

**Middle Level Education  
Endorsement Guidelines  
To Accompany Rule 24  
(Adopted by the State Board  
of Education on \_\_/\_\_/\_\_)**

006.40 Middle Level Education

006.40A Grade Levels: 5 - 9

006.40B Endorsement Type: Field

006.40C Persons with this endorsement may teach grades 5 through 9.

006.40D Certification Endorsement Requirements: This endorsement shall require a total of 54 semester hours of which 18 semester hours shall be in professional education courses, not including student teaching, related to middle level education and a minimum of:

1. Thirty-six (36) semester hours in one of four core academic areas as listed in 006.40D1, or
2. A minimum of 18 semester hours in each of two core academic areas as listed in 006.40D1, or
3. A minimum of 18 semester hours in one core academic area as listed in 006.40D1 and 18 hours in one area of specialization:
  - a. English as a Second Language,
  - b. Reading and Writing, or
  - c. Special Education, which includes any portion of grades 5-9.

006.40D1 Core Academic Areas include the following:

- 006.40D1a English Language Arts
- 006.40D1b Mathematics
- 006.40D1c Science
- 006.40D1d Social Science

006.40E In addition to the 54 semester hours listed above, candidates for this endorsement must complete coursework in all academic areas of the middle level curriculum including:

- 006.40E1 communication, including composition and speech,
- 006.40E2 health and wellness,
- 006.40E3 humanities including literature,
- 006.40E4 mathematics,
- 006.40E5 science,
- 006.40E6 social sciences, and
- 006.40E7 fine arts.

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006.40F Endorsement Program Requirements: Nebraska teacher education institutions offering this endorsement program must have on file, within the institution, a plan which identifies the courses and the course completion requirements which the institution utilizes to grant credit toward completion of this endorsement.

006.40F Effective September 1, 2016, an applicant will be required to submit a passing score as set forth in Appendix C for the applicable content test for the first-time placement of this endorsement on a Nebraska certificate or permit.

***THE FOLLOWING ARE RECOMMENDED GUIDELINES FOR  
INCLUSION AS PART OF THE INSTITUTION'S PLAN  
UNDER THIS ENDORSEMENT.***

Through the courses identified in its plan, the institution must provide middle level teacher candidates with opportunities to demonstrate the dispositions and competencies required by the following guidelines.

**Standard 1:** Demonstrate knowledge and understanding of, and be able to teach the concepts, skills, and processes of the Nebraska Content Standards in the areas of reading/writing, mathematics, science, and social studies for grades five through nine and demonstrate knowledge of how these concepts, skills, and processes relate to the Nebraska Content Standards beyond the eighth grade in the areas of reading/writing, mathematics, science, and social studies.

**Standard 2: Young Adolescent Development**

Middle level teacher candidates understand, use, and reflect on the major concepts, principles, theories, and research related to young adolescent development and use that knowledge in their practice. They demonstrate their ability to apply this knowledge when making curricular decisions, planning and implementing instruction, participating in middle level programs and practices, and providing healthy and effective learning environments for all young adolescents.

**Element 1. Knowledge of Young Adolescent Development:**

Middle level teacher candidates demonstrate a comprehensive knowledge of young adolescent development. They use this understanding of the intellectual, physical, social, emotional, and moral characteristics, needs, and interests of young adolescents to create healthy, respectful, supportive, and challenging learning environments for all young adolescents, including those whose language and cultures are different from their own.

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**Element 2. Knowledge of the Implications of Diversity on Young Adolescent Development:**

Middle level teacher candidates demonstrate their understanding of the implications of diversity on the development of young adolescents. They implement curriculum and instruction that is responsive to young adolescents' local, national, and international histories, language, and individual identities (e.g., race, ethnicity, culture, age, appearance, ability, socioeconomic status, etc.) and participate successfully in middle level practices that consider and celebrate the diversity of all young adolescents.

**Element 3. Implications of Young Adolescent Development for Middle Level Curriculum and Instruction:**

Middle level teacher candidates use their knowledge of young adolescent development when planning and implementing middle level curriculum and when selecting and using instructional strategies.

