

Missouri
Assessment
Program
Grade-Level
Assessments



Guide to
Interpreting
Results

Summative Assessments
English Language Arts/Literacy,
Mathematics, and
Science

Revised March 2015

This guide has been prepared by CTB to provide an overview for interpreting reports generated from the Missouri Assessment Program (MAP). It is intended to help educators apply MAP data to the needs of individual students and the district as a whole.

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Introduction

Educational Assessment: A Primary Tool

Assessment, or testing, fulfills a vital role in today's educational environment. Assessment results often are a major force in shaping public perceptions about the capabilities of our students and the quality of our schools. As a primary tool for educators and policymakers, assessment is used for many important purposes. Educators use assessment results to help improve teaching and learning and to evaluate programs and schools. Policy decisions are often based, in part, on assessment data. Because of its important role, educational assessment is used in every school, district, and state. It is vital to innovation, higher standards, and educational excellence.

Originally developed in response to Missouri's Outstanding Schools Act of 1993, the **Missouri Assessment Program (MAP)** encompasses several statewide assessments that meet state and federal statutory requirements. **MAP Grade-Level Assessments** are administered to students in grades 3 through 8 to determine their progress toward the Show-Me Standards/Missouri Learning Standards. As directed by the Outstanding Schools Act, the Show-Me Standards were developed by the Missouri Department of Elementary and Secondary Education (DESE), in cooperation with teachers, school administrators, parents and business professionals throughout the state, to identify the knowledge, skills, and competencies that Missouri students should acquire prior to graduating from high school. For a more detailed explanation of the Show-Me Standards, refer to the DESE website (<http://dese.mo.gov/show-me-standards>). The Missouri Learning Standards articulate the Show-Me Standards in each content area across the grade levels. MAP Grade-Level Assessment items are aligned with the Missouri Learning Standards, which are available on the DESE website (<http://dese.mo.gov/college-career-readiness/curriculum/missouri-learning-standards>).

The spring 2015 Grade-Level MAP includes the following required assessments:

English Language Arts (ELA)—Grades 3–8

Mathematics—Grades 3–8

Science—Grades 5 and 8

For students in grades 3, 4, 6, and 7, the ELA and Mathematics assessments require approximately 1½ to 2 hours of test administration time per content area. For students in grades 5 and 8, the assessments require approximately 3 to 4 hours of test administration time per content area for ELA and Mathematics. In addition, students in grades 5 and 8 take a Science assessment requiring an additional 2 to 2½ hours of test administration. All assessments are administered online, unless students require a Braille, Large Print, or paper/pencil form as an accommodation.

For all grade levels (3 through 8), the MAP Grade-Level Assessments in ELA and Mathematics include multiple items types. **Selected-response items** (also known as multiple-choice), present students with a question followed by three or more response options. **Short text items** require students to type an appropriate response. **Technology-enhanced items** use innovative technology to allow students to demonstrate their knowledge in ways that are not possible using paper/pencil assessments. For example, the items may include embedded video or audio; they may require students to drag and drop data into a table, click on “hot spots” within a graphic, or indicate their response on a grid. Short text items are scored by trained readers using specific criteria. Trained readers are always humans, not machines. Some technology-enhanced items (for example, gridded response items) are machine scorable. Others are scored by trained readers.

The ELA and Mathematics assessments in grades 5 and 8 also include a **performance task**. Prior to the performance task, all students participate in a 30-minute classroom activity. Performance tasks require students to provide a series of responses. In ELA, the performance task includes research questions and a full-write essay. The research questions require students to interpret provided informational sources, which are the foundation for the full-write essay. In Mathematics, the performance task may require students to do such things as simulate a study and present and interpret data in a table or graph. Students are required to explain their responses; and often the task allows more than one approach to arrive at a correct response. The ELA full-write essay is scored by trained readers using a 6-point rubric that evaluates purpose and organization, evidence and elaboration, and conventions. The Mathematics performance task is also scored by trained readers using scoring criteria that are specific to each task.

