## Missouri State Portfolio Guide

### MoSPE & Conceptual Framework Standards

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<tr>
<th>QUALITY INDICATORS</th>
<th>PERFORMANCE INDICATORS</th>
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<tbody>
<tr>
<td><strong>MoSPE 1: Content Knowledge Aligned with Appropriate Instruction.</strong></td>
<td>1.1 Demonstrates basic content knowledge as well as academic language of disciplines.</td>
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<tr>
<td>The teacher understands the central concepts, structures and tools of inquiry of the discipline(s) and creates learning experiences that make aspects of subject matter meaningful and engaging for students.</td>
<td>1.2 Demonstrates an awareness of teaching methodologies used to engage students in subject matter.</td>
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<td></td>
<td>1.3 Utilizes disciplinary methods of inquiry and research.</td>
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<td>1.4 Demonstrates an understanding of what constitutes an interdisciplinary lesson.</td>
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<td></td>
<td>1.5 Demonstrates an understanding of cultural diversity and the potential for bias in teaching.</td>
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### CONCEPTUAL FRAMEWORK

1. **Foundations and Content Integration**
2. **Subject Matter Knowledge**

- 1.1 Demonstrates basic content knowledge as well as academic language of disciplines.
- 1.2 Demonstrates an awareness of teaching methodologies used to engage students in subject matter.
- 1.3 Utilizes disciplinary methods of inquiry and research.
- 1.4 Demonstrates an understanding of what constitutes an interdisciplinary lesson.
- 1.5 Demonstrates an understanding of cultural diversity and the potential for bias in teaching.

### MoSPE 2: Student, Learning Growth and Development.

The teacher understands how students learn, develop, and differ in their approaches to learning. The teacher provides learning opportunities that are adapted to diverse learners and that support the intellectual, social, and personal development of all students.

### CONCEPTUAL FRAMEWORK

3. **Learning and Development**
9. **Diversity**

- 2.1 Demonstrates a basic knowledge of principles of child/adolescent development.
- 2.2 Demonstrates the ability to set short and longterm goals, organize, implement, and selfreflect.
- 2.3 Demonstrates a basic knowledge of theories of learning.
- 2.4 Demonstrates an understanding that students differ in their approaches to learning.
- 2.5 Explains how students' prior experiences, multiple intelligences, strengths, and needs to positively impact learning.
- 2.6 Explains how instruction is connected to students’ prior experiences, family, culture, and community.
<table>
<thead>
<tr>
<th>MoSPE 3: Curriculum Implementation.</th>
<th>3.1 Demonstrates an understanding of curriculum, instructional alignment, and national and state standards.</th>
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<tbody>
<tr>
<td>The teacher recognizes the importance of long range planning and curriculum development. The teacher develops, implements, and evaluates curriculum based upon student, district and state standards data.</td>
<td>3.2 Demonstrates an understanding of the importance of using appropriate strategies, materials, and technology based on the needs of diverse learners.</td>
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<tr>
<td>CONCEPTUAL FRAMEWORK</td>
<td>3.3 Demonstrates an understanding of the importance of differentiated instruction and short and long-term instructional goal planning to meet student needs.</td>
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<td>6. Professional Skills</td>
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<tr>
<th>MoSPE 4: Critical Thinking.</th>
<th>4.1 Demonstrates a general knowledge of various types of instructional strategies to promote critical thinking.</th>
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<tbody>
<tr>
<td>The teacher uses a variety of instructional strategies and resources to encourage students’ development and critical thinking, problem solving, and performance skills.</td>
<td>4.2 Demonstrates an understanding of how using current instructional resources benefits the teaching and learning process.</td>
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<tr>
<td>CONCEPTUAL FRAMEWORK</td>
<td>4.3 Demonstrates an understanding of the importance of using cooperative learning strategies for effective student engagement.</td>
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<td>6. Professional Skills</td>
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<tr>
<th>MoSPE 5: Positive Classroom Environment.</th>
<th>5.1 Recognizes principles of classroom management, motivation, and engagement.</th>
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<tbody>
<tr>
<td>The teacher uses an understanding of individual/group motivation and behavior to create a learning environment that encourages active engagement in learning, positive social interaction and self-motivation.</td>
<td>5.2 Recognizes the importance of managing time, space, transitions, and activities.</td>
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<tr>
<td>CONCEPTUAL FRAMEWORK</td>
<td>5.3 Recognizes the influence of classroom, school, and community culture on student relationships and the impact on the classroom environment and learning.</td>
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<td>6. Professional Skills</td>
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</table>
MoSPE 6: Effective Communication.

The teacher models effective verbal, nonverbal, and media communication techniques with students, colleagues and families to foster active inquiry, collaboration, and supportive interaction in the classroom.