**Element 4. Implications of Young Adolescent Development for Middle Level Programs and Practices:**

Middle level teacher candidates apply their knowledge of young adolescent development when making decisions about their respective roles in creating and maintaining developmentally responsive learning environments. They demonstrate their ability to participate successfully in effective middle school organizational practices such as interdisciplinary team organization and advisory programs.

**Standard 3: Middle Level Philosophy and School Organization**

Middle level teacher candidates understand the major concepts, principles, theories, and research underlying the philosophical foundations of developmentally responsive middle level programs and schools, and they work successfully within middle level organizational components.

**Element 1. Middle Level Philosophical Foundations:**

Middle level teacher candidates demonstrate an understanding of the philosophical foundations of developmentally responsive middle level programs and schools.

**Element 2. Middle Level Organization and Best Practices:**

Middle level teacher candidates utilize their knowledge of the effective components of middle level programs and schools to foster equitable educational practices and to enhance learning for all students (e.g., race, ethnicity, culture, age, appearance, ability, socioeconomic status, etc.) They demonstrate their ability to apply this knowledge and to function successfully within a variety of school organizational settings (e.g., grades K-8, 6-8, 7-12). Middle level teacher

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candidates perform successfully in middle level programs and practices such as interdisciplinary teaming, advisory programs, flexible block schedules, and common teacher planning time.

**Standard 4: Middle Level Curriculum**

Middle level teacher candidates understand and use the central concepts, standards, research, and structures of content to plan and implement curriculum that develops all young adolescents' competence in subject matter. They use their knowledge and available resources to design, implement, and evaluate challenging, developmentally responsive curriculum that results in meaningful learning outcomes. Middle level teacher candidates demonstrate their ability to assist all young adolescents in understanding the interdisciplinary nature of knowledge. They design and teach curriculum that is responsive to all young adolescents' local, national, and international histories, language, and individual identities (e.g., race, ethnicity, culture, age, appearance, ability, socioeconomic status, etc.)

**Element 1. Subject Matter Content Knowledge:**

Middle level teacher candidates demonstrate a depth and breadth of subject matter content knowledge in the subjects they teach (e.g., English/language arts, mathematics, science, social science). They incorporate information literacy skills and state-of-the-art technologies into teaching their subjects.

**Element 2. Middle Level Student Standards:**

Middle level teacher candidates use their knowledge of local, state, and national standards to frame their teaching. They draw on their knowledge of these standards to design, implement, and evaluate developmentally responsive, meaningful, and challenging curriculum for all young adolescents.

**Element 3. Interdisciplinary Nature of Knowledge:**

Middle level teacher candidates demonstrate the interdisciplinary nature of knowledge by helping all young adolescents make connections among subject areas. They facilitate relationships among content, ideas, interests, and experiences by developing and implementing relevant, challenging, integrative, and exploratory curriculum. They provide learning opportunities that enhance information literacy (e.g., critical thinking, problem solving, evaluation of information gained) in their specialty fields (e.g., mathematics, social studies, health).

**Element 4. Reading in the Content Area**

Middle level teacher candidates plan, organize, deliver, and assess content area reading strategies, demonstrate techniques for content area and grade level appropriate vocabulary instruction, and develop essential, grade level, content specific comprehension strategies for reading complex text.

## **Standard 5: Middle Level Instruction and Assessment**

Middle level teacher candidates understand, use, and reflect on the major concepts, principles, theories, and research related to data-informed instruction and assessment. They employ a variety of developmentally appropriate instructional strategies, literacy skills, and technologies to meet the learning needs of all young adolescents.

### **Element 1. Content Pedagogy:**

Middle level teacher candidates use their knowledge of instruction and assessment strategies that are especially effective in the subjects they teach.

### **Element 2. Middle Level Instructional Strategies:**

Middle level teacher candidates employ a wide variety of effective teaching, learning, and assessment strategies. They use instructional strategies and technologies in ways that encourage exploration, creativity, and information literacy skills (e.g., critical thinking, problem solving, evaluation of information gained) so that young adolescents are actively engaged in their learning. They use instruction that is responsive to young adolescents' local, national, and international histories, language, and individual identities (e.g., race, ethnicity, culture, age, appearance, ability, socioeconomic status, etc.)

