# Wisconsin Student Assessment System

# Interpretive Guide for Students and Parents

## Grades 4 • 8 • 10

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**Wisconsin Department of Public Instruction**
**Elizabeth Burmaster, State Superintendent**

## Knowledge and Concepts Examinations

# State of Wisconsin
## Department of Public Instruction

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**Elizabeth Burmaster**
State Superintendent

April 2004

Dear Students and Parents:

Public school students have completed this year's testing under the 2003–04 Wisconsin Student Assessment System *Wisconsin Knowledge and Concepts Examinations* (WKCE). These examinations were administered at grades 4, 8, and 10 as required by s. 118.30, Wis. Stats. The test results will provide important information about what students know and are able to do in core academic areas.

Fundamental to every student's success in school is a clear set of expectations for academic achievement. By August 1, 1998, each school board should have adopted the Wisconsin Model Academic Standards issued by the governor in January 1998 as an executive order under s. 14.23, Wis. Stats., or have adopted their own academic standards.

The WKCE results are reported by the proficiency categories of Advanced, Proficient, Basic, Minimal Performance, and Pre-Requisite Skills. These categories were established by determining what all students must know and be able to do at the beginning of grades 4, 8, or 10 in order to be successful at mastering the Model Academic Standards by the end of the school year. Each academic content area is treated as a separate test, and separate proficiency results are reported for reading, language arts, mathematics, science, and social studies. Writing scores based on proficiency categories are not provided; only holistic scores are reported. Students are asked to respond in writing to a variety of prompts, which include the following purposes and modes: expressive writing (narrative or descriptive), informative or expository writing, and persuasive writing.

Criterion-referenced scores are reported, allowing users to make score interpretations of a student's performance in relation to a specified performance standard or criteria, rather than in comparison to the performance of other test-takers.

The purpose of the WKCE is to measure whether students meet the pupil academic standards adopted by each local school board. The results of the examinations are used by the Department of Public Instruction as an accountability measure for schools and districts, as required by state and federal laws. Beginning in the school year 2002–2003, under s. 118.33, Wis. Stats., each school board is required to adopt a written policy (The Grade Advancement Policy), specifying the criteria for promoting a student from the fourth to the fifth grade and from the eighth to the ninth grade. The criteria must include the WKCE test score, pupil academic performance, recommendations of teachers based on academic performance, and any other academic criteria identified by the local school board. This promotion policy must include the pupil's WKCE score administered to students enrolled in grades 4 and 8 under s. 118.30, Wis. Stats. The law went into effect September 1, 2002.

I encourage you to study the requirement of the law and to look closely at your WKCE scores. If the student has not performed in the Proficient or Advanced category, it is important to communicate with teachers to help the student improve academic skills in order to achieve his or her highest potential.

Sincerely,

*Elizabeth Burmaster*

Elizabeth Burmaster
State Superintendent

# Wisconsin Knowledge and Concepts Examinations (WKCE)

The *Wisconsin Knowledge and Concepts Examinations* (WKCE) have two parts. The first part includes multiple-choice items and short-answer items. The second part requires the student to respond to a writing test.

## Multiple-Choice and Short-Answer Examinations

For multiple-choice items, the student selects a response, usually from four choices. These answers are machine-scored. Short-answer items allow students to demonstrate their skills in more complex levels of thinking and are scored by a professional staff experienced in providing reliable and consistent hand-scoring services. Students receive partial credit for partially answered questions.

The following are the content areas covered in the WKCE:

> *Reading/Language Arts:* Basic and higher-order skills essential for effective communication—reading comprehension, language expression, vocabulary, and reference skills—are integrated in one test to provide a comprehensive assessment experience. Directions, passages, and test questions are linked by themes that provide context and stimulate interest. The test involves the student in thinking critically and creatively, solving problems, and constructing meaning.

> *Mathematics:* Real-world topics engage students' interest, provide context, and encourage confidence in their ability to do mathematics. Procedures such as estimation and mental computation are interwoven through the test. Computation items are included, many of them in a realistic setting to provide students with a sense of purpose. Reading and interpreting graphs, and principles of geometry and measurement are also assessed.

> *Science:* Core concepts in the traditional subject areas of life science, physical science, and Earth and space science are covered, as well as key science inquiry skills. The ability to recognize, understand, and apply scientific principles and methods is measured in the context of situations students encounter in their everyday lives. Many questions tap higher-order thinking skills such as analysis, synthesis, and evaluation.

> *Social Studies:* Thematic units interrelate social studies concepts; primary sources and real-world materials such as maps, political cartoons, diary entries, photographs, and art provide students with authentic experiences. The test represents different cultures, geographic areas, and perspectives to help ensure equity for all students. In its framework, question formats, and graphics, the test emphasizes the interrelationships of history, geography, government, and economics.

## Wisconsin Writing Assessment—Grades 4, 8, and 10

The Wisconsin Department of Public Instruction has developed a customized writing assessment that was administered at grades 4, 8, and 10 beginning in the fall of 2002 as part of the enhanced *Wisconsin Knowledge and Concepts Examinations.*

This customized writing assessment includes rubrics based on the Wisconsin Model Academic Standards in English Language Arts as well as writing prompts developed, reviewed, and field-tested in Wisconsin.

In the writing portion of the *Wisconsin Knowledge and Concepts Examinations,* students plan, write, and edit a composition on a specific topic (prompt) within a specified time frame. Since the fall of 2002, students' essays have been scored using anchor and training papers written by Wisconsin students under standardized testing conditions. These exemplar papers take into account the draft and impromptu nature of the writing situation.

The writing prompts that may be used on the WKCE include the following purposes and modes: expressive writing (narrative or descriptive); informative or expository writing; and persuasive writing.

*Expressive (Narrative or Descriptive)* writing presents persons, places, and subjects related to a specific theme and made vivid by complete and relevant action and sensory images.

*Informative or Expository* writing presents autobiographical information, descriptions of people and places, character sketches, fictional narratives, eyewitness reports, field notes, interview profiles, journalistic writing, fictional narratives, concepts/ideas, cause and effect, and literary analysis.

*Persuasive* writing presents a paired proposal-solution, essays, letters, editorials, critical analysis essays, reviews, response to issues or events, and speeches in support of a specific point of view.

Wisconsin's customized writing assessment is grounded in the Wisconsin Model Academic Standards, which stress the importance of writing for a variety of purposes and audiences.

## Composing and Conventions Rubrics

Each student's paper is scored using two holistic rubrics: a 6-point composing rubric that measures students' ability to write purposeful, focused, and organized prose directed clearly and effectively to an audience; and a 3-point conventions rubric that measures students' ability to control the conventions of standard written English appropriate to each grade level tested.

## Relationship of the Impromptu Essay Score to the WKCE Language Arts Score

The maximum number of raw score points that an essay can earn is 9. During the fall 2003 administration of the WKCE, the points earned on the impromptu essay at grade 10 were incorporated into the same scoring scale as all other points earned on the Language Arts portion of the examination. Because the 10th-grade WKCE examination this year is a fully customized instrument, the essay (or "extended constructed response") was built into the test design. At grades 4 and 8, however, the points earned on the impromptu essay are not incorporated into the same scoring scale as the other points earned on the Language Arts portion of CTB/McGraw-Hill's *TerraNova* examination.

# Types of WKCE Scores

## Proficiency Scores: Their Categories and Characteristics

**Advanced**—Demonstrates in-depth understanding of the academic knowledge and skills tested on the WKCE.

**Proficient**—Demonstrates competency in the academic knowledge and skills tested on the WKCE.

**Basic**—Demonstrates some academic knowledge and skills tested on the WKCE.

**Minimal Performance**—Demonstrates very limited academic knowledge and skills tested on the WKCE.

## Criterion-Referenced Scores

**Scale Score**—This shows the basic score for this assessment. It is used primarily to provide a basis for across-form, across-year comparisons of test performance. Scale scores are calculated by applying sophisticated computational procedures directly to the pattern of student responses to the items.

**Holistic Score**—This is a scoring procedure yielding a single score based on overall student performance rather than on an accumulation of points. Holistic scoring uses rubrics, or scoring criteria, for evaluation.

**Criterion-Referenced Test**—An assessment that allows its user to make score interpretations of a student's performance in relation to a specified performance standard or criteria, rather than in comparison to the performance of other test-takers.

Criterion-referenced scores indicate where a student stands in relation to the established Wisconsin Model Academic Standards. The most valuable use of criterion-referenced information is to identify a student's strengths and needs and to be able to plan instruction accordingly.

Criterion-referenced scale scores are affected by different combinations of test questions that students are able to answer correctly. Let's say both Student A and Student B correctly answered nine out of twenty test questions. Of the nine questions, Student A correctly answered six that were easy and three that were difficult. In contrast, Student B correctly answered nine easy questions. It is likely that Student A would receive a higher scale score than Student B because he or she correctly answered a few more difficult questions. Therefore, Student A would be estimated to be slightly more knowledgeable than Student B. Page 10 of this Interpretive Guide presents the scale score range for each of the four performance categories for each content area tested by the WKCE.

## Holistic Score

This is a scoring procedure that gives a single score based on overall student performance rather than on receiving a number of points. Holistic scoring uses rubrics to evaluate student performance.

Wisconsin Writing Rubric—6-Point Composing

  6.0    Exemplary control of the domain
  5.0    Advanced control of the domain
  4.0    Proficient control of the domain
  3.0    Adequate control of the domain
  2.0    Basic control of the domain
  1.0    Minimal control of the domain
  0.0    Off topic; no response; illegible; another language

Wisconsin Writing Rubric—3-Point Conventions

  3.0    Advanced Control—The response demonstrates advanced control of a wide range of conventions identified in the Wisconsin Model Academic Standards in English Language Arts

  2.0    Proficient Control—The response demonstrates proficient control of the essential conventions identified in the Wisconsin Model Academic Standards in English Language Arts

  1.0    Minimal Control—The response demonstrates minimal control of the essential conventions identified in the Wisconsin Model Academic Standards in English Language Arts

  0.0    Off topic; no response; illegible; another language

# How Do I Read the Individual Profile Report?

**A sample of the Individual Profile Report is found on page 7 of this guide.**

The *Wisconsin Knowledge and Concepts Examinations* provide information about educational achievement and skills in basic content areas. The sample 8th-grade Individual Profile Report on page 7 indicates an 8th-grade student's proficiency levels in Reading/Language Arts, Mathematics, Science, and Social Studies. The report will provide a complete record of the student's performance, including general information about achievements in these content areas as well as specific information about the student's levels of proficiency. This information can provide a basis for planning an educational program to meet specific academic needs.

## Page 1 of the Individual Profile Report

This report provides information about a student's achievement in five content areas in terms of four proficiency levels: Advanced, Proficient, Basic, and Minimal Performance. Using this report, parents and educators can compare student performance to proficiency levels defined by Wisconsin educators, and identify areas of relative strength and need. This report also provides an explanation of WKCE proficiency levels and the WKCE writing program scores.

## PROFICIENCY LEVELS

**Ⓐ  Identifying Information:** The student's name, grade, and birth date are shown in the left-hand panel of the report. You will also find the student's test date, school, and district name listed in the lower part of this panel.

**Ⓑ  Purpose:** This statement indicates what the report contains and how to use the data. This helps teachers and parents/guardians interpret the test results.

**Ⓒ  Proficiency Levels:** The chart provides information about student achievement in terms of proficiency levels. The proficiency levels are Advanced, Proficient, Basic, and Minimal Performance. The maximum score for each content area tested is provided.

For each subject, a scale score range for each proficiency level is indicated in *italics*. The bar graph indicates the proficiency level the student achieved in each content area. The number in **boldface** type above the bar graph shows the scale score obtained by the student. This score determines the proficiency level the student attained. It must be within the scale score range of the proficiency level the student is shown to have attained.

For example, the sample report shows that this 8th-grade student achieved a scale score of 683 in Reading, as shown, in bold, above the bar graph. This score falls within the Reading scale score range of 654–697, the Proficient level. This means that this student's performance falls into the "Proficient" proficiency level in Reading. This information shows how close the student's obtained score is to the upper and lower boundaries of the proficiency level.

**Ⓓ  Explanation of WKCE Proficiency Levels:** This section provides an explanation of the WKCE proficiency levels.

**WKCE Writing:** This section provides the type of writing mode the student was tested on. Each grade (4, 8, and 10) may have responded to a different writing prompt. If a student did not take the writing test, this section will be left blank. The writing scores include the 6-point Composing score and the 3-point Conventions score.

**F**
**Observations:** This section provides interpretive information about the individual student scores.



**2003–2004** **Wisconsin Student Assessment System**

Wisconsin Student Assessment System

**Individual Profile Report**

DEBORAH L SCHOENLEBER

Grade: 8 **A**

Simulated Data

**Purpose** **B**
This report presents information about a student's achievement in five subject areas, in terms of four proficiency levels: minimal performance, basic, proficient, and advanced. Using this report, parents and educators can compare student performance to proficiency levels, defined by Wisconsin educators, and identify areas of relative strength and need.

Birthdate: 02/08/88 **A**

Test Date: 11/03/03    Scoring: PATTERN (IRT)

School: ANYSCHOOL
District: ANYDISTRICT
State: WISCONSIN

CTB McGraw-Hill    Page 1

**Wisconsin Knowledge and Concepts Examinations Results**

| Proficiency Levels **C** | Reading | Language Arts | Mathematics | Science | Social Studies |
|---|---|---|---|---|---|
| | Maximum 820 | Maximum 819 | Maximum 872 | Maximum 857 | Maximum 803 |
| **4 Advanced** | | | | 796 | 740 |
| Scale Score Range | 698 - 820 | 702 - 819 | 730 - 872 | 717 - 857 | 693 - 803 |
| **3 Proficient** | 683 | | | | 672 |
| Scale Score Range | 654 - 697 | 668 - 701 | 682 - 729 | 682 - 716 | 662 - 692 |
| **2 Basic** | | | 657 | | |
| Scale Score Range | 633 - 653 | 644 - 667 | 659 - 681 | 660 - 681 | 639 - 661 |
| **1 Minimal Performance** | | | | | |
| Scale Score Range | 507 - 632 | 523 - 643 | 502 - 658 | 487 - 659 | 523 - 638 |

**Explanation of WKCE Proficiency Levels** **D**

**4 Advanced**
Demonstrates in-depth understanding of academic knowledge and skills tested on WKCE.
**3 Proficient**
Demonstrates competency in the academic knowledge and skills tