

MASSACHUSETTS DEPARTMENT OF EDUCATION

Recommended Criteria for Evaluating Instructional Materials and Programs in Reading

Choosing instructional materials and programs in any subject area is a very important task. Comprehensive programs should provide coherence across grade levels, reflect a scientific research base, promote achievement of approved state learning standards, support a full range of pedagogical approaches for learners of differing achievement levels, and provide for cumulative building of skills over multiple instructional sessions and years. Beyond that, districts and schools will still have many options.

The criteria recommended on the following pages for evaluating instructional materials and programs in reading are designed to help districts, schools, and teachers reassess the strengths and weaknesses of the programs and materials they have in place, as well as assess the strengths and weaknesses of programs and materials being considered for implementation. The criteria for reading appear in the federal Reading First grant applications.

The Massachusetts Department of Education does not mandate specific programs. While no program is likely to fulfill all the criteria in the following checklists, these checklists can assist educators in evaluating the benefits and limitations of the features and components of instructional materials and programs

Recommended Criteria for Evaluating Instructional Materials and Programs in Reading

Reading	Strongly Agree	Agree	Cannot Judge	Disagree	Strongly Disagree
I. Reading Contents					
Reflect the learning standards in the English Language Arts Curriculum Framework					
Include quality literary/non-literary selections					
Include science and history selections					
Highlight works of authors suggested in Appendix A of the Massachusetts English Language Arts Curriculum Framework					
Highlight works of authors suggested in Appendix B of the Massachusetts English Language Arts Curriculum Framework					
Contain selections with an appropriately challenging vocabulary of English words					
Contain selections with all non-English words italicized and footnoted					
Include predictable texts, leveled texts, and both fictional and non-fictional trade books					
Include reading materials in which approximately 75% of the words are decodable, for practicing phonic elements already taught					
Include biographical information on authors represented in the selections					

Reading	Strongly Agree	Agree	Cannot Judge	Disagree	Strongly Disagree
Include illustrations that depict the diversity of our culture					
II. Pedagogical Features					
A. Phonological Awareness					
Provide ways to identify and work with individual phonemes in spoken words: isolating, identifying, blending, segmenting, deleting, adding, substituting					
Provide ways to identify and produce oral rhymes					
Provide ways to identify and work with onsets and rhymes in spoken syllables					
Provide ways to identify and work with syllables in spoken words					
B. Systematic Phonics					
Provide a clearly identified, logically coordinated and sequenced set of letter-sound relationships					
Provide explicit and systematic teaching of these letter-sound relationships					
Provide for application of knowledge of letter-sound relationships in decodable texts					
C. Fluency					
Explain how to model fluent oral reading followed by student rereading					
Explain how to assess student oral reading rate					
Explain how to promote student oral reading with expression					
Explain how to enhance student comprehension while reading aloud					
Explain how to direct and monitor repeated oral reading					
Include guidance in providing students with opportunities for supplemental, independent silent reading					
D. Vocabulary					
Provide for direct instruction of important words in a text before reading it					
Provide for direct instruction of frequently used words in a text before reading it					
Provide for direct instruction of difficult words such as compound words, homographs, homophones before reading text					
Provide direct instruction in using word parts (prefixes, suffixes, base words, and Greek and Latin roots)					
Provide direct instruction in using dictionaries and other references					
Provide direct instruction in ways to use context to understand word meaning: definitions, restatements, examples, descriptions					
E. Text Comprehension					
Provide guidelines for teaching comprehension strategies: direct explanation; modeling; guided practice; application; using prior knowledge; using mental imagery					
Provide explicit instruction on skills or to promote their use					
Cumulatively build a repertoire of skills and strategies					
Explain how to promote and monitor student use of active comprehension strategies before, during, and/or after independent silent reading: using graphic and semantic					

Reading	Strongly Agree	Agree	Cannot Judge	Disagree	Strongly Disagree
organizers; answering questions; generating questions; recognizing narrative and expository structure; summarizing					
III. Learning Activities					
Fit into a research-based, conceptual framework for the concepts and skills taught					
Fit into coherent units that build conceptual understanding					
Use a variety of pedagogical strategies: e.g., open-ended questioning, direct instruction, practice, discussion and flexible grouping patterns					
Are developmentally appropriate					
Encourage student discussion and reflection					
Enrich and reinforce skills and strategies for extended learning					
Provide explicit strategies for students reading significantly below grade level					
Provide enrichment and acceleration for advanced readers					
Involve students in active learning and problem solving					
Offer multiple ways for students to explore, analyze, and communicate concepts and ideas					
IV. Teacher Support Materials					
Provide complete, useful teacher manuals					
Provide supplemental materials for the full range of students, from those with reading difficulties to those reading above grade level					
Provide a master list of materials and resources					
Provide adequate skill practice					
Reference resources (software, laser disks, Internet sites, videos)					
Suggest how to adapt materials and instruction for students with differing levels of achievement					
Suggest a variety of assessment approaches: portfolios, projects and informal and formal assignments and tests					
Draw on a variety of resources (e.g., trade manuals, literature, Internet, visuals)					
V. Student Assessment Materials					
Are free of inappropriate or derogatory material					
Occur throughout, not merely at the end of a unit					
Focus on the acquisition of skills and concepts as well as on the learning process					
Provide for assessment of major reading skills and strategies					
Incorporate multiple forms of assessment: oral presentations, written reports, compositions, teacher observations, performance assessments, quizzes and pre-and post tests					
VI. Program Development and Implementation					
Provide field tests data showing positive effects on student learning for similar population					
Are adaptable to local curriculum and school					
Offer professional development training and long-term follow up for teachers					