### **Element 3. Middle Level Assessment and Data-Informed Instruction:**

Middle level teacher candidates develop and administer assessments and use them as formative and summative tools to create meaningful learning experiences by assessing prior learning, implementing effective lessons, reflecting on young adolescent learning, and adjusting instruction based on the knowledge gained.

### **Element 4. Young Adolescent Motivation:**

Middle level teacher candidates demonstrate their ability to motivate all young adolescents and facilitate their learning through a wide variety of developmentally responsive materials and resources (e.g., technology, manipulative materials, information literacy skills, contemporary media). They establish equitable, caring, and productive learning environments for all young adolescents.

Middle Level candidates must have opportunities to demonstrate the following competencies in their selected core content area(s):

## **1. English Language Arts**

### **Standard 1. Content Knowledge**

Candidates demonstrate knowledge of English language arts subject matter content that specifically includes literature and multimedia texts as well as knowledge of the nature of young adolescents as readers.

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Element 1: Candidates are knowledgeable about texts—print and non-print texts, classic texts and contemporary texts, including young adult—that represent a range of world literatures, historical traditions, genres, and the experiences of different genders, ethnicities, and social classes; they are able to use literary theories to interpret and critique a range of texts.

Element 2: Candidates are knowledgeable about how young adolescents read texts and make meaning through interaction with media environments.

**Standard 2. Content Knowledge**

Candidates demonstrate knowledge of English language arts subject matter content that specifically includes language and writing as well as knowledge of young adolescents as language users.

Element 1. Candidates can compose a range of formal and informal texts taking into consideration the interrelationships among form, audience, context, and purpose; candidates understand that writing is a recursive process; candidates can use contemporary technologies and/or digital media to compose multimodal discourse.

Element 2. Candidates know the conventions of English language as they relate to various rhetorical situations (grammar, usage, and mechanics); they understand the concept of dialect and are familiar with relevant grammar systems (e.g., descriptive and prescriptive); they understand principles of language acquisition; they recognize the influence of English language history on ELA content; and they understand the impact of language on society.

Element 3. Candidates are knowledgeable about how young adolescents compose texts and make meaning through interaction with media environments.

**Standard 3. Content Pedagogy: Planning Literature and Reading Instruction in English Language Arts**

Candidates plan instruction and design assessments for reading and the study of literature to promote learning for all students.

Element 1. Candidates use their knowledge of theory, research, and practice in English Language Arts to plan standards-based, coherent and relevant learning experiences utilizing a range of different texts—across genres, periods, forms, authors, cultures, and various forms of media—and instructional strategies that are motivating and accessible to all young adult students, including English language learners, students with special needs, students from diverse language and learning backgrounds, those designated as high achieving, and those at risk of failure.

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Element 2. Candidates design a range of authentic assessments (e.g., formal and informal, formative and summative) of reading and literature that demonstrate an understanding of how learners develop and that address interpretive, critical, and evaluative abilities in reading, writing, speaking, listening, viewing, and presenting.

Element 3. Candidates plan standards-based, coherent and relevant learning experiences in reading that reflect knowledge of current theory and research about the teaching and learning of reading and that utilize individual and collaborative approaches and a variety of reading strategies.

Element 4. Candidates design or knowledgeably select appropriate reading assessments that inform instruction by providing data about student interests, reading proficiencies, and reading processes.

Element 5. Candidates plan instruction that incorporates knowledge of language—structure, history, and conventions—to facilitate students' comprehension and interpretation of print and non-print texts.

Element 6. Candidates plan instruction which, when appropriate, reflects curriculum integration and incorporates interdisciplinary teaching methods and materials.

Standard 4. Content Pedagogy: Planning Writing and Composition Instruction in English Language Arts.

Candidates plan instruction and design assessments for composing texts (i.e., oral, written, and visual) to promote learning for all students.

Element 1. Candidates use their knowledge of theory, research, and practice in English Language Arts to plan standards-based, coherent and relevant composing experiences that utilize individual and collaborative approaches and contemporary technologies and reflect an understanding of writing processes and strategies in different genres for a variety of purposes and audiences.