The MAP Grade-Level Assessments in Science include selected-response items, as well as **constructed-response items**, which require students to supply their answer (similar to short text items), and **performance events**. Similar to the ELA and Mathematics performance tasks, Science performance events require students to provide an extended response, and require students to apply their knowledge and understanding in real-life situations. Like the ELA and Mathematics short text items and performance tasks, the Science constructed-response items and performance events are scored by trained readers using established scoring criteria.

The Department uses the information obtained through MAP to monitor the progress of Missouri's students toward meeting the Show-Me standards in order to inform the public and the state legislature about student performance and to help make informed decisions about educational issues. The information obtained through MAP provides the academic performance data that drive student services throughout the state. The **MAP reports** provide useful information for determining the performance of individual students, as well as student performance at the classroom, building, and district levels.

Assessment Terms and Types of Scores

Familiarity with the testing terms and the types of scores used in the MAP reports and other components will help you interpret test information accurately and efficiently.

MAP Scale Score

CTB uses the student's correct responses to derive a MAP scale score. The scale score describes achievement on a continuum that in most cases spans the complete range of Grades 3–8. These scores range in value from 2300 to 2800 for English Language Arts and Mathematics and from 470 to 895 for Science. Within a content area, scores from adjacent grades may be compared. Scale scores cannot be compared across content areas. For example, it is appropriate to compare a student's Grade 5 Mathematics scale score with his or her Grade 6 Mathematics scale score. The MAP scale score determines the student's achievement level. The MAP scale score ranges for each achievement level can be found beginning on page 4 of this guide. Within a content area, scale scores can be added, subtracted, and averaged. A student receives a MAP scale score when he or she makes a valid attempt in any content area.

Achievement Levels

Student performance can be reported in terms of four performance, or achievement, levels that describe a pathway to proficiency and college and career readiness. Each achievement level represents standards of performance for each assessed content area (English Language Arts, Mathematics, and Science). Panels drawn from educational, business, and professional communities determined the achievement standards. Achievement-level scores provide a description of what students can do in terms of the content and skills assessed, as described in the Missouri Learning Standards.

Claim-Level Performance

In English Language Arts and Mathematics, student performance can also be reported at the claim level. Each claim is an evidence-based statement about what students know and can do, as demonstrated by their performance on the assessments. Claim performance levels are reported in terms of three levels of proficiency: below, at/near, and above.

Lowest Obtainable Scale Score and Level Not Determined

Within each grade level and content area, a Lowest Obtainable Scale Score (LOSS) is established for students whose scores are below the level expected by guessing. Students with certain accommodations that impact the construct being assessed (e.g., read-aloud of ELA passages for students in grades 3–5) also receive a LOSS.

A student may receive “Level Not Determined” (LND) instead of a MAP scale score. Students that receive LND are not assigned to an achievement level. Students may receive LND for either of the following reasons:

- A student does not attempt any items in one or more content areas of the MAP test.
- A student is absent for all testing sessions for a particular content area.

Standard Error of Measurement

No test provides a perfect measure of a student's ability. This situation is expected because all tests have a known Standard Error of Measurement (SEM). The SEM reports the amount of variability that can be expected in a student's test score due to the inherent imprecision of the test. The SEM for the MAP test will be reported in the 2015 MAP Technical Report.

Achievement-Level Descriptors

English Language Arts, Reporting Achievement-Level Descriptors

Grades 3–5

Below Basic (Level 1)

The student has not met the achievement standard and needs substantial improvement to demonstrate the knowledge and skills in English language arts/literacy needed for likely success in future coursework.

MAP score ranges:

Grade 3: Below 2367

Grade 4: Below 2416

Grade 5: Below 2442

Basic (Level 2)

The student has nearly met the achievement standard and may require further development to demonstrate the knowledge and skills in English language arts/literacy needed for likely success in future coursework.

