

Mathematics Program Selection Criteria – January 2008

<i>Criteria</i>	<i>Program: Math Trailblazers</i>
Alignment with GLE's	Yes; aligns with the NCTM Principles and standards for School Mathematics
Research of Effectiveness	The TIMS Project, founded in 1984 by 2 researchers, led to the development and field testing of the <i>Math Trailblazers</i> Program from 1990-1996. Content strands are based on research relative to conceptual understanding and skill acquisition. Improvement in student achievement was tracked over a 5 year period in districts using the program in Kansas, Iowa and Illinois.
Depth/breadth of textbook, workbook, resource materials, etc.	Multiple sources – Student Guide Book provides definitions, practice examples and homework; Student workbook; manipulatives
Assessments in classroom	Formative assessment in the form of observations, math journals, labs, and activity pages. Summative assessment are fact tests, end of unit tests in grades 3-5, quarterly tests in grades 3-5, end of year tests
Parent communication component	Letters to introduce each unit, homework activities that involve family participation, website for parents
Enrichment component	There are extension lessons which are designed for differentiation, not necessarily enrichment. There are also Challenges for deeper thinking.
Student Grouping (grade or ability level)	Grade level instruction with differentiated activities for work with smaller groups in need of review or remediation
Common Language with GLE's	Vocabulary is included in each lesson
Teacher Support Materials and Training	Teacher materials are comprehensive, but difficult to “wade through”. Teacher training is offered during the summer with an e-mail forum to post questions for other teachers and text authors
Problem Solving Emphasis	Problem solving is included in all of the units. Students discuss strategies and explain their thinking/work in solving the problems.
Real-Life Applications	Problems that are included within the units are based on real-life applications
Integration of Technology	Teachers have a CD in Grades 3-5 that provided assessment materials and student material builder
Current Flow into Middle School	materials for K-5. The program is not used in any school system in RI
Use of Manipulatives & Program Integration	Manipulatives are integrated throughout all of the units
Cost	See attached materials