Element 2. Candidates design a range of assessments for young adolescent students that promote their development as writers, are appropriate to the writing task, and are consistent with current research and theory. Candidates are able to respond to student writing in process and to finished texts in ways that engage students' ideas and encourage their growth as writers over time.

Element 3. Candidates design instruction related to the strategic use of

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language conventions (grammar, usage, and mechanics) in the context of young adolescent students' writing for different audiences, purposes, and modalities.

Element 4. Candidates design instruction that incorporates young adolescent students' home and community languages to enable skillful control over their rhetorical choices and language practices for a variety of audiences and purposes.

Standard 5. Learners and Learning: Implementing English Language Arts Instruction

Candidates plan, implement, assess, and reflect on research-based instruction that increases motivation and active student engagement, builds sustained learning of English Language Arts, and responds to diverse students' context-based needs.

Element 1. Candidates plan and implement instruction based on English Language Arts curricular requirements and standards, school and community contexts, and knowledge about students' linguistic and cultural backgrounds.

Element 2. Candidates use data about their students' individual differences, identities, and funds of knowledge for literacy learning to create inclusive learning environments that contextualize curriculum and instruction and help all students participate actively in their own learning in English Language Arts.

Element 3. Candidates differentiate instruction based on students' self-assessments and formal and informal assessments of learning in English Language Arts; candidates communicate with students about their performances in ways that actively involve them in their own learning.

Element 4. Candidates select, create, and use a variety of instructional strategies and teaching resources, including contemporary technologies and digital media, consistent with what is currently known about young adolescent student learning in English Language Arts.

Standard 6. Professional Knowledge and Skills

Candidates demonstrate knowledge of how theories and research about social justice, diversity, equity, student identities, and schools as institutions can enhance young adolescent students' opportunities to learn in English Language Arts.

Element 1. Candidates plan and implement English language arts and literacy instruction that promotes social justice and critical engagement with complex issues related to maintaining a diverse, inclusive, and equitable society.

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Element 2. Candidates use knowledge of theories and research to plan instruction responsive to young adolescent students' local, national and international histories, individual identities (e.g., race, ethnicity, age, appearance, abilities, socioeconomic status, community environment, etc.), and languages as they affect students' opportunities to learn in English Language Arts.

Standard 7. Professional Knowledge and Skills

Candidates are prepared to interact knowledgeably with students, families, and colleagues based on social needs and institutional roles, engage in leadership and/or collaborative roles in English Language Arts professional learning communities, and actively develop as a professional educator.

Element 1. Candidates model literate and ethical practices in English Language Arts teaching, and engage in/reflect on a variety of experiences related to English Language Arts.

Element 2. Candidates engage in and reflect on a variety of experiences related to English Language Arts that demonstrate understanding of and readiness for leadership, collaboration, ongoing professional development, and community engagement.

**2. Mathematics**

Standard 1. Content Knowledge

Effective teachers of middle grades mathematics demonstrate and apply knowledge of major mathematics concepts, algorithms, procedures, connections, and applications within and among mathematical content domains.

Element 1. Demonstrate and apply knowledge of major mathematics concepts, algorithms, procedures, applications in varied contexts, and connections within and among mathematical domains (Number, Algebra, Geometry, Trigonometry, Statistics, Probability, and Calculus) as outlined in the *NCTM CAEP Mathematics Content for Middle Grades*.

Standard 2. Mathematical Practices

Effective teachers of middle grades mathematics solve problems, represent mathematical ideas, reason, prove, use mathematical models, attend to precision, identify elements of structure, generalize, engage in mathematical communication, and make connections as essential mathematical practices. They understand that these practices intersect with mathematical content and that understanding relies on the ability to demonstrate these practices within and among mathematical domains and in their teaching.

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Element 1. Use problem solving to develop conceptual understanding, make sense of a wide variety of problems and persevere in solving them, apply and adapt a variety of strategies in solving problems confronted within the field of mathematics and other contexts, and formulate and test conjectures in order to frame generalizations.

