# Educator Preparation Program Competencies for Elementary Mathematics

### **DEFINITIONS**

Basic Concept Knowledge: Teacher candidates demonstrate knowledge through assignments or assessments.

**Application:** Teacher candidates apply it in a university setting with other adults, in collaboration with colleagues, or in a lesson plan.

**Demonstration:** Teacher candidates demonstrate in an elementary classroom setting with children.

Competencies	Basic Content Knowledge	Application	Demonstra- tion	Exemplars
<b>EM 1</b> Implement tasks that promote reasoning and problem solving.			Х	Engage students in solving and discussing tasks that promote mathematical reasoning and problem solving and allow multiple entry points and varied solution strategies.
EM 2 Use and connect mathematical representation.		Х		Engage students in making connections among mathematical representation to deepen understanding of mathematics concepts and procedures and use tools for problem solving.
<b>EM 3</b> Build procedural fluency from conceptual understanding.		Х		Build fluency with procedures on a foundation of conceptual understanding so that students, over time, become skillful in using procedures flexibly as they solve contextual and mathematical problems.
<b>EM 4</b> Elicit and use evidence of student thinking.			Х	Use evidence of student thinking to assess progress toward mathematical understanding and to adjust instruction continually in ways that support and extend learning.

EM 5 Facilitate meaningful mathematical discourse.	Х		Provide opportunities for discourse among students to build shared understanding of mathematical ideas by analyzing and comparing student approaches and arguments.
EM 6 Pose purposeful questions	X		Use purposeful questions to assess and advance students' reasoning and sense making about important mathematical ideas and relationships.
<b>EM 7</b> Support productive struggle in learning mathematics	X		Consistently provide students, individually and collectively, with opportunities and supports to engage in productive struggle as they grapple with mathematical ideas and relationships.
EM 8 Engaging students in authentic mathematics learning experiences		Х	Include practices of student-centered, task- based mathematics instruction that includes opportunities for students to engage in learning experiences.

# Educator Preparation Program Competencies for Elementary Science

### **DEFINITIONS**

**Basic Concept Knowledge**: Teacher candidates demonstrate knowledge through assignments or assessments.

**Application:** Teacher candidates apply it in a university setting with other adults or in a lesson plan.

**Demonstration:** Teacher candidates demonstrate in an elementary classroom setting with children.

Competency	Basic Concept Knowledge	Applica- tion	Demon- stration	Exemplars
ES 1 Use understanding of science content knowledge to develop learning tasks that teach the current Utah SEEd Standards.		Х		Embed accurate content knowledge into instruction through (a) a phenomenon that is an appropriate application of the science concept and (b) learning tasks that support accurate understanding of the science concept of the phenomenon.
ES 2 Know where and how to gather credible scientific resources to support educator scientific knowledge.	Х			Identify four resources that help you better understand a science topic as an adult. Briefly justify why these are credible resources.  When given two science resources, describe the strengths and weaknesses of each in terms of credibility.

ES 3 Explain the Nature of Science and the cultural norms and values inherent to the current and historical development of scientific knowledge.	X		<ul> <li>Include questions about Nature of Science aspects on a quiz such as:</li> <li>Science uses a variety of methods in investigations,</li> <li>Scientific knowledge is empirically based,</li> <li>Scientific knowledge is tentative but durable,</li> <li>Science understanding is derived from a combination of observation and inference,</li> <li>Science involves creativity,</li> <li>Science is both objective and subjective, and</li> <li>Science is a way of knowing.</li> </ul> Locate Nature of Science aspects in lesson plans or instruction.
ES 4 Implement science instruction that promotes opportunities for students to ask questions, gather evidence, and reason to form evidence-based conclusions.		X	Plan and implement science instruction that engages students in investigating the changes organisms go through during their life cycles by asking questions, gathering information from observations, and developing evidence-based conclusions using both Wisconsin Fast Plants and mealworms.

