

INTRODUCTION

The *Maryland School Assessment (MSA)* is a measure of students' reading and mathematics comprehension. The *MSA* fulfills recommendations of the Visionary Panel for Better Schools and meets the federal testing requirements of the *No Child Left Behind Act (NCLB)* of 2001.

New academic standards were designed to inform parents, teachers, and educators of what students actually learned in schools and to make schools accountable for teaching contents measured by the *MSA*. To this end, the Maryland State Department of Education (MSDE), in collaboration with hundreds of educators across the state, developed a series of math tests to measure students' achievement against the new academic standards.

In 2003, the *MSA-Math* was introduced in grades 3, 5, and 8; grades 4, 6, and 7 were added to the program in 2004.

The purpose of the 2008 *MSA-Math Technical Report* is to provide users and other interested parties with a general overview and statistical results of the *MSA-Math*.

The 2008 *Technical Report* is composed of four sections. The first section contains the following information:

- General overview and purposes of the *MSA-Math*
- Development and review of the 2008 *MSA-Math* items and test
- Test form design, test form specifications, item type, and item roles
- Test administration
- Operational item analyses
- Field test analyses
- Linking, equating, and scaling procedures
- Score interpretation
- Test validity
- Unidimensionality analyses
- Item bank construction
- Quality assurance

The second section provides the 2008 MSA-Math results for students in grades 3 through 8. It contains information about the cutoff score and pass rate at each performance level for the 2008 math tests.

After an overview of statistical summaries in the third section, the last section contains statistical summaries of the 2008 MSA-Math. This section outlines the statistical and psychometric characteristics of the 2008 MSA-Math.

Three appendices provide additional statistical results for the 2008 MSA-Math: Appendix A contains stratified random sampling results; Appendix B contains 2008 MSA-Math scale score histograms and Tukey charts; Appendix C contains both classical and Rasch (One-Parameter Logistic Item Response Theory) item parameters. The last appendix contains test blueprints for grades 3 through 8.