Element 2. Reason abstractly, reflectively, and quantitatively with attention to units, constructing viable arguments and proofs, and critiquing the reasoning of others; represent and model generalizations using mathematics; recognize structure and express regularity in patterns of mathematical reasoning; use multiple representations to model and describe mathematics; and utilize appropriate mathematical vocabulary and symbols to communicate mathematical ideas to others.

Element 3. Formulate, represent, analyze, and interpret mathematical models derived from real-world contexts or mathematical problems.

Element 4. Organize mathematical thinking and use the language of mathematics to express ideas precisely, both orally and in writing to multiple audiences.

Element 5. Demonstrate the interconnectedness of mathematical ideas and how they build on one another and recognize and apply mathematical connections among mathematical ideas and across various content areas and real-world contexts.

Element 6. Model how the development of mathematical understanding within and among mathematical domains intersects with the mathematical practices of problem solving, reasoning, communicating, connecting, and representing.

**Standard 3. Content Pedagogy**

Effective teachers of middle grades mathematics apply knowledge of curriculum standards for mathematics and their relationship to student learning within and across mathematical domains. They incorporate research-based mathematical experiences and include multiple instructional strategies and mathematics-specific technological tools in their teaching to develop all students' mathematical understanding and proficiency. They provide students with opportunities to do mathematics – talking about it and connecting it to both theoretical and real-world contexts. They plan, select, implement, interpret, and use formative and summative assessments for monitoring student learning, measuring student mathematical understanding, and informing practice.

Element 1. Apply knowledge of curriculum standards for middle grades mathematics and their relationship to student learning within and across mathematical domains.

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Element 2. Analyze and consider research in planning for and leading students in rich mathematical learning experiences.

Element 3. Plan lessons and units that incorporate a variety of strategies, differentiated instruction for diverse populations, and mathematics-specific and instructional technologies in building all students' conceptual understanding and procedural proficiency.

Element 4. Provide students with opportunities to communicate about mathematics and make connections among mathematics, other content areas, everyday life, and the workplace.

Element 5. Implement techniques related to student engagement and communication including selecting high quality tasks, guiding mathematical discussions, identifying key mathematical ideas, identifying and addressing student misconceptions, and employing a range of questioning strategies.

Element 6. Plan, select, implement, interpret, and use formative and summative assessments to inform instruction by reflecting on mathematical proficiencies essential for all students.

Element 7. Monitor students' progress, make instructional decisions, and measure students' mathematical understanding and ability using formative and summative assessments.

**Standard 4. Mathematical Learning Environment**

Effective teachers of middle grades mathematics exhibit knowledge of pre-adolescent and adolescent learning, development, and behavior. They use this knowledge to plan and create sequential learning opportunities grounded in mathematics education research where students are actively engaged in the mathematics they are learning and building from prior knowledge and skills. They demonstrate a positive disposition toward mathematical practices and learning, include culturally relevant perspectives in teaching, and demonstrate equitable and ethical treatment of and high expectations for all students. They use instructional tools such as manipulatives, digital tools, and virtual resources to enhance learning while recognizing the possible limitations of such tools.

Element 1. Exhibit knowledge of pre-adolescent and adolescent learning, development, and behavior and demonstrate a positive disposition toward mathematical processes and learning.

Element 2. Plan and create developmentally appropriate, sequential, and challenging learning opportunities grounded in mathematics education

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research in which students are actively engaged in building new knowledge from prior knowledge and experiences.

Element 3. Incorporate knowledge of individual differences and the cultural and language diversity that exists within classrooms and include culturally relevant perspectives as a means to motivate and engage students.

Element 4. Demonstrate equitable and ethical treatment of and high expectations for all students.

Element 5. Apply mathematical content and pedagogical knowledge to select and use instructional tools such as manipulatives and physical models, drawings, virtual environments, spreadsheets, presentation tools, and mathematics-specific technologies (e.g., graphing tools and interactive geometry software); and make sound decisions about when such tools enhance teaching and learning, recognizing both the insights to be gained and possible limitations of such tools.