ES 5 Understand what each of the dimensions of science entail (i.e., Science and Engineering Practices, Crosscutting Concepts, Disciplinary Core Ideas) and explain how these dimensions work together to support student conceptual understanding.	X	Recognize the dimensions of science in a lesson plan and explain how they work together in this example to support student sensemaking of the science concept.
ES 6 Engage students in wondering and figuring out science phenomena, how it drives student sensemaking during science instruction, and demonstrate the ability to select authentic and relevant phenomena that align to disciplinary core ideas.	X	Select a phenomena for the science concept that energy can be moved from place to place by moving objects or through sound, light, or electric currents. Describe how this phenomena guides what tasks will be utilized to support student sensemaking and identify the student population for which this phenomena is authentic and relevant.
ES 7 Build on students' initial ideas and scaffold learning experiences that allow students to build a more accurate scientific understanding over time.	X	Analyze a student work sample to identify current student understanding about a science concept, identify any accurate scientific understandings, and determine and implement learning experiences that will move the student toward a more scientific understanding.
ES 8 Recognize the importance of discourse during science instruction to support student sensemaking and use discourse strategies appropriate to science (e.g., evaluating evidence, supporting claims, constructing explanations).	X	Analyze a video of science instruction and identify discourse strategies that could be used to improve discourse.  Craft a mock discourse between teacher and students or student to student on a given science topic.  Conduct a short science lesson with a child (or adult if necessary) that focuses on science talking and discussion. Use discourse scaffolds to extend the discussion and reflect on how the scaffolds affected the conversation.

ES 9 Explain safe techniques and procedures for storing and using chemicals, equipment, and materials and ethical decisions about the safe and humane treatment of all living organisms.	Х		Describe appropriate safety procedures for the elementary science classroom based on NSTA recommendations.  Create a science safety plan for your future elementary classroom.
<b>ES 10</b> Set high expectations and provide support and models that promote access to and engagement in science learning for all students.		X	Plan and deliver instruction that includes supports (e.g., procedures, accommodations, scaffolds, enrichment) that enable diverse students (e.g., Multilingual learners, gifted and talented, special education) to succeed. Point out each support within the instruction, identify which diverse student population the support will enable, and explain how the support scaffolds the identified student population to successfully access the instruction.

# Educator Preparation Program Competencies for Elementary Social Studies

### **DEFINITIONS**

Basic Concept Knowledge: Teacher candidates demonstrate knowledge through assignments or assessments.

**Application:** Teacher candidates apply it in a university setting with other adults or in a lesson plan. **Demonstration:** Teacher candidates demonstrate in an elementary classroom setting with children.

Competency	Basic Content Knowledge	Application	Demonstration	Exemplars
ESS 1 Demonstrate knowledge of the facts, concepts, and tools associated with the History, Civics, Geography, and Economics strands in the Utah Elementary Social Studies Standards.	Х			Candidates can use ETS Praxis Social Studies CKT test 7815 to demonstrate content knowledge, social studies courses' GPA, content analysis forms, content knowledge portfolios, and comprehensive exams developed by institutions.
ESS 2 Understand what each of the strands of the Utah Elementary Social Studies Standards entail (i.e., History, Geography, Civics, Economics) and explain how these strands work together to support student conceptual understanding. Emphasize the relationships between history, economics, civics, and geography in lessons and units.			X	Candidates provide unit and lesson plans, and student work samples (including assessments), that show connections between the four strands.
ESS 3 Understand disciplinary inquiry as it applies to planning and delivering instruction in the History, Civics, Geography, and Economics strand of the Utah Elementary Social Studies Standards.		X		Candidates can use Social Studies courses' GPA; portfolios that include unit plans, lesson plans, student work examples, and assessments; and comprehensive exams developed by institutions.

ESS 4 Demonstrate knowledge of and plan learning sequences where learners create disciplinary forms of representation in history, civics, geography, economics that correlate to the Utah Elementary Social Studies Standards.	X	Candidates provide unit plans and student work samples (including assessments) that successfully implement strategies of social studies best practices of: developing questions and planning inquiries, applying disciplinary tools and concepts, evaluating sources and using evidence,
Gtaridards.		communicating conclusions and taking informed action.
engage learners with disciplinary inquiry, primary sources, concepts, facts, and tools to develop social studies literacies (strategies, routines, skills, language, or practices).	X	Candidates provide unit plans and student work samples (including assessments) that successfully implement strategies of social studies best practices of: developing questions and planning inquiries, applying disciplinary tools and concepts, evaluating sources and using evidence, communicating conclusions and taking informed action.
ESS 6 Design and implement a range of assessments that measure learners' mastery of disciplinary knowledge, inquiry, and forms of representation that align with the Utah Elementary Social Studies Standards.	X	Candidates provide unit plans and student work samples (including assessments) that successfully implement strategies of social studies best practices of: developing questions and planning inquiries, applying disciplinary tools and concepts, evaluating sources and using evidence, communicating conclusions and taking informed action.
ESS 7 Facilitate collaborative learning environments in which learners use disciplinary facts, concepts, and tools to engage in the practices of disciplinary forms of representation.	X	Candidates provide unit plans and student work samples (including assessments) that successfully implement strategies of social studies best practices of: developing questions and planning inquiries, applying disciplinary tools and concepts, evaluating sources and using evidence, communicating conclusions and taking informed action through the use of collaborative, interdisciplinary learning environments.