**CONCEPTUAL FRAMEWORK**
6. Professional Skills

| 6.1 | Demonstrates effective verbal and nonverbal communication techniques. |
| 6.2 | Recognizes sensitivity to differences in culture, gender, intellectual and physical ability in classroom communication. |
| 6.3 | Identifies the importance of facilitating learner expression in speaking, writing, listening, and other media. |
| 6.4 | Develops skills in using a variety of media communication tools. |

MoSPE 7: Student Assessment and Data Analysis

The teacher understands and uses formative and summative assessment strategies to assess the learner’s progress and uses both classroom and standardized assessment data to plan ongoing instruction. The teacher monitors the performance of each student and devises instruction to enable students to grow and develop, making adequate academic progress.

**CONCEPTUAL FRAMEWORK**
7. Assessment Skills

<p>| 7.1 | Demonstrates the importance of using formative and summative assessment strategies. |
| 7.2 | Recognizes the importance of using assessment data to guide instructional approaches and learning strategies. |
| 7.3 | Recognizes the importance of self and peer assessment, differences in formats, and can set their own learning goals. |
| 7.4 | Recognizes the importance of gathering assessment data to show the effectiveness of instruction on individual/class learning. |
| 7.5 | Recognizes the importance of maintaining confidentiality of student records and communicating student progress to students, families, colleagues, and administrators. |
| 7.6 | Recognizes the importance of the collaborative data analysis process. |</p>
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<tr>
<th>MoSPE 8: Professional Practice.</th>
<th>8.1 Articulates understanding of the importance of reflective practice and continual professional growth.</th>
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<tbody>
<tr>
<td>The teacher is a reflective practitioner who continually assesses the effects of choices and actions on others. The teacher actively seeks out opportunities to grow professionally in order to improve learning for all students.</td>
<td>8.2 Articulates the importance of regular participation in professional learning opportunities.</td>
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<td>8.3 Recognizes ethical practices and the influence of district policies and school procedures on professional practice.</td>
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CONCEPTUAL FRAMEWORK
4. Reflective and Inquiry Skills
8. Dispositions

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<tr>
<th>MoSPE 9: Professional Collaboration.</th>
<th>9.1 Reflects on the importance of fostering appropriate relationships with peers and school personnel.</th>
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<tbody>
<tr>
<td>The teacher has effective working relationships with students, families, school colleagues and community members.</td>
<td>9.2 Recognizes the importance of accessing basic services available in the school and community to support students and their learning.</td>
</tr>
<tr>
<td>9.3 Reflects on the importance of developing relationships with students, families, and communities in support of student learning.</td>
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CONCEPTUAL FRAMEWORK
10. Collaboration and Leadership
MoSTEP 1.2.1.1: Selected Middle School (5-9) English/Language Arts Competencies

For: Mild/Moderate Cross-Categorical Special Educators

Approved by MSBE: August 2008

The beginning (pre-service) Mild/Moderate, Cross-Categorical Special Education teacher who chooses English/Language Arts as an area of emphasis will (also) demonstrate knowledge of and/or competency in the following areas of study:

1. Fundamentals and Effective Use of English

(1997 SSC 1, 8; NCTE 3.1; IRA (2003) 1.4.2, 4.3; IRA (1997): 2.1, 2.4; PRAXIS II: 0049: II.1, III.2)

1.1 the interrelation of reading, writing, speaking, and listening.
1.2 effective oral and written language usages.
1.3 how the English language works, including its grammars, semantics, syntax, morphology, phonology, lexicon, history and dialects.

2. Language Development and Literacy

(1997 SSC: 4, 7; NCTE: 3.1, 3.6; IRA (2003) 1.3.2; IRA (1997) 6 and 3; PRAXIS II: 0049: II.3)

2.1 how middle school students continue to develop effective reading, writing, speaking, viewing, and listening skills.
2.2 diversity in language use, patterns, and dialects across cultures, ethnic groups, geographic regions, and social roles.
2.6 how to design instructional programs and strategies that build on students’ experiences and existing language skills and result in the students becoming competent, effective users of language.

3. Reading, Literature, and Comprehension

(1997 SSC2.5,6,10; MO GLE, 5-8: Reading [1-C,D,E,F,G,H,I; 2- A,B,C; 3-A,B,C]; MO GLE, 5-8: Information Literacy [1 A,B]; NCTE: 3.2, 3.3, 3.5., 3.6; IRA (2003) 1.1.2, 4.1.2, 4.2.2, 4.2.3, 4.3, 4.4.2; IRA (1997) 1.3, 1.4, 1.5, 2.6, 2.6.12, 2.13, 5.1, 5.2, 5.3, 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 7.1, 7.2, 7.3, 7.4, 7.5, 8.1; ETS: 0049: I.1-I.7; IV.1)

3.1 reading processes (pre-, during, post-).
3.3 strategies to monitor and increase reading comprehension.
3.4 techniques and strategies for the ongoing development of structured and independent vocabulary acquisition.
3.6 the basic elements of literary types and forms.
3.7 ways to help students think critically about what they read.