MAP score ranges:

Grade 3: 2367–2431

Grade 4: 2416–2472

Grade 5: 2442–2501

Proficient (Level 3)

The student has met the achievement standard and demonstrates progress toward mastery of the knowledge and skills in English language arts/literacy needed for likely success in future coursework.

MAP score ranges:

Grade 3: 2432–2489

Grade 4: 2473–2532

Grade 5: 2502–2581

Advanced (Level 4)

The student has exceeded the achievement standard and demonstrates advanced progress toward mastery of the knowledge and skills in English language arts/literacy needed for likely success in future coursework.

MAP score ranges:

Grade 3: 2490+

Grade 4: 2533+

Grade 5: 2582+

Grades 6–8

Below Basic (Level 1)

The student has not met the achievement standard and needs substantial improvement to demonstrate the knowledge and skills in English language arts/literacy needed for likely success in entry-level credit-bearing college coursework after high school.

MAP score ranges:

Grade 6: Below 2457

Grade 7: Below 2479

Grade 8: Below 2487

Basic (Level 2)

The student has nearly met the achievement standard and may require further development to demonstrate the knowledge and skills in English language arts/literacy needed for likely success in entry-level credit-bearing college coursework after high school.

MAP score ranges:

Grade 6: 2457–2530

Grade 7: 2479–2551

Grade 8: 2487–2566

Proficient (Level 3)

The student has met the achievement standard and demonstrates progress toward mastery of the knowledge and skills in English language arts/literacy needed for likely success in entry-level credit-bearing college coursework after high school.

MAP score ranges:

Grade 6: 2531–2617

Grade 7: 2552–2648

Grade 8: 2567–2667

Advanced (Level 4)

The student has exceeded the achievement standard and demonstrates advanced progress toward mastery of the knowledge and skills in English language arts/literacy needed for likely success in entry-level credit-bearing college coursework after high school.

MAP score ranges:

Grade 6: 2618+

Grade 7: 2649+

Grade 8: 2668+

Mathematics, Reporting Achievement-Level Descriptors

Grades 3–5

Below Basic (Level 1)

The student has not met the achievement standard and needs substantial improvement to demonstrate the knowledge and skills in mathematics needed for likely success in future coursework.

MAP score ranges:

Grade 3: Below 2381

Grade 4: Below 2411

Grade 5: Below 2455

Basic (Level 2)

The student has nearly met the achievement standard and may require further development to demonstrate the knowledge and skills in mathematics needed for likely success in future coursework.

MAP score ranges:

Grade 3: 2381–2435

Grade 4: 2411–2484

Grade 5: 2455–2527

Proficient (Level 3)

The student has met the achievement standard and demonstrates progress toward mastery of the knowledge and skills in mathematics needed for likely success in future coursework.

MAP score ranges:

Grade 3: 2436–2500

Grade 4: 2485–2548

Grade 5: 2528–2578

Advanced (Level 4)

The student has exceeded the achievement standard and demonstrates advanced progress toward mastery of the knowledge and skills in mathematics needed for likely success in future coursework.

MAP score ranges:

Grade 3: 2501+

Grade 4: 2549+

Grade 5: 2579+

Grades 6–8

Below Basic (Level 1)

The student has not met the achievement standard and needs substantial improvement to demonstrate the knowledge and skills in mathematics needed for likely success in entry-level credit-bearing college coursework after high school.

MAP score ranges:

Grade 6: Below 2473

Grade 7: Below 2484

Grade 8: Below 2504

Basic (Level 2)

The student has nearly met the achievement standard and may require further development to demonstrate the knowledge and skills in mathematics needed for likely success in entry-level credit-bearing college coursework after high school.

MAP score ranges:

Grade 6: 2473–2551

Grade 7: 2484–2566

Grade 8: 2504–2585

Proficient (Level 3)

The student has met the achievement standard and demonstrates progress toward mastery of the knowledge and skills in mathematics needed for likely success in entry-level credit-bearing college coursework after high school.

