

NEW YORK STATE TEACHER CERTIFICATION EXAMINATIONS (NYSTCE)

FIELD 01: LIBERAL ARTS AND SCIENCES TEST (LAST) TEST FRAMEWORK (June 2003) (ACEI Standards)

LAST 1. Scientific, Mathematical, and Technological Processes (ACEI 2.2, 2.3 & 2.8)

LAST 1.01 Use mathematical reasoning in problem-solving situations to arrive at logical conclusions and to analyze the problem-solving process.

LAST 1.02 Understand connections between mathematical representations and ideas; and use mathematical terms and representations to organize, interpret, and communicate information.

LAST 1.03 Apply knowledge of numerical, geometric, and algebraic relationships in problem-solving and mathematical contexts.

LAST 1.04 Understand major concepts, principles, and theories in science and technology; and use that understanding to analyze phenomena in the natural world and to interpret information presented in illustrated or written form.

LAST 1.05 Understand the historical development and cultural contexts of mathematics, science, and technology; the relationships and common themes that connect mathematics, science, and technology; and the impact of mathematics, science, and technology on human societies.

LAST 1.06 Understand and apply skills, principles, and procedures associated with inquiry and problem solving in the sciences.

LAST 2. Historical and Social Scientific Awareness (ACEI 2.4 & 2.8)

LAST 2.07 Understand the interrelatedness of historical, geographic, cultural, economic, political, and social issues and factors.

LAST 2.08 Understand principles and assumptions underlying historical or contemporary arguments, interpretations, explanations, or developments.

LAST 2.09 Understand different perspectives and priorities underlying historical or contemporary arguments, interpretations, explanations, or developments.

LAST 2.10 Understand and apply skills, principles, and procedures associated with inquiry, problem solving, and decision making in history and the social sciences.

LAST 2.11 Understand and interpret visual representations of historical and social scientific information.

LAST 3. Artistic Expression and the Humanities (ACEI 2.1, 2.5 & 2.8)

LAST 3.12 Understand and analyze elements of form and content in works from the visual and performing arts from different periods and cultures.

LAST 3.13 Analyze and interpret works from the visual and performing arts representing different periods and cultures and understand the relationship of works of art to their social and historical contexts.

LAST 3.14 Understand forms and themes used in literature from different periods and cultures.

LAST 3.15 Analyze and interpret literature from different periods and cultures and understand the relationship of works of literature to their social and historical contexts.

LAST 3.16 Analyze and interpret examples of religious or philosophical ideas from various periods of time and understand their significance in shaping societies and cultures.

LAST 4. Communication and Research Skills (ACEI 2.1, 3.3 & 3.5)

LAST 4.17 Derive information from a variety of sources (e.g., magazine articles, essays, Web sites).

LAST 4.18 Analyze and interpret written materials from a variety of sources.

LAST 4.19 Use critical-reasoning skills to assess an author's treatment of content in written materials from a variety of sources.

LAST 4.20 Analyze and evaluate the effectiveness of expression in a written paragraph or passage according to the conventions of edited American English.

LAST 4.21 Demonstrate the ability to locate, retrieve, organize, and interpret information from a variety of traditional and electronic sources.

LAST 5. Written Analysis & Expression (ACEI 2.1, 2.8 & 3.5)

LAST 5.22 Prepare an organized, developed composition in edited American English in response to instructions regarding audience, purpose, and content.

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MS 1. English Language Arts (ACEI 2.1)

- MS 1.01 Understand the foundations of reading development.
- MS 1.02 Understand skills and strategies involved in reading comprehension.
- MS 1.03 Understand and apply reading skills and strategies for various purposes (including information and understanding, critical analysis and evaluation, literary response, and social interaction).
- MS 1.04 Understand processes for generating, developing, revising, editing, and presenting/publishing written texts.
- MS 1.05 Understand and apply writing skills and strategies for various purposes (including information and understanding, critical analysis and evaluation, literary response and personal expression, and social interaction).
- MS 1.06 Understand skills and strategies involved in listening and speaking for various purposes (including information and understanding, critical analysis and evaluation, literary response and expression, and social interaction).
- MS 1.07 Understand and apply techniques of literary analysis to works of fiction, drama, poetry, and nonfiction.
- MS 1.08 Demonstrate knowledge of literature, including literature from diverse cultures and literature for children and/or adolescents.

MS 2. Mathematics (ACEI 2.3)

- MS 2.09 Understand formal and informal reasoning processes, including logic and simple proofs, and apply problem-solving techniques and strategies in a variety of contexts.
- MS 2.10 Use mathematical terminology and symbols to interpret, represent, and communicate mathematical ideas and information.
- MS 2.11 Understand skills and concepts related to number and numeration, and apply these concepts to real-world situations.
- MS 2.12 Understand patterns and apply the principles and properties of linear algebraic relations and functions.
- MS 2.13 Understand the principles and properties of geometry and trigonometry, and apply them to model and solve problems.
- MS 2.14 Understand concepts, principles, skills, and procedures related to the customary and metric systems of measurement.
- MS 2.15 Understand concepts and skills related to data analysis, probability, and statistics, and apply this understanding to evaluate and interpret data and to solve problems.

MS 3. Science and Technology (ACEI 2.2)

- MS 3.16 Understand and apply the principles and processes of scientific inquiry and investigation.
- MS 3.17 Understand and apply concepts, principles, and theories pertaining to the physical setting (including earth science chemistry and physics).
- MS 3.18 Understand and apply concepts, principles, and theories pertaining to the living environment.
- MS 3.19 Apply knowledge of technology and the principles of engineering design.
- MS 3.20 Understand the relationships among and common themes that connect mathematics, science, and technology, and the application of knowledge and skills in these disciplines to other areas of learning.