Criteria for Evaluating Instructional Materials and Programs in Mathematics

Mathematics	Strongly Agree	Agree	Cannot Judge	Disagree	Strongly Disagree
I. Mathematical Contents					
Reflect the learning standards in the Mathematics Curriculum Framework					
Are mathematically accurate					
II. Features					
Provide descriptions of the achievements of historically important mathematicians					
Contain illustrations of contemporary children and adults that reflect the diversity of our society					
Include clear instructions on using tools, equipment, and materials					
Include a master source of materials and resources					
Provide student texts, booklets, or printed material and accompanying teacher manuals					
Provide coherent units that build conceptual understanding					
Provide for in-depth investigations of major mathematical concepts					
Incorporate applications of mathematics					
Highlight connections within mathematics and with the natural and social sciences where relevant					
III. Learning Activities					
Involve students in active learning, inquiry, and problem solving					
Involve the use of manipulatives to explore, model, and analyze					
Clarify appropriate use of instructional technology such as calculators and computers					
Show how instructional technology can help students visualize complex concepts, analyze and refine information, and communicate solutions					
Provide multiple ways for students to explore concepts and communicate ideas and solutions					
Are developmentally appropriate and provide for different abilities and learning paces					
Encourage discussion and reflection					
Draw on a variety of resources (e.g., trade manuals, measuring tools, other tools and machines, manipulatives, and the Internet)					
Show students how to use standard algorithms for basic arithmetic operations					
IV. Teacher Support Materials					
Provide a clear conceptual framework for the concepts and skills taught					
Offer ideas for involving parents and community and keeping them informed about the programs					

Mathematics	Strongly Agree	Agree	Cannot Judge	Disagree	Strongly Disagree
Give suggestions for a variety of pedagogical strategies, such as open-ended questioning, direct instruction, practice, discussion, and cooperative learning					
Reference resource materials, such as appropriate videos, file clips, reference books, software, video laser disk, long-distance learning, CD-ROM, and electronic bulletin boards					
Suggest how to adapt materials for students with differing levels of achievement					
Suggest enrichment and skill reinforcement activities for extended learning					
Include suggestions for a variety of assessment approaches such as portfolios, journals, projects, and informal and formal tests					
V. Student Assessment Materials					
Are free of inappropriate or derogatory material					
Contain a balance among activities that assess conceptual understanding, procedural skill, and problem solving ability					
Occur throughout the unit, not just at the end					
Incorporate multiple forms of assessment, such as oral presentations, written reports, teacher observations, performance assessments, quizzes, and pre- and post-tests					
Focus on the acquisition of skills and concepts as well as on the learning process					
VI. Program Development and Implementation					
Have field test data showing positive effects on student learning					
Are adaptable to local curriculum and/or school					
Offer training and long-term follow up for teachers					

Criteria for Evaluating Instructional Materials and Programs in Science and Technology/Engineering

Science and Technology/Engineering	Strongly Agree	Agree	Cannot Judge	Disagree	Strongly Disagree
I. Scientific and Technological Contents					
Reflect the learning standards in the Science and Technology/Engineering Curriculum Framework					
Are scientifically and technologically accurate					
II. Features					
Provide descriptions of the achievements of historically important scientists and engineers					
Contain illustrations of contemporary children and adults that reflect the diversity of our society					
Include clear instructions on using tools, equipment, and materials, and on how to use them safely in learning activities					
Include a master source of materials and resources					
Provide student texts, booklets, or printed material and accompanying teacher manuals					
Provide coherent units that build conceptual understanding					
Provide for in-depth investigations of major scientific and technological concepts					
Incorporate applications of science and technology					
Highlight connections within science and technology and with mathematics and social sciences where relevant					
III. Learning Activities					
Involve students in active learning and inquiry					
Clarify appropriate use of instructional technology such as calculators and computers					
Show how instructional technology can help students visualize complex concepts, analyze and refine information, and communicate solutions					
Provide multiple ways for students to explore concepts and communicate ideas and solutions					
Are developmentally appropriate and provide for different abilities and learning paces					
Encourage discussion and reflection					
Draw on a variety of resources, e.g., trade manuals, measuring tools, other tools and machines, manipulatives, and the Internet					
IV. Teacher Support Materials					
Provide a clear conceptual framework for the concepts and skills taught					
Offer ideas for involving parents and community and keeping them informed about the programs					
Give suggestions for a variety of pedagogical strategies, such as open-ended questioning, direct instruction, practice, discussion, and cooperative learning					

Science and Technology/Engineering	Strongly Agree	Agree	Cannot Judge	Disagree	Strongly Disagree
Reference resource materials, such as appropriate videos, file clips, reference books, software, video laser disk, long-distance learning, CD-ROM, and electronic bulletin boards					
Suggest how to adapt materials for students with differing levels of achievement					
Suggest enrichment and skill reinforcement activities for extended learning					
Include suggestions for a variety of assessment approaches such as portfolios, journals, projects, and informal and formal tests					
V. Student Assessment Materials					
Are free of inappropriate or derogatory material					
Occur throughout the unit, not just at the end					
Incorporate multiple forms of assessment, such as oral presentations, written reports, teacher observations, performance assessments, quizzes, and pre- and post-tests					
Focus on the acquisition of skills and concepts as well as on the learning process					
VI. Program Development and Implementation					
Have field test data showing positive effects on student learning					
Are adaptable to local curriculum and/or school					
Offer training and long-term follow up for teachers					