of major events and developments in Indiana history, including:

- 6.1** Native American cultures of the Midwest, the impact of European settlement on Native Americans in Indiana, and the role of Native Americans in the development of Indiana
- 6.2** early explorers, major political and economic developments in Indiana prior to statehood, and the development of Hoosier culture
- 6.3** causes and effects of historic and contemporary patterns of immigration and settlement in Indiana
- 6.4** slavery, abolitionism, and social reform in Indiana and the role of Indiana in national affairs during the Civil War and Reconstruction
- 6.5** industrial and agricultural growth in Indiana during the late nineteenth and early twentieth centuries and the effect on rural and urban communities
- 6.6** effects of World War I and World War II on Indiana and major economic, political, social, cultural, and technological developments of the interwar era
- 6.7** experiences, challenges, and contributions of major cultural and ethnic groups in Indiana
- 6.8** important social, cultural, political, and economic developments and changes in Indiana since World War II

Social Studies—Historical Perspectives Educator Standards

Standard 7: History Instruction and Assessment

History teachers have a broad and comprehensive understanding of content-specific instruction and assessment in history, including:

- 7.1** Indiana Academic Standards for United States History, World History and Civilization, Geography and History of the World, Indiana Studies, and Content Area Literacy: History/Social Studies
- 7.2** NCSS National Curriculum Standards for Social Studies and the College, Career, and Civic Life (C3) Framework for Social Studies State Standards
- 7.3** instructional strategies and resources that engage learners with disciplinary concepts, facts, and tools related to history, and require learners to create disciplinary forms of representation that convey historical knowledge and civic competency
- 7.4** strategies and skills for planning and designing historical instruction that engages learners in disciplinary inquiry, including the use of techniques and approaches that support individualized learning, meet the needs of diverse learners, and demonstrate alignment with state-required content standards
- 7.5** instructional strategies that draw on knowledge of learners' sociocultural assets, learning demands, and individual identities to promote student learning and foster the development of critical-thinking, problem-solving, and performance skills in history, and engage learners in ethical reasoning to deliberate social, political, and economic issues, communicate conclusions, and take informed action toward achieving a more inclusive and equitable society
- 7.6** instructional strategies that facilitate collaborative, interdisciplinary learning environments in which learners use disciplinary facts, concepts, and tools to engage in disciplinary inquiry and create disciplinary forms of representation
- 7.7** communication methods that promote student learning and foster active inquiry, interaction, and collaboration in the history classroom
- 7.8** strategies and skills for selecting, adapting, and using technological resources to enhance teaching and learning about history and to foster civic competence
- 7.9** strategies and skills for designing and implementing authentic assessments of student understanding and mastery of essential historical concepts and skills, and using assessment data to guide instructional decision-making and reflect on student learning outcomes related to disciplinary knowledge, inquiry, and forms of representation

**Rules for Educator Preparation and Accountability (REPA) Standards Development:
Key Milestones and Timeline**

REPA Educator Standards Redevelopment Tasks		Dates	
		Phase 1:	Phase 2:
		<ul style="list-style-type: none"> • Computer Science • MS English Language Arts • MS Mathematics • MS Science 	<ul style="list-style-type: none"> • Elementary Ed Generalist • MS Social Studies • Social Studies – Hist. Perspectives
1. Evaluation Systems drafts updates to the REPA Educator Standards based on the alignment study.	October 2017	October - November 2018	
2. IDOE subject-matter experts (SMEs) in each field review draft REPA Educator Standards in preparation for review by committees of Indiana educators.	November 2017	December 2018	
3. IDOE approves the initial draft REPA Educator Standards for committee review.	December 2017	December 2018	
4. Fairness and content advisory committees of Indiana educators review and suggest revisions to the draft REPA Educator Standards.	October 2018	March 2019	
5. The IDOE SMEs in each field review suggested revisions to the draft REPA Educator Standards based on committee feedback in preparation for public comment.	December 2018 - February 2019	June - July 2019	
6. Draft REPA Educator Standards are available on the IDOE website for a public comment period.	February 28 - April 10, 2019	September 2019	
7. IDOE shares public comments and IDOE SME feedback to the public comments with Evaluation Systems.	April 2019	October 2019	
8. Evaluation Systems incorporates feedback from the public comment period into the draft REPA Educator Standards and shares the updated versions with IDOE.	May-June 2019	October - November 2019	
9. Evaluation Systems incorporates the IDOE SMEs final revisions in the draft REPA Educator Standards (if applicable) and shares clean versions with the IDOE.	August 2019	November 2019	
10. IDOE approves final revisions to the draft REPA Educator Standards.	August 2019	November 2019	
11. The Indiana State Board of Education (SBOE) adopts the final versions of the REPA Educator Standards.	September 4, 2019	December 2019	



**Rules for Educator Preparation and Accountability (REPA) Standards Development:
Key Milestones and Timeline**

Overview of Original Development	Dates
<p>1. Indiana enacts the REPA licensure rules to emphasize content knowledge at both the elementary and secondary levels.</p>	<p align="center">Spring 2010</p>
<p>2. Indiana Department of Education (IDOE) selects Evaluation Systems group of Pearson to develop the REPA Educator Standards grounded in scientifically-based research and aligned with Indiana Academic standards and national standards.</p>	<p align="center">Fall 2010</p>
<p>3. The Professional Standards Board approves REPA Educator Standards in 46 content areas, 2 administrative areas, and 5 school setting developmental levels.</p>	<p align="center">Winter 2010</p>
<p>4. Evaluation Systems conducts the alignment study between the REPA Educator Standards and the Indiana P-12 Standards and national standards and assigns redevelopment priority for each field, divided into two phases.</p>	<p align="center">2015</p>

