Name of Grant Program: 2006 Content Institute Program **Fund Codes:** 171/151

Priority Areas and Content Topics

➢ *FIRST PRIORITY*

SCIENCE AND TECHNOLOGY/ENGINEERING

The upcoming high school science competency determination required for graduation has been a catalyst for schools and districts to re-examine their local science and technology/engineering curriculum, instruction, and assessments. In addition, the high school science and technology/engineering standards were revised recently and approved by the Board of Education. To support schools and districts in the improvement of science and technology/engineering education, these areas will receive top priority for funding this year.

Proposed institutes should address the science and technology/engineering knowledge needed for teaching the 2006 revised high school learning standards or the grades PreK-8 learning standards of the 2001 Massachusetts Science and Technology/Engineering Curriculum Framework http://www.doe.mass.edu/frameworks/current.html. These institutes should help prepare educators in meeting the content requirements for one or more of the following licenses: biology; chemistry; earth science; physics; technology/engineering; middle school science; middle school mathematics/science; elementary science; elementary; moderate disabilities; academically advanced; or English as a second language. Proposed institutes should assist teachers to become highly qualified in the content area that they are teaching, particularly in high need areas, such as introductory physics and technology/engineering.

Elementary, Middle, and High
All applicants should analyze district and/or school data to choose the topics most in need of being addressed in that district or school.

High
Proposed institutes at the high school level should address the 2006 revised standards. These institutes should include substantial hands-on laboratory experiences that are designed to enhance the understanding of the content standards. Providers are also encouraged to integrate mathematics into their science and technology/engineering institutes.

➢ *SECOND PRIORITY*

MATHEMATICS

Proposed institutes should address the mathematical knowledge needed for teaching the learning standards in the 2000 Massachusetts Mathematics Curriculum Framework and the May 2004 Supplement to the Massachusetts Mathematics Framework. They should also address the knowledge needed for obtaining an educator license in these fields: elementary mathematics; middle school mathematics; middle school mathematics/science; mathematics (8-12); elementary; moderate disabilities; academically advanced; or English as a second language.

Elementary, Middle, and High
Topics of proposed institutes should be based on an analysis of student performance on MCAS. Applicants should analyze district and/or school data to choose which of the mathematics topics are most in need of being addressed in that district or school.

Problem solving, communication, reasoning, connecting, and representing should also be an integral part of all mathematics institutes.

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ENGLISH LANGUAGE ARTS

Proposed institutes should address the English language arts knowledge needed for teaching the standards of the 2001 Massachusetts English Language Arts Curriculum Framework and the May 2004 Supplement to the Massachusetts English Language Arts Framework. They should also address the knowledge needed for obtaining an educator license in these fields: elementary; moderate disabilities; academically advanced; English as a second language; middle school humanities; English; library; or reading.

Applicants should analyze district and/or school data to choose which topics are in most need of being addressed in that district or school.

Elementary, Middle, and High

Writing

Writing institutes for elementary, middle, or high school teachers should focus on the fundamentals of writing or improving the writing of narrative, expository, and essays that analyze literature. Readings may come from a wide range of sources and periods. Writing institutes may also focus on writing in the content areas of mathematics, science and technology/engineering, and history/social science.

Literature

Literature institutes should focus on the study of particular works of literature, critical essays, and author studies. Institutes for teachers at the high school level may propose an advanced literature institute that provides teachers with an opportunity to study a variety of ways to analyze literature, to study texts, and accompanying critical theory.

THE ARTS

Proposed institutes should address the knowledge needed for teaching the learning standards in the 1999 Arts Curriculum Framework and for obtaining an educator license in the following fields: elementary; moderate disabilities; English as a Second Language; academically advanced; music; dance; theatre; and/or visual arts.

Elementary, Middle, High

Institutes should relate and connect the arts to selected topics addressed in the subject area curriculum frameworks (mathematics, history/social science, English/language arts, and science and technology/ engineering).