4. Thinking and Communicating Through Writing, Speaking, and Listening

(1997 SSC 3, 9; MO GLE, 5-8: Writing [1-A; 2-B,C,D,E,F; 3- A,B,C,D,E]; MO GLE, 9-12: Listening & Speaking [1-A,B; 2-A]; MO GLE, 5-8: Information Literacy [2-A]; ACEI 11, 12, 13, 14; NCTE: 2.4, 3.2, 3.4; IRA (2003) 4.3; IRA (1997) 2.6, 2.7, 9.1, 9.2; ETS: 0049: III.1, III.2; IV.2)

4.1 different types of writing and speaking appropriate for different audiences and in different situations, including persuasive strategies.
4.3 composing processes used to prepare information to share orally, visually, and/or in writing.
4.5 ways of creating instruction, activities, and experiences that develop varied writing, speaking and presentation skills to communicate with different audiences for varying purposes.
MoSTEP 1.2.1.1: Selected Middle School Science Competencies

For: Mild/Moderate Cross-Categorical Special Educators

Approved by MSBE: August 2008

1. The beginning (pre-service) Mild/Moderate, Cross-Categorical Special Education teacher who chooses science as an area of emphasis will (also) demonstrate knowledge of and/or competency in the following areas of study:

1. **Unifying Concepts and Processes** The beginning teacher of science is familiar with, and teaches, the major concepts and principles that unify all scientific effort and that are used in each of the science disciplines

   (1997 SSC: 1.2; CR GenEd, IILD; NSTA [2001]: Standard 1; NSTA [1998], Standard 1; NSES: UCP-1-5)
   1.1 systems, order, and organization;
   1.2 evidence, models, and explanation; and
   1.4 evolution and equilibrium.

2. **Science As Inquiry** The beginning teacher of science understands and practices the science inquiry process.

   (1997 SSC: 1.1, 1.4; CR GenEd, IILD; NSTA [2001]: Standard 3, 9; NSTA [1998], Standard 3, 9; NSES: M-A1, A2; S 1, 2, 7-8; ETS 0439: I)
   2.1 identify questions that can be answered through scientific investigations.
   2.2 design and conduct a scientific investigation, including general abilities, such as recognition of the principal elements in an experimental design (i.e., the hypothesis, independent and dependent variables, and controls); systematic observation, making accurate measurements, and identifying and controlling variables; clarifying ideas that are influencing and guiding the inquiry; and comparing ideas with current scientific knowledge
   2.3 use appropriate tools (e.g., hand tools, measuring instruments, calculators, and computers for the collection, summary, and display of evidence), techniques, and mathematics to gather, analyze, and interpret data, including selecting the scientific apparatus or instrument appropriate to a specified laboratory or field task and identifying proper operation of such equipment; using the metric system of measurement, recognizing equivalents within that system and selecting units appropriate to a given laboratory or field task; converting between scientific notation and conventional numerals and using scientific notation to perform calculations.

3. **Physical Science** The beginning teacher of science understands the central concepts, tools of inquiry, and structures of the physical sciences and makes these aspects of subject matter meaningful for students.

   (1997 SSC: 2.1-2.8, 3.1-3.7; CR GenEd, IILD; NSTA [2001]: Rationale; Standard 1; NSTA [1998], Standard 1; NSES: M-B1, B2, B3; S 1, 2, 7-8; ETS 0439: III)
   3.1 Structure of Atoms (ETS 0439: II, III)
   3.3 Motion and Forces (1997 SSC 3.1-7; NSES: M-B2; ETS 0439: III)
   3.4 Transfer of Energy (1997 SSC: 2.5-7; NSES: M-B3; ETS 0439: III)

4. **Life Science** The beginning teacher of science understands the central concepts, tools of inquiry, and structures of the life sciences and makes these aspects of subject matter meaningful for students.

   (1997 SSC 4.1-.7, 5.1-.6; CR GenEd, IILD; NSTA [2001]: Rationale; Standard 1; NSTA [1998], Standard 1; NSES: M-C1, C2, C3, C4, C5; S 3, 4, 7-8; ETS 0439: IV)
   4.1 Structure and Function in Living Systems (1997 SSC: 4.3-.7; NSES: M-C1; ETS 0439: IV)
   4.2 The Cell (1997 SSC: 4.4; NSES: M-C3; ETS 0439: IV)
   4.3 Molecular Basis of Heredity (1997 SSC 4.2; ETS 0439: IV)

5. **Earth and Space Science** The beginning teacher of science understands the central concepts, tools of inquiry, and structures of the earth and space sciences and makes these aspects of subject matter meaningful for students.