MS 4. Social Studies (ACEI 2.4)

- MS 4.21 Understand major ideas, eras, themes, developments and turning points in the history of New York State, the United States, and the world.
- MS 4.22 Understand geographic concepts and phenomena and analyze the interrelationships of geography, society, and the culture in the development of New York State, the United States, and the world.
- MS 4.23 Understand the concepts and phenomena related to human development and interactions (including anthropological, psychological, and sociological concepts).
- MS 4.24 Understand economic and political principles, concepts, and systems, and relate this knowledge to historical and contemporary developments in New York State, the United States, and the world.
- MS 4.25 Understand the roles, rights, and responsibilities of citizenship in the United States and the skills, knowledge, and attitudes necessary for successful participation in civic life.
- MS 4.26 Understand and apply skills related to social studies, including gathering, organizing, mapping, evaluating, interpreting, and displaying information.

MS 5. The Fine Arts (ACEI 2.5)

- MS 5.27 Understand the concepts, techniques, and the materials of the visual arts; analyze works of visual art; and understand the cultural dimensions and contributions of the visual arts.
- MS 5.28 Understand concepts, techniques, and materials for producing, listening to, and responding to music; analyze works of music; and understand the cultural dimensions and contributions of music.
- MS 5.29 Understand concepts, techniques, and materials related to theater and dance; analyze works of drama and dance; and understand the cultural dimensions and contributions of drama and dance.

MS 6. Health and Fitness (ACEI 2.6 & 2.7)

- MS 6.30 Understand basic principles and practices of personal, interpersonal, and community health and safety; and apply related knowledge and skill (e.g. decision making, problem solving) to promote personal well-being.
- MS 6.31 Understand physical education concepts and practices related to the development of personal living skills.
- MS 6.32 Understand health-related physical fitness concepts and practices.

MS 7. Family and Consumer Science and Career Development (ACEI 1.0, 2.4, 3.3, 5.1 & 5.3)

- MS 7.33 Understand concepts and practices related to child development and care and apply knowledge of family and interpersonal relationships.
- MS 7.34 Understand skills and procedures related to consumer economics and personal resource management.
- MS 7.35 Understand basic principles of career development; apply processes and skills for seeking and maintaining employment; and demonstrate knowledge of workplace skills, behaviors, and responsibilities.

MS 8. Foundations of Reading: Constructed-Response Assignment (ACEI 2.1, 2.8 & 3.5)

NEW YORK STATE TEACHER CERTIFICATION EXAMINATIONS

FIELD 91: ASSESSMENT OF TEACHING SKILLS-WRITTEN (ATS-W) ELEMENTARY TEST FRAMEWORK (June 2003) (ACEI Standards)

ATSW 1. Student Development and Learning (ACEI 1, 3.1, 3.2, 5.3)

ATSW 1.01 Understand human development, including developmental processes and variations, and use this understanding to promote student development and learning.

ATSW 1.02 Understand learning processes, and use this understanding to promote student development and learning.

ATSW 1.03 Understand how factors in the home, school, and community may affect students' development and readiness to learn; and use this understanding to create a classroom environment within which all students can develop and learn.

ATSW 1.04 Understand language and literacy development, and use this knowledge in all content areas to develop the listening, speaking, reading, and writing skills of students, including students for whom English is not their primary language.

ATSW 1.05 Understand diverse student populations, and use knowledge of diversity within the school and the community to address the needs of all learners, to create a sense of community among students, and to promote students' appreciation of and respect for individuals and groups.

ATSW 1.06 Understand the characteristics and needs of students with disabilities, developmental delays, and exceptional abilities (including gifted and talented students); and use this knowledge to help students reach their highest levels of achievement and independence.

ATSW 2. Instruction and Assessment (ACEI 3, 4)

ATSW 2.07 Understand how to structure and manage a classroom to create a safe, healthy, and secure learning environment.

ATSW 2.08 Understand curriculum development, and apply knowledge of factors and processes in curricular decision making.

ATSW 2.09 Understand the interrelationship between assessment and instruction and how to use formal and informal assessment to learn about students, plan instruction, monitor student understanding in the context of instruction, and make effective instructional modifications.

ATSW 2.10 Understand instructional planning and apply knowledge of planning processes to design effective instruction that promotes the learning of all students.

ATSW 2.11 Understand various instructional approaches, and use this knowledge to facilitate student learning.

ATSW 2.12 Understand principles and procedures for organizing and implementing lessons, and use this knowledge to promote student learning and achievement.

ATSW 2.13 Understand the relationship between student motivation and achievement and how motivational principles and practices can be used to promote and sustain student cooperation in learning.

ATSW 2.14 Understand communication practices that are effective in promoting student learning and creating a climate of trust and support in the classroom, and how to use a variety of communication modes to support instruction.

ATSW 2.15 Understand uses of technology, including instructional and assistive technology, in teaching and learning; and apply this knowledge to use technology effectively and to teach students how to use technology to enhance their learning.

ATSW 3. The Professional Environment (ACEI 5)

ATSW 3.16 Understand the history, philosophy, and role of education in New York State and the broader society.

ATSW 3.17 Understand how to reflect productively on one's own teaching practice and how to update one's professional knowledge, skills, and effectiveness.

ATSW 3.18 Understand the importance of and apply strategies for promoting productive relationships and interactions among the school, home, and community to enhance student learning.

ATSW 3.19 Understand reciprocal rights and responsibilities in situations involving interactions between teachers and students, parents/guardians, community members, colleagues, school administrators, and other school personnel.

ATSW 4. Instruction and Assessment Constructed Response Assignment (ACEI 1)