ESS 8 Demonstrate and support the use of civic dialogue through pedagogical techniques when teaching difficult, controversial, and/ or sensitive content topics.		X	Candidates explain how they help learners learn and engage in the skills of civic dialogue, and the importance of using multiple perspectives from credible sources that are age-appropriate and tied to standards.
ESS 9 Use knowledge of learners' socio- cultural assets to plan and implement pedagogy surrounding social studies	Х		Candidates explain how curriculum and pedagogy within their teaching uses students' socio-cultural assets to teach social studies.
instruction ESS 10 Offer opportunities for students to use their social studies knowledge, skills, and dispositions outside the classroom.		X	Candidates explain how students practice/use their new found knowledge, skills, and dispositions outside the classroom.
ESS11 Understand the importance of social studies in the elementary classroom.		X	Candidates can articulate the connection between social studies and student learning, such as the role social studies plays in overall student literacy, providing background knowledge, developing civic competence and citizenry.
ESS12 Synthesize social studies concepts with other content area standards.		X	Candidates provide original lesson plans that show relevant, intentional integration of Social Studies Standards and other content area standards.

# Educator Preparation Program Competencies for Elementary Health Education

### **DEFINITIONS**

Basic Concept Knowledge: Teacher candidates demonstrate knowledge through assignments or assessments.

Application: Teacher candidates apply it in a university setting with other adults or in a lesson plan.

**Demonstration:** Teacher candidates demonstrate in an elementary classroom setting with children.

Competency	Basic Concept Knowledge	Applica- tion	Demon- stration	Exemplars
EH 1 Utilize Utah's Health Triangle to explain the interconnectedness of physical, mental and emotional, and social health in various contexts, as aligned with the Utah Core Standards for Health Education.		Х		Utilize appropriate grade level Health Education Core Standards to create a unit plan that shows how the components of the Health Triangle work in conjunction.
EH 2 Demonstrate an understanding of common and specialized content, and scientific and theoretical foundations for the delivery of an effective elementary health education program.		X		Create appropriate activities to engage students in their understanding of personal safety procedures in various circumstances such as internet safety, playground safety, and other personal safety measures.  • Create or design a take-home activity that aligns with one of the Substance Abuse Prevention Health standards for one grade level  • Answer exam questions on the content of the health education core standards.

EH 3 Apply content and foundational knowledge to plan and implement developmentally appropriate learning experiences aligned with local, state and/or national standards through the effective use of resources, accommodations and/or modifications, technology and metacognitive strategies to address the diverse needs of all students.		X	<ul> <li>Access and utilize SHAPE America         National Standards and local state         standards to create engaging health         education lesson plans incorporating         learning progressions.</li> <li>Identify and use appropriate online         resources and technologies for         lesson planning.</li> <li>Develop and design intentional and         authentic content integration between         health education and other core (i.e.,         ELA, science, mathematics, social         studies, the arts).</li> <li>Identify and apply strategies and         adaptations that address the diverse         needs of all students.</li> </ul>
EH 4 Engage students in meaningful skill- based learning experiences through effective use of health instruction, such as skills instruction, practice, modeling, skill performance, feedback, effective use of technology, and universal design for learning to enhance student learning.		X	<ul> <li>Deliver age and developmentally appropriate lessons that includes appropriate cues and learning progressions.</li> <li>Utilize management routines, procedures, protocols and pedagogical strategies such as: stopping/starting class, giving short and long instructions, modeling and demonstration, giving feedback.</li> <li>Implement a child-centered management plan that helps students to self-manage appropriate behaviors.</li> <li>Use technology to aid in virtual modeling of desired healthy behavior tracking and assessment tools</li> </ul>

EH 5 Select and implement appropriate skill- based health education assessments to monitor students' progress and allow students to demonstrate competency through projects and assessments that reflect real life application, relevance, and transfer outside of the classroom.	X	<ul> <li>Develop age and skill appropriate formative and summative assessments meeting the core standards and learning intentions.</li> <li>Provide multiple forms of ongoing formative assessment during class such as observation, feedback, and monitoring.</li> <li>Implement an ongoing assessment plan that identifies and diagnoses areas of need to achieve student understanding of lifelong healthy behaviors.</li> <li>Utilize multiple forms of summative assessments including rubrics, checklists, and teacher developed assessments.</li> </ul>
EH 6 Health education candidates demonstrate behaviors essential to becoming effective professionals. They exhibit professional ethics and culturally competent practices; seek opportunities for continued professional development; and demonstrate knowledge of promotion/advocacy strategies for health education and expanded wellness opportunities that support the development of health literate individuals.	X	<ul> <li>Be an active and engaged member in your school and district/charter learning community for health promotions.</li> <li>Promote and integrate lifelong healthy behaviors in your classroom.</li> <li>Employ local law and policies around health education.</li> <li>Implement universal design for learners (UDL) for adapting activities for all students.</li> <li>Demonstrate student-centered culturally responsive planning and instructional practices.</li> </ul>

## Educator Preparation Program Competencies for Elementary Physical Education

### **DEFINITIONS**

**Basic Concept Knowledge**: Teacher candidates demonstrate knowledge through assignments or assessments.

**Application:** Teacher candidates apply it in a university setting with other adults or in a lesson plan. **Demonstration:** Teacher candidates demonstrate in an elementary classroom setting with children.

Competency	Basic Concept Knowledge	Applica- tion	Demon- stration	Exemplars
EPE 1 Demonstrate an understanding of common and specialized content, and scientific and theoretical foundations for the delivery of an effective elementary physical education program.			X	<ul> <li>Share the unique role, value, and contribution of physical education to social, cognitive, emotional, and physical, learning outcomes.</li> <li>Provide instruction that addresses all three learning domains: psychomotor, cognitive, and affective.</li> <li>Understand trends and issues of how physical education contributes to the overall physical growth and motor development of children.</li> <li>Engage in proactive PLC efforts to advocate for high quality PE programs as a content area.</li> <li>Share the brain science of how physical activity contributes to academic outcomes.</li> <li>Model healthy personal behaviors to students.</li> <li>Model correct terminology and concepts with</li> </ul>

	students about healthy living and physical activity.
EPE 2 Understand physical literacy and provide demonstrations of skillful performance in physical education content areas and health- enhancing levels of fitness, including nutrition and hydration.	<ul> <li>Provide appropriate skill modeling and demonstration or locate appropriate live or virtual skill modeling.</li> <li>Design and employ appropriate skill progressions such as progression of throwing and catching: throwing underhand → throwing overhand → catching overhead → throwing and catching while moving to be applied in modified- then to full-game play</li> <li>Demonstrate knowledge of developmentally appropriate movement skills and concepts related to physical education.</li> <li>Optimize levels of physical activity and teach how the body responds to physical activity across all five components of health related fitness: cardiovascular, flexibility, muscle-strength and muscle-endurance, and body composition.</li> <li>Demonstrate knowledge of nutrition, hydration, and exercise and their roles in meeting the needs of all students.</li> <li>Content coursework dedicated to skill acquisition as evidenced by completion of a programmed practice sheet or other standardized assessments.</li> <li>Content knowledge acquisition as evidenced by a skill-cues assessment.</li> </ul>

EPE 3 Apply content and foundational knowledge to plan and implement developmentally appropriate learning experiences aligned with local, state and/or SHAPE America's National Education through the effective use of resources, accommodations and/or modifications, technology and metacognitive strategies to address the diverse needs of all students. Standards and Grade-Level Outcomes for K-12 Physical Education.	X	<ul> <li>Access and utilize SHAPE America National Standards and local state standards to create engaging physical education lesson plans incorporating learning progressions.</li> <li>Identify and use appropriate online resources and technologies for lesson planning.</li> <li>Authentically create content integrated experiences during physical education with other core content areas.</li> <li>Identify and apply strategies and adaptations that address the diverse physical needs of all students</li> </ul>
EPE 4 Engage students in meaningful learning experiences through effective use of pedagogical skills, such as communication, feedback, technology, and instructional and managerial skills to enhance student learning.	X	<ul> <li>Deliver age and developmentally appropriate lessons that includes appropriate cues and learning progressions.</li> <li>Utilize management routines, procedures, protocols and pedagogical strategies such as: stopping/starting class; giving short and long instructions; modeling and demonstration; giving feedback; managing equipment; and grouping students.</li> <li>Implement a child-centered management plan that helps students to self-manage appropriate behaviors.</li> <li>Use technology to aid in virtual modeling of desired movement patterns, healthy behavior tracking and assessment tools, use of pedometers, activity monitors.</li> </ul>