MAP score ranges:

Grade 6: 2552–2609

Grade 7: 2567–2634

Grade 8: 2586–2652

Advanced (Level 4)

The student has exceeded the achievement standard and demonstrates advanced progress toward mastery of the knowledge and skills in mathematics needed for likely success in entry-level credit-bearing college coursework after high school.

MAP score ranges:

Grade 6: 2610+

Grade 7: 2635+

Grade 8: 2653+

Science

Science Achievement-Level Descriptors will be available by July 1, 2015.



Sample Reports

Individual Student Report

The Individual Student Report provides information about performance on the MAP Grade-Level Assessments, describing results in terms of four levels of achievement in a content area. For English Language Arts and Mathematics, a student's strength or weakness at the claim level is also reported. This information may be used for instructional planning, as a point of reference during a parent/teacher conference, and for permanent record keeping. Other sources of information, such as classroom performance, should be used along with this report when determining the student's areas of strength or need.

Achievement-level scores describe what students can do in terms of the content and skills assessed by the MAP. Because the English Language Arts and Mathematics Missouri Learning Standards are grounded in expectations for college and career readiness, the MAP Grade-Level Assessments are designed to measure each student's progress toward meeting those expectations. Teachers, students, and parents/guardians can use this information in addition to how the student performs in the classroom to determine what skills and abilities need to be acquired to enable the student to progress to higher achievement levels. A student in the Proficient or Advanced level has met the standard. Students in the Below Basic and Basic levels have typically mastered skills described for their levels on pages 4–5, but need to work on skills in higher levels.

A Student Report for:

This area of the report is reserved for the name and biographical data of the student taking the assessment.

B How did your child perform in English Language Arts?

This is your child's scale score. The scale score is also printed in the left column under "Overview of Performance."

C Your child's achievement level is Proficient.

Achievement levels (whether Advanced, Proficient, Basic, or Below Basic) are based on the test score ranges listed beneath each Achievement Level shown in the center column.

D Overview of Performance

The **Scale Score** is derived from student responses to assessment items. It summarizes the overall level of performance attained by your child for a particular content area.

E Claim Information (for ELA and Mathematics only)

English Language Arts and Mathematics are comprised of claims. Within each claim, student performance is reported as "Below Standard," "At/Near Standard," or "Above Standard." A description of each claim is provided.

Missouri Grade-Level Assessment Program

2015 Individual Student Report



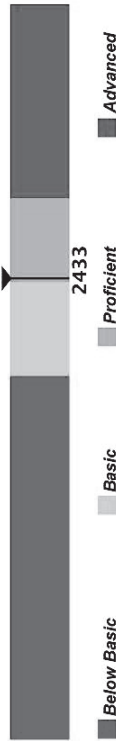
A Student Report for:

Name **WEBBER, PEGGY**
 Student ID **1234567890**
 Birthdate **MM/DD/YYYY**
 Grade **3**
 School **ADAIR CO. ELEM.**
 District **ADAIR CO.**

B How did your child perform in English Language Arts? Your Child received a score of 2433.

One way to measure performance is by achievement levels, which are based on scale scores. Achievement levels describe what your child's score means.

Your child's achievement level is **Proficient**.



Advanced

Scores of 2490 and above demonstrate a thorough understanding of the content at this grade level.

Proficient

Scores at 2432-2489 demonstrate an understanding of the content expected at this grade level.

Basic

Scores at 2367-2431 demonstrate a partial understanding of the content expected at this grade level.

Below Basic

Scores at 2366 and below do not demonstrate an understanding of the content expected at this grade level.

D Overview of Performance

Scale Score: 2433

This report provides information about achievement on the Missouri Assessment Program (MAP).

It is the policy of the Missouri Department of Elementary and Secondary Education not to discriminate on the basis of race, color, religion, gender, national origin, age, or disability in its programs or employment practices as required by Title VI and Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, the Age Discrimination Act of 1975 and Title II of the Americans with Disabilities Act of 1990. Inquiries related to the Department programs and to the location of services, activities, and facilities that are accessible by persons with disabilities may be directed to the Jefferson State Office Building, Office of the General Counsel, Coordinator-Civil Rights Compliance (Title VI/Title IX/504/ADA/Age Act), 6th Floor, 205 Jefferson Street, P.O. Box 480, Jefferson City, MO 65102-0480; telephone number (573) 526-4757 or TTY (800) 735-2966, fax (573) 522-4883, email civilrights@dese.mo.gov.

A single exam can provide only limited information. You should confirm your child's strengths and needs in these topics by reviewing classroom work, standards-based assessments, and your child's progress reports during the year.

For more resources, go to <http://dese.mo.gov/>

C What does a level of "Proficient" mean?

The student has met the achievement standard and demonstrates progress toward mastery of the knowledge and skills in English language arts/literacy needed for likely success in future coursework.

E

Reading	Writing	Listening	Research
Above Standard Students can read closely and analytically to comprehend a range of increasingly complex literary and informational texts.	Above Standard Students can produce effective and well-grounded writing for a range of purposes and audiences.	Above Standard Students can employ effective speaking and listening skills for a range of purposes and audiences.	Above Standard Students can engage in research and inquiry to investigate topics, and to analyze, integrate, and present information.



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03/04/15

Student Label

MISSOURI ASSESSMENT PROGRAM Dalbey, Kori A A Grade: 8 Test Date: MM/DD/YY DOB: MM/DD/YY MOSIS State ID: 0123456789	Content Area	English Language Arts	
	Achievement Level	Proficient	B
	MAP Scale Score	2596	C

Above is a sample of the MAP student label. The student label is designed so that each student's test results can be placed in the student's permanent record. A label is provided for every student who participated in the spring 2015 administration of the MAP. Each label has a self-adhesive backing so that it can be peeled from the sheet and placed in the student's cumulative school record. The label presents a snapshot of the student's results on the MAP. Separate labels are generated for each grade and content area; thus, a student will have multiple labels for each of the content areas administered within a grade.

- A** The left side of the label lists the name and biographical data of the student taking the assessment.
- B** This is the student's Achievement Level (Advanced, Proficient, Basic, or Below Basic).
- C** This is the student's Scale Score for the content area listed at the top of the label.



Notice of Non-Discrimination

It is the policy of the Missouri Department of Elementary and Secondary Education not to discriminate on the basis of race, color, religion, gender, national origin, age, or disability in its programs or employment practices as required by Title VI and VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, the Age Discrimination Act of 1975, and Title II of the Americans with Disabilities Act of 1990.

Inquiries related to Department employment practices may be directed to the Jefferson State Office Building, Human Resources Director, 8th Floor, 205 Jefferson Street, P.O. Box 480, Jefferson City, MO 65102-0480; telephone number (573) 751-9619 or TYY (800) 735-2966. Inquiries related to Department programs and to the location of services, activities, and facilities that are accessible by persons with disabilities may be directed to the Jefferson State Office Building, Office of the General Counsel, Coordinator–Civil Rights Compliance (Title VI/Title IX/504/ADA/Age Act), 6th Floor, 205 Jefferson Street, P.O. Box 480, Jefferson City, MO 65102-0480; telephone number (573) 526-4757 or TYY (800) 735-2966, email civilrights@dese.mo.gov.

Anyone attending a meeting of the State Board of Education who requires auxiliary aids or services should request such services by contacting the Executive Assistant to the State Board of Education, Jefferson State Office Building, 205 Jefferson Street, Jefferson City, MO 65102-0480; telephone number (573) 751-4446 or TTY (800) 735-2966.

Inquiries or concerns regarding civil rights compliance by school districts or charter schools should be directed to the local school district or charter school Title IX/non-discrimination coordinator. Inquiries and complaints may also be directed to the Office for Civil Rights, Kansas City Office, U.S. Department of Education, 8930 Ward Parkway, Suite 2037, Kansas City, MO 64114; telephone number (816) 268-0550; FAX (816) 823-1404; TDD (877) 521-2172.



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