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, 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 and grades 4, 6, and 7 were added to the program in 2004. In addition, it should be noted that the MSA-Math was contracted to Harcourt Assessment, Inc starting with spring 2007.

The purpose of the 2007 *MSA-Math Technical Report* is to provide users and other interested parties with a general overview and statistical results of the MSA-Math.

The 2007 *Technical Report* is composed of four parts, and the first part contains the following information:

- General overview and purposes of the MSA-Math
- Development and review of the MSA-Math
- Test administration
- Operational test analyses
- Field test analyses
- Linking, equating, and scaling
- Score interpretation
- Test validity
- Unidimensionality analyses
- Item bank construction
- Quality assurance

The second part provides the 2007 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 2007 math tests.

The third part contains statistical summaries for the 2007 MSA-Math. This part outlines the statistical and psychometric characteristics of the 2007 MSA-Math.

Five appendices provide additional statistical results for the 2007 MSA-Math: Appendix A contains stratified random sampling results; Appendix B contains 2007 MSA-Math scale score histograms and Tukey charts; Appendix C contains Year 2006 MSA-Math recalibration results from 3PL *IRT* to the Rasch model using equipercentile method; Appendix D contains both classical and *item response theory (IRT)* item parameters; Appendix E contains test blueprints for grades 3 through 8.