Standard 5. Impact on Student Learning

Effective teachers of middle grades mathematics provide evidence demonstrating that as a result of their instruction, middle grades students' conceptual understanding, procedural fluency, strategic competence, adaptive reasoning, and application of major mathematics concepts in varied contexts have increased. These teachers support the continual development of a positive disposition toward mathematics. They show that new student mathematical knowledge has been created as a consequence of their ability to engage students in mathematical experiences that are developmentally appropriate, require active engagement, and include mathematics-specific technology in building new knowledge.

Element 1. Verify that middle grades students demonstrate conceptual understanding; procedural fluency; the ability to formulate, represent, and solve problems; logical reasoning and continuous reflection on that reasoning; productive disposition toward mathematics; and the application of mathematics in a variety of contexts within major mathematical domains.

Element 2. Engage students in developmentally appropriate mathematical activities and investigations that require active engagement and include mathematics-specific technology in building new knowledge.

Element 3. Collect, organize, analyze, and reflect on diagnostic, formative, and summative assessment evidence and determine the extent to which students' mathematical proficiencies have increased as a result of their instruction.

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**Standard 6. Professional Knowledge and Skills**

Effective teachers of middle grades mathematics are lifelong learners and recognize that learning is often collaborative. They participate in professional development experiences specific to mathematics and mathematics education, draw upon mathematics education research to inform practice, continuously reflect on their practice, and utilize resources from professional mathematics organizations.

**Element 1.** Take an active role in their professional growth by participating in professional development experiences that directly relate to the learning and teaching of mathematics.

**Element 2.** Engage in continuous and collaborative learning that draws upon research in mathematics education to inform practice; enhance learning opportunities for all students' mathematical knowledge development; involve colleagues, other school professionals, families, and various stakeholders; and advance their development as a reflective practitioner.

**Element 3.** Utilize resources from professional mathematics education organizations such as print, digital, and virtual resources/collections.

**3. Science**

**Standard 1. Content Knowledge**

Effective teachers of science understand and articulate the knowledge and practices of contemporary science. They interrelate and interpret important concepts, ideas, and applications in their fields of licensure.

**Element 1.** Understand the major concepts, principles, theories, laws, and interrelationships of their fields of licensure and supporting fields as recommended by the National Science Teachers Association.

**Element 2.** Understand the central concepts of the supporting disciplines and the supporting role of science-specific technology.

**Element 3.** Show an understanding of state and national curriculum standards and their impact on the content knowledge necessary for teaching middle level students.

**Standard 2. Content Pedagogy**

Effective teachers of science understand how students learn and develop scientific knowledge. They use scientific inquiry to develop this knowledge for all students.

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Element 1. Plan multiple lessons using a variety of inquiry approaches that demonstrate their knowledge and understanding of how all students learn science.

Element 2. Include active inquiry lessons where students collect and interpret data in order to develop and communicate concepts and understand scientific processes, relationships and natural patterns from empirical experiences. Applications of science-specific technology are included in the lessons when appropriate.

Element 3. Design instruction and assessment strategies that confront and address naïve concepts/preconceptions.

**Standard 3. Learning Environments**

Effective teachers of science are able to plan for engaging all students in science learning by setting appropriate goals that are consistent with knowledge of how students learn science and are aligned with state and national standards. The plans reflect the nature and social context of science, inquiry, and appropriate safety considerations. Candidates design and select learning activities, instructional settings, and resources—including science-specific technology, to achieve those goals; and they plan fair and equitable assessment strategies to evaluate if the learning goals are met.

Element 1. Use a variety of strategies that demonstrate the candidates' knowledge and understanding of how to select the appropriate teaching and learning activities – including laboratory or field settings and applicable instruments and/or technology – to allow access so that all students learn. These strategies are inclusive and motivating for all students.

Element 2. Develop lesson plans that include active inquiry lessons where students collect and interpret data using applicable science-specific technology in order to develop concepts, understand scientific processes, relationships and natural patterns from empirical experiences. These plans provide for equitable achievement of science literacy for all students.

Element 3. Plan fair and equitable assessment strategies to analyze student learning and to evaluate if the learning goals are met. Assessment strategies are designed to continuously evaluate preconceptions and ideas that students hold and the understandings that students have formulated.

Element 4. Plan a learning environment and learning experiences for all students that demonstrate chemical safety, safety procedures, and the ethical treatment of living organisms within their licensure area.

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**Standard 4. Safety**

Effective teachers of science can, in a middle level classroom setting, demonstrate and maintain chemical safety, safety procedures, and the ethical treatment of living organisms needed in the middle level science classroom.

**Element 1.** Design activities in a middle level classroom that demonstrate the safe and proper techniques for the preparation, storage, dispensing, supervision, and disposal of all materials used within their subject area science instruction.

**Element 2.** Design and demonstrate activities in a middle level classroom that demonstrate an ability to implement emergency procedures and the maintenance of safety equipment, policies, and procedures that comply with established state and/or national guidelines. Candidates ensure safe science activities appropriate for the abilities of all students.

**Element 3.** Design and demonstrate activities in a middle level classroom that demonstrate ethical decision-making with respect to the treatment of all living organisms in and out of the classroom. They emphasize safe, humane, and ethical treatment of animals and comply with the legal restrictions on the collection, keeping, and use of living organisms.

**Standard 5. Impact on Student Learning**

Effective teachers of science provide evidence to show that middle level students' understanding of major science concepts, principles, theories, and laws have changed as a result of instruction by the candidate and that student knowledge is at a level of understanding beyond memorization. Candidates provide evidence for the diversity of students they teach.

**Element 1.** Collect, organize, analyze, and reflect on diagnostic, formative, and summative evidence of a change in mental functioning demonstrating that scientific knowledge is gained and/or corrected.

**Element 2.** Provide data to show that middle level students are able to distinguish science from nonscience, understand the evolution and practice of science as a human endeavor, and critically analyze assertions made in the name of science.

**Element 3.** Engage students in developmentally appropriate inquiries that require them to develop concepts and relationships from their observations, data, and inferences in a scientific manner.

**Standard 6. Professional Knowledge and Skills**

Effective teachers of science strive continuously to improve their knowledge and understanding of the ever changing knowledge base of both content and science

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pedagogy, including approaches for addressing inequities and inclusion for all students in science. They identify with and conduct themselves as part of the science education community.

Element 1. Engage in professional development opportunities in their content field such as talks, symposiums, research opportunities, or projects within their community.

Element 2. Engage in professional development opportunities such as conferences, research opportunities, or projects within their community.

#### **4. Social Sciences**

Standard 1. The middle level teacher candidate will demonstrate knowledge and understanding of the four major 'motifs' or concerns of young adolescents and make connections with the social sciences to address those 'motifs', which include:

- 1) To meet students' concern with self, including development of self-esteem and a strong sense of identity, the teacher candidate will:
  - a. Acquire appropriate skills and attitudes to be a lifelong learner;
  - b. Communicate effectively;
  - c. Conduct activities necessary for research, critical thinking, and problem solving;
  - d. Recognize and capitalize upon the relationships between school subjects, as well as integrate experiences with academic knowledge;
  - e. Gain awareness through the use of primary sources.
- 2) To meet students' concern for right and wrong and development of ethics, the teacher candidate will:
  - a. Show a strong commitment to democratic values and ethical standards;
  - b. Think critically and analyze one's own thoughts and actions.
- 3) To meet students' concern for others and development of group and other-centeredness, the teacher candidate will:
  - a. Function effectively as a member of a variety of political, economic, and social groups such as the family, marketplace, and the community;
  - b. Show efficacy in analyzing and participating in contemporary affairs, public policy matters, and global issues;
  - c. Understand the significance of the past to one's own life and to current social issues.
- 4) To meet students concern for the world and development of a global perspective, the teacher candidate will:
  - a. Demonstrate respect for cultural diversity, knowledge of diverse cultures, and intercultural competencies;

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- b. Understand and appreciate the delicate relationship between humans and the natural world;
- c. Demonstrate knowledge of temporal and spatial relationships and of the world as a dynamic system.

Standard 2. The middle level teacher candidate will demonstrate knowledge and an understanding of the unifying concepts and processes of the social sciences, including being able to:

- 1) Communicate – The teacher candidate will:
  - a. Listen, read critically, interpret, translate, and express ideas and information in both group and interpersonal communication.
- 2) Inquire – The teacher candidate will:
  - a. Formulate and clarify questions, investigate problems, and develop rational conclusions supported by evidence.
  - b. Recognize there are various perspectives in the area of inquiry.
  - c. Recognize there is bias in others and themselves.
  - d. Recognize the value of critical and creative thinking.
- 3) Participate – The teacher candidate will:
  - a. Act both individually and collaboratively in order to solve problems, make decisions, and negotiate and enact plans for action in ways that respect and value the customs, beliefs, and practices of others.
  - b. Take responsibility for individual and group work.
  - c. Respond to class, school, community, state, or national public issues.
  - d. Value the importance of taking action to support reasonable citizenship.

Standard 3. The middle level teacher candidate will demonstrate knowledge and an understanding of empowering and engaging social studies teaching which includes:

- 1) Providing meaningful experiences, which encourage students to learn through purposeful experiences, designed around stimulating ideas, social issues and themes, and discourages the memorization of disconnected pieces of information.
- 2) Providing significant experiences which are student-centered, age appropriate, and centered around truly significant events, concepts, and principles that students need to know and apply in their everyday lives.
- 3) Providing challenging experiences, which involve modeling high expectations for their students and themselves, promoting a thoughtful approach to inquiry, and demanding well-reasoned arguments.
- 4) Providing active experiences which encourage students to assume increasing responsibility for managing their own learning. Exploration, investigation, critical and creative thinking, problem solving, discussion

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- and debate, and reflection are essential elements of this principle. This active process of constructing meaning encourages lifelong learning.
- 5) Providing integrative social studies instruction, which crosses disciplinary borders to explore issues and events, while using and reinforcing informational, technological, and application skills. This approach facilitates the study of the cultural and physical environment by making appropriate, meaningful, and evident connections to the human disciplines and to the concepts of time, space, continuity, and change.
  - 6) Providing issues-based social studies which considers the ethical dimensions of issues and addresses controversial topics. It encourages consideration of opposing points of view, respect for well-supported positions, sensitivity to cultural similarities and differences, and a commitment to social responsibility and action.

Standard 4. The middle level teacher candidate will demonstrate knowledge and understanding of the learning context in the middle grades social studies classroom that is inclusive and inviting; emphasizes respect for diversity; encourages engagement and interactivity; uses relevant and significant resource-based learning; expands literacy through social studies; integrates technology and social studies; applies a variety of research-based instructional approaches and strategies; and assesses and evaluates student learning using a variety of research-based assessment strategies.

Standard 5. The middle level teacher candidate will demonstrate a knowledge and understanding of and be able to teach the following social science disciplines at the middle level:

- 1) Civics
  - a. Develop and apply knowledge of responsible citizenship within local, state, and national levels, including constitutional government, citizen rights and responsibilities, political processes, public policy, and judicial systems.
- 2) Economics
  - a. Develop and apply knowledge of economic decisions within the American economy and the impact within local, state, national, and international levels, including marketplace operation, economic structure, role of government, and personal finance.
- 3) Geography
  - a. Develop and apply spatial perspective and geographic skills to make informed decisions regarding issues and current events at local, state, national and international levels, taking into account the world in spatial terms, places and regions, physical systems,

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human systems, human/environment interactions, and application of geography to issues and events.

4) History

- a. Develop and apply historical knowledge and skills to research, analyze, and understand key concepts of past, current, and potential issues and events at the local, state, national, and international levels, including chronological thinking, historical comprehension, multiple perspectives, historical analysis and interpretation, and historical research skills.

Middle Level Guidelines based on the Association for Middle Level Education (AMLE) Teacher Preparation Standards (2012).

Middle Level core academic content guidelines based on National Council of Teachers of English Standards (2012), National Council of Teachers of Mathematics Standards for Middle Grades Initial Preparation (2012), National Science Teachers Association Standards for Middle Grades Preservice Teachers (2012), and National Standards for Social Studies Teachers (2002).

***(NOTE TO NCTE MEMBERS: Please see 'Ad Hoc Notes' on the REDLINE VERSION.)***