EPE 5 Select and implement appropriate assessments to monitor students' progress and guide decision making related to instruction and learning.		<ul> <li>Develop age and skill appropriate formative and summative assessments meeting the core standards and learning intentions.</li> <li>Provide multiple forms of ongoing formative assessment during class such as observation, feedback, skill demonstration, monitoring, and correcting skill execution.</li> <li>Implement an ongoing assessment plan that identifies and diagnoses areas of need to achieve skill acquisition.</li> <li>Utilize multiple forms of summative assessments including rubrics, checklists, skill tests, and teacher developed assessments.</li> </ul>
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# Educator Preparation Program Competencies for Elementary Fine Arts

### **DEFINITIONS**

**Basic Concept Knowledge**: Teacher candidates demonstrate knowledge through assignments or assessments.

**Application:** Teacher candidates apply it in a university setting with other adults or in a lesson plan. **Demonstration:** Teacher candidates demonstrate in an elementary classroom setting with children.

Competencies	Basic Content Knowledge	Application	Demonstra- tion	Exemplars
EFA 1 Arts Integration: Apply arts integration approach to teaching in which students construct and demonstrate understanding through an art form in the elementary classroom. and support student engagement in a creative process which connects an art form and another subject area to meet balanced objectives.		X		One or more arts integrated lesson plan that supports balanced objectives by connecting the arts with at least one other subject area.  Candidates collect images or videos of student artifacts that document student learning during an arts integration lesson.
EFA 2 Creative Process: Support student engagement in the creative process (prepare, develop, create, critique and refine, and reflect).			X	Creative process focused lesson plan outlining the creative process used in a classroom, student artifacts that documents the stages, and reflection on how you engaged in the creative process.  Video of the lesson being delivered (full).

#### **EFA 3 Art Form Specific Lesson**

Planning: Design and present at least one art form specific teaching materials using the 4 strands of Create, Perform/Present, Respond, and Connect that are developmentally appropriate.

#### EFA 3.1 Dance Competencies:

- Implement dance improvisation as a tool for discovery of self, others, and creative processes.
- Create original choreography with a diverse array of movement dynamics, structures, and aesthetics that includes the elements of dance (body, energy, space, time, and action).

#### EFA 3.2 Drama Competencies:

- Implement the tools and various acting techniques (body, voice, & mind) of drama/theatre in expressive drama.
- Demonstrate/perform basic knowledge of the central elements of the dramatic process, such as sensory elements (movement and sound spectacle), organizational principles (plot and conflict, setting, character, language, rhythm, and unity), and expressive qualities (emotion, mood, ideas, and dynamics).

#### EFA 3.3 Visual Art Competencies:

- Demonstrate a basic knowledge of the elements of design: line, color, shape, texture, value, form, and space.
- Demonstrate basic skills in drawing, painting, printmaking, and sculpting using a variety of art media suitable to the

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Create a lesson or unit plan that demonstrates the competencies in one elementary art form (dance, drama, music, art).

Collect images or video of student artifacts form the elementary art form lesson.

Reflect on how the elementary art form lesson plan(s) demonstrates quality instruction in the 4 strands and how the elementary art form lesson plan is developmentally appropriate for the intended audience.

elementary classroom.		
Know the artistic development		
stages of elementary students		
and be able to provide		
appropriate motivation and		
instruction in each stage.		
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EFA 3.4 Music Competencies:		
Demonstrate a basic knowledge		
of the elements of Music: rhythm		
(beat, meter, tempo), melody,		
harmony, form, and expression		
(timbre, dynamics, style).		
Demonstrate musicianship		
appropriate for teaching		
elementary students by singing,		
playing, reading simple music		
patterns, and directing music		
accurately and expressively.		
Use a variety of instruments,		
vocal techniques, etc.		
Know the musical sequence of		
learning for elementary students		
and be able to provide		
appropriate motivators and		
instruction in each stage.		