   (1997 SSC 6.1-.7, 7.1-.5; CR GenEd, IILD; NSTA [2001]: Rationale; Standard 1; NSTA [1998], Standard 1; NSES: M-D1, D2, D3; S 5-8; ETS 0439: V)
   5.1 Properties of Earth Materials (1997 SSC: 6.1-.3, 6.5-.6; ETS 0439: V)

6. **Science and Technology** The beginning teacher of science understands the relationship between science and technology, can distinguish between natural objects and objects made by humans, and makes these aspects of subject matter meaningful for students by creating experiences in making models of useful things and by developing students’ abilities to identify and communicate a problem and to design, implement, and evaluate a solution.

   (1997 SSC: 1.3, 1.4; NSTA [2001], Standards 4, 5.d; NSTA [1998] Standards 2, 4, 5; NSES: M-E1, E2, E3; S 8; ETS 0439: I, VI)
   6.1 compare/contrast scientific inquiry and technological design (NSES: M-E2; ETS 0439: I, VI)
   6.5 design a solution or product and use a variety of technologies to model phenomena (NSES: M-E1; ETS 0439: I, VI)
   6.6 identify and organize materials and other resources, choose suitable tools and techniques, and work with appropriate measurement methods to ensure adequate accuracy in the implementation of a proposed design.
   (NSES:ME1;ETS0439:1,VI)
   6.7 analyze and interpret data obtained from an experiment or investigation, including graphical data, and identify and demonstrate an understanding of sources of error in data that is presented (NSES: M-E1; ETS 0439: I, VI)
7: **Science in Personal and Social Perspectives**: The beginning teacher of science understands the context of science (i.e., relationships among systems of human endeavor including science and technology; relationships among scientific, technological, personal, social and cultural values; and the relevance and importance of science to the personal lives of students) and the social context of science teaching (i.e., the social and community support network within which science teaching and learning occur; relationship of science teaching and learning to the needs and values of the community; and involvement of people and institutions from the community in the teaching of science) and uses this knowledge to enrich the science learning of all students.

(1997 SSC: 1.3, 4.3, 4.6, 5.1, 5.4-6, 6.1; NSTA [2001]: Standards 4, 7; NSTA [1998], Standards 4, 7; NSES: M-F1, F2, F3, F4, F5; S 1, 3-5; ETS 0439: VI)

7.1 Personal Health (1997 SSC: 4.3, 4.6; NSES: M-F1; ETS 0439: VI)

7.3 Types of Resources (1997 SSC: 6.1; NSES: M-F2; ETS 0439: VI)

7.4 Changes in Environments (1997 SSC: 5.1, 5.6; NSES: M-F2; ETS 0439: VI)
MoSTEP 1.2.1.1: Selected Middle School (5-9) Social Studies Education Competencies
For: Mild/Moderate Cross-Categorical Special Educators
Approved by MSBE: August 2008

The beginning (pre-service) Mild/Moderate, Cross-Categorical Special Education teacher who chooses
social studies as an area of emphasis will (also) demonstrate knowledge of and/or competency in the following areas of study:

1 Social Studies as a Field of Study
(1997 SSC: 1.1-2; NCSS: 1.1 through 1.10; Discipline-Specific Standards 2.1-2.5; PRAXIS II: 0089: no overt alignment; Mo 5-8 SS GLE no overt alignment)

1.1 the definitions and purposes of social studies (including history, geography, economics, political science, anthropology, psychology, and sociology).
1.2 how to integrate knowledge across the social studies, and between the social studies and other disciplines (e.g., science, fine arts, language, mathematics).

2 Principles Expressed in Documents Shaping Constitutional Democracy in the United States
(1997 SSC: 2.1-4; NCSS: 1.10.1, 1.10.2, 1.10.8, 1.10.3, 1.10.4, 1.10.5, 1.10.6, 1.10.7, 1.10.9, 2.1, 2.3; G 41; SS1; PRAXIS II: 0089; II; Mo 5-8 SS GLE 1)

2.1 basic U.S. government documents (including but not limited to those listed in the Show-Me Curriculum Frameworks, Standard I and the 5-8 Grade-Level Expectations), their origins, evolution, and changing interpretations, and how they attempt to balance the needs of the individual and the group.
2.2 civic ideals and democratic principles implicit in basic documents (human dignity and individual rights, justice, general welfare, freedom, equality, rule of law, etc.).

3 Continuity and Change in the History of Missouri, the United States, and the World
(1997 SSC: 3.1-5; NCSS: 1.2.1, 1.2.2, 1.2.3, 1.2.4, 1.2.5, 1.2.6, 1.5.2, 1.5.3, 1.5.7, 2.1.1, 2.1.2; SS2; PRAXIS II: 0089: I; II; Mo 5-8 SS GLE 2)

3.2 historical periods, people, events, developments, and documents including but not limited to:
   a) the migrations, interactions, and cultures of people from many regions of the world;
   b) the development and evolution of democracy around the world, especially the American democracy;
   c) the evolution of the world economy, including the development and growth of the American economy;
   d) the evolution of U.S. domestic and foreign policies;
   e) changes in world politics and cultures, including reform movements and civil unrest and others listed in the Show-Me Curriculum Frameworks and 5-8 Grade Level Expectations) and how the past shapes the present.
3.3 how and why individuals (including historians) may view, interpret, and report on the past from very different perspectives.

4 Principles and Processes of Governance Systems
(1997 SSC: 4.1-5; NCSS: 1.6.1, 1.6.2, 1.6.3, 1.6.4, 1.6.5, 1.6.6, 1.6.7, 1.10.1, 1.10.2, 1.10.3, 1.10.4, 1.10.5, 1.10.6, 1.10.7, 1.10.8, 1.10.9, 2.3.1, 2.3.2, 2.3.3, 2.3.4, 2.3.5, 2.3.6, 2.3.7; SS3; PRAXIS II: 0089: III; Mo 5-8 SS GLE 3)

4.2 the effects of political theories and philosophies (including but not limited to those listed in the Show-Me Curriculum Frameworks and 5-8 Grade-Level Expectations).

5 Economic Concepts and Principles
(1997 SSC: 5.1-6; NCSS: 1.7.1, 1.7.2, 1.7.3, 1.7.4, 1.7.5, 1.7.6, 1.7.7, 1.7.8, 1.7.9, 2.4.1, 2.4.2, 2.4.3, 2.4.4, 2.4.5, 2.4.6, 2.4.7, 2.4.8, 2.4.9, 2.4.10, 2.4.11, 2.4.12, 2.4.13, 2.4.14, 2.4.15, 2.4.16, 2.4.17, 2.4.18, 2.4.19; SS4; PRAXIS II: 0089: V; Mo: 5-8 SS GLE 4)

5.1 economic systems (e.g., traditional, market, command, and mixed, etc.) and basic economic concepts (e.g., scarcity, opportunity cost, trade-offs, supply, demand, etc.).
5.2 economic choices and processes for making rational economic decisions (e.g., saving, purchasing, investing, etc.).

6 The Major Elements of Geographical Study and Analysis
(1997 SSC: 6.1-4; NCSS: 1.3.1, 1.3.2, 1.3.3, 1.3.4, 1.3.5, 1.3.6, 1.3.7, 1.3.8, 1.3.9, 1.3.10, 2.2.1, 2.2.2, 2.2.3, 2.2.4, 2.2.5, 2.2.6, 2.2.7, 2.2.8, 2.2.9, 2.2.10, 2.2.11, 2.2.12, 2.2.13, 2.2.14, 2.2.15; SS5; PRAXIS II: 0089: IV; Mo: 5-8 SS GLE 5)

6.1 application and use of geographic representations, tools, and resources (maps, atlases, aerial photographs, globes, etc.).
6.2 the interaction between physical geography and culture, history, politics, and economics.

7 Relationships of Individuals and Groups to Institutions and Cultural Traditions
(1997 SSC: 7.1-5; NCSS: 1.1.1, 1.1.3, 1.1.4, 1.1.5, 1.1.6, 1.1.7, 1.1.8, 1.4.1, 1.4.2, 1.4.3, 1.4.4, 1.4.5, 1.4.6, 1.4.7, 1.4.8, 1.4.9, 1.5.1, 1.5.2, 1.5.3, 1.5.4, 1.5.5, 1.5.6, 1.5.7, 1.8.1, 1.8.3, 1.8.4, 1.8.5, 1.9.1, 1.9.2, 2.5.1, 2.5.2, 2.5.3)

7.3 the similarity of basic human needs and the diverse ways individuals, groups, societies, and cultures meet those needs.

8 Social Science Tools and Inquiry
(1997 SSC: 8.1-5; NCSS: 1.5.8 (and others), 2.1.3, 2.1.4, 2.1.6, 2.1.7, 2.2.17, 2.2.16, 2.5.12, 2.5.11, 2.5.10; G 1 & 2; SS7; PRAXIS II: 0089: no overt alignment; Mo 5-8 SS GLE 7)

8.3 data sources and collection techniques (artifacts and historical places; field research; primary and secondary sources; interviews, surveys, and polling; geographic representations; case studies; statistics; observations; charts, graphs, and tables; and multimedia/electronic resources, etc.).
MoSTEP 1.2.1.1: Selected Middle School (5-9) Mathematics Competencies
For: Mild/Moderate Cross-Categorical Special Educators
Approved by MSBE: August 2008

The beginning (pre-service) Mild/Moderate, Cross-Categorical Special Education teacher who chooses mathematics as an area of emphasis will (also) demonstrate knowledge of and/or competency in the following areas of study:

1. Mathematical Processes and Tools: The beginning teacher of mathematics understands mathematical process and tools, and makes these aspects of subject matter meaningful for students. 1997 SSC: 1; CR 1-4, a-h

   1.1 use problem solving to investigate and understand mathematical content.
   (G 1.2, 3.5-6; ACEI 2c; NCTM P1.1.1, 1.1.1, S1.1.1; MAA I.2)
   1.2 communicate mathematical ideas in writing and orally, using mathematical language and symbols.
   (G2.1.4.1; ACEI 2c; NCTM P1.2.1, M1.2.1, S1.2.1; MAA I.2, I.3)
   1.3 analyze and articulate connections within mathematics
   (G J.6; ACEI 2c; NCTM P1.4.2, M1.4.2, S1.4.2; MAA I.2)
   1.10 use calculators and computers as tools to generate multiple representations of mathematical concepts.
   (ACEI 2c; MAA I.5)

2: Number Operation: The beginning teacher of mathematics understands numbers and their operations and makes these aspects of subject matter meaningful for students. 1997 SSC: 2; CR 1 2, b, c

   2.1 understand properties of real and complex numbers, including equivalent representations of numbers
   (M 1, 5; ACEI 2c; NCTM P2.2.2, M1.6.1, S1.5.1; MAA II.1, III.1, IV.1)
   2.2 analyze the effect of and relationships among operations on real and complex numbers.
   (M.1; ACEI 2c; NCTM P1.5.4; MAA II.1)
   2.3 use estimation in working with quantities, measurement, computation, and problem solving.
   (M J.1; ACEI 2c; NCTM P1.5.10; MAA II.1)
   2.4 develop, use, model, and explain computational algorithms, including multidigit calculations involving standard algorithms, fundamental math, and nonstandard methods commonly created by students, the reasoning behind the procedures, how the base-10 structure of a number is used in these calculations. (M J.1; ACEI 2c; NCTM P1.5.10; MAA II.1)
   2.5 understand and apply numerical computation techniques (mental, paper/pencil, calculator) and extend them to algebraic expressions. (M 2; ACEI 2c; NCTM P1.5.3, M1.6.2, S1.5.3)

3: Geometry and Measurement: The beginning teacher of mathematics understands the central concepts, tools of inquiry, and structures of geometry and measurement and makes these aspects of subject matter meaningful for students. 1997 SSC:3; CR 3

   3.1 understand and apply various systems and tools of measurement and the process of measurement (e.g., understanding the idea of a unit and the need to select a unit appropriate to the attribute being measured, knowing the standard [English and metric] systems of units, understanding that measurements are approximate and that different units affect precision, comparing units and converting measurements from one unit to another. (M 2; ACEI 2c; NCTM P1.5.5, M1.6.3, S1.5.3)
   3.2 identify, describe, measure, compare, classify, and represent two- and three-dimensional figures.
   (M 2; ACEI 2c; MAA II.2)

4: Data Analysis, Probability, and Statistics: The beginning teacher of mathematics understands the central concepts, tools of inquiry, and structures of data analysis, probability, and statistics and makes these aspects of subject matter meaningful for students. 1997 SSC:4; CR e

   4.1 collect, organize, and display data in meaningful form(s) by describing data (e.g., understanding shape, spread, and center; using different forms of representation; comparing two sets of data)
   (M 3, 1.8, 2.1; ACEI 2c; NCTM P1.5.7, M1.6.5, S1.5.5; MAA II.4, III.4, IV.4)
   4.4 understand the kinds of questions that can be addressed by data, create data sets, and move back and forth between the question (i.e., the purpose of the study) and its design.

5: Patterns, Functions, & Relationships: The beginning teacher of mathematics understands patterns, functions, and relationships and makes these aspects of subject matter meaningful for students. 1997 SSC:5; CR 1-4, a-h

   5.1 identify and describe patterns and relationships. (M 4, 1.6; ACEI 2c; NCTM P1.3; MAA II.3)
   5.2 represent and justify patterns and functions in multiple ways, including reading and creating graphs of functions; reading and creating formulas (in closed and recursive forms) and tables; and understanding the characteristics of particular classes of functions on integers. (M 4, 1.6, 2.2, 3.4; ACEI 2c; NCTM P1.5.9, M1.6.6, S1.5.7; MAA I.3, II.3, IV.3, III.3)
   5.4 represent and justify general arithmetic claims, using a variety of representations including algebraic notation; understand different forms of argument; and devise deductive arguments.

7: Discrete Mathematics: The beginning teacher of mathematics understands the central concepts, tools of inquiry, and structures of discrete mathematics and makes these aspects of subject matter meaningful for students. 1997 SSC:7; CR 1-4, b, d-f

   7.1 use a variety of counting techniques and principles (e.g., permutations and combinations).
   (M 6; ACEI 2c; NCTM S1.5.10; MAA IV.6)
   7.2 identify, model, and analyze situations represented by discrete and continuous data.
   (M 6; ACEI 2c; NCTM P, M, S1.5.10)
The Professional Preparation Portfolio

Successful completion of a Professional Preparation Portfolio is required of all teacher education candidates at Missouri State in order to be recommended for initial certification to teach. This portfolio is a graphic anthology of a student’s progress and performance in all coursework, practicum placements and student teaching experiences. The Professional Preparation Portfolio is also a medium by which the academic programs are evaluated for accreditation by the Missouri Department of Elementary and Secondary Education and the National Council for the Accreditation of Teacher Education.

Teacher education students will receive guidance throughout their program from the instructors of their courses to help answer questions and maintain quality of the portfolio. There are three checkpoints scheduled throughout the sequence of courses taken in the teacher education program. The checkpoints are individual conferences held between students and instructors to assure that everything is in order and progressing satisfactorily toward meeting the Missouri Standards for Teacher Education Program (MoSTEP) quality indicators and subject area competencies.

The first checkpoint occurs in SEC 302. PED 200, or MUS 200. The second will occur during the special methods courses or designated point in the degree program. The third and final checkpoint occurs during the student teaching semester. At that time the portfolio will be reviewed to determine if there is sufficient evidence to meet MoSTEP quality indicators and subject area competencies.

Portfolio Checkpoint 1: ELE 302/SEC 302/PED 200/MUS 200*
These artifacts are required and must be included within the portfolio at checkpoint 1:

- Professional Resume
- Clinical Placements Log
- Artifacts with cover sheets as assigned – minimum of lesson plan and appropriate artifact cover sheet
- Evaluation of uploaded materials by faculty

Portfolio Checkpoint 2: Special Methods Courses or Designated Point in Program
A summary of general expectations for Portfolio Checkpoint 2 follows:

- Artifacts and artifact cover sheets required by the specialty area that reflect knowledge, skills and professional dispositions aligned with standards
- Professional Resume further developed
- Clinical Placement form completed to reflect additional experiences and outcomes
- Educational Philosophy

Portfolio Checkpoint 3: Supervised Student Teaching
Artifacts may be required and reviewed by the specialty area faculty, University Student Teaching Supervisor and cooperating teacher. A summary of expected content follows:

- Additional artifacts and artifact cover sheets as required in order to meet MoSTEP quality indicators and subject area competencies
- Professional resume completed
- Clinical placement form completed to reflect culminating experiences and outcomes
- Complete section IV of your portfolio (Student Teaching Evaluations)

For additional help log on to the Missouri State PEU Website at http://www.missouristate.edu/peu/
*Students must consult with their departmental advisors concerning special requirements for artifact cover sheets. Limited examples follow.
Appendix 1: Portfolio Content and Requirements

- Access the portfolio website for further details at http://www.missouristate.edu/peu/student_portfolios/
- Candidates (students) starting the program in fall 2001 semester will be expected to develop the portfolio in an electronic format (web-based and/or zip disk or CD).
- There are four sections to the portfolio as noted below.
- Candidates that wish to maintain a hard copy of the portfolio, along with a copy in an electronic format, may purchase tabs that correspond to the following section at the University bookstore (Spring, 2002).
- The number and type of artifacts will correspond to the program assessment plan. See program faculty for guidance.
- Candidates should record progress toward meeting professional standards on the Portfolio Guide (see downloadable forms).

Portfolio Sections

Section I. Introduction
Section I contains the professional education candidate’s:
- Educational Philosophy
- Resume'
- Log of Clinical Placements assigned during the program (downloadable form)

Section II. Professional Practice
Section II includes artifacts that represent performances aligned to the Conceptual Framework (CF) MoSTEP and specialty area standards.
- Download a copy of the Portfolio Guide (replaces the old Table of Contents) specific to your area of study. The Portfolio Guide should be kept in Section II of the portfolio with artifacts reflecting the required standards placed after the guide. Candidates are expected to monitor progress toward standards on the Portfolio Guide (downloadable form).
- Artifacts that reflect the Missouri State (CF) Learner Outcomes, the MoSTEP Standards and the specialty area standards will be placed in Section II of the portfolio. Artifacts must be accompanied by an Artifact Cover Sheet that documents the nature of the project as well as performances related to standards. (See downloadable forms to access the Artifact Cover Sheet and corresponding Directions for the Artifact Cover Sheet.

Section III. Showcase
Section III is the student Showcase Section. This is optional for students who elect to include items that will further illustrate their experiences in the professional education program as well as showcase mastery of professional standards and the Conceptual Framework general outcomes.

Section IV. Field Evaluations
This section should include practicum and student teaching field evaluations. See your program faculty for guidance regarding practicum materials and evaluations. For student teaching, include the evaluation of the cooperating teacher and the University supervisor of all placements in the student teaching semester.
APPENDIX 2: ABOUT THIS ARTIFACT - DIRECTIONS FOR THE ARTIFACT COVER SHEET

Cover sheets should be attached to artifacts within the Professional Preparation Portfolio as directed by program faculty. The purpose of the cover sheet is to ensure reflection and review regarding performances related to the Missouri State Professional Education Unit (PEU) Conceptual Framework (CF), the MoSTEP standards and your Specialty Area standards. Information provided on the cover sheet yields evidence of your progress in meeting professional education standards. Directions for completing the sections of the cover sheet follow.

- **“Title of artifact”:** Typically, an artifact will have a designated title. If it does not, provide a brief description or name.
- **“Date this artifact was collected”:** When was the item completed, graded, or made available for inclusion in the portfolio? If necessary, give a more general time, e.g. “Fall Semester 2001.”
- **“Course or experience where the artifact was developed”:** Provide both the course code and course title. If the item was not developed for a course, describe the experience corresponding to development.
- **“Quality indicators addressed by this artifact”:** Identify the quality indicators/learner outcomes that are represented within the artifact. Example:
  
  CF (add learner outcome and #) MoSTEP (add # and description) Specialty Area: Science Education (add # and description)

  Since there is commonality between the CF, the MoSTEP, and the Specialty Area Standards, it is typically appropriate to reference all three sets of standards on the cover sheet. See your program faculty for guidance if you have questions.
- **“Reflective Narrative”:** This section includes a summary of candidate performances that correspond to the quality indicator and learner outcomes listed. Use the performance indicators corresponding to each quality indicator as a guide. This section requires analysis and synthesis of performances related to standards and should be written as a narrative summary rather than a list. The narrative should document that you have demonstrated performances consistent with the CF Learner Outcomes, the MoSTEP and the Specialty Area standards noted above. Examples of completed Artifact Cover Sheets follow; however, you must seek guidance from program faculty regarding requirements specific to your area of study.
ABOUT THIS ARTIFACT

Student Name: ________________________________

Major/Certification Area: ________________________________

Title of the Artifact: ________________________________

Date this artifact was collected: ________________________________

Course or experience where artifact was developed: _________________

Quality indicators addressed by this artifact - Include MoSTEP and Specialty Area Indicator(s) as well as PEU CF Learner Outcome(s) as appropriate:

Reflective narrative – How this artifact reflects performances specific to MoSTEP, PEU CF Learner Outcomes and/or Specialty Area performance indicators as appropriate. What do I know and what am I able to do?
Appendix 3: CF General Learning Outcomes

The curricula of professional education programs at Southwest Missouri State University reflect our commitment to these beliefs. Further, they reflect and are aligned with the professional standards specified by state, national and professional accreditation organizations. Our initial and advanced programs are designed to develop candidate knowledge, skills, and dispositions associated with successful professional educational practice.

Missouri State professional education graduates will demonstrate competence in:

1. Foundations: knowledge of the historical development of the profession, and foundational issues and arguments underlying its practices, as well as understanding of the importance of integrated learning across disciplines.
2. Subject Matter: knowledge of subject matter discipline content and the ability to integrate content with pedagogy appropriate to the candidate’s field of study.
3. Learning and Development: knowledge of human development and motivation, theories of learning, pedagogy and assessment.
4. Reflective skills: communication skills, critical and creative thinking abilities and other skills crucial to reflective decision-making.
5. Technology: knowledge and skills in the use of technology appropriate to the candidate’s field of study.
6. Professional Skills: the practical abilities to implement the skills, techniques, and strategies associated with student learning and development in the educational context in which they practice.
7. Assessment Skills: the skills to conduct valid and reliable assessments of their students’ learning, and use that assessment to improve learning and development for their students.
8. Dispositions: the intellectual, social, ethical, and other personal attributes and beliefs previously ascribed to reflective decision-makers in a variety of professional settings, including a commitment to their own lifelong learning and professional development.
9. Diversity: the ability to skillfully facilitate and promote the learning of all students, including those from diverse cultural, racial and economic backgrounds, and those with disabilities.
10. Collaboration and Leadership: the ability and skills to foster and maintain collaborative, empowering relationships with other professionals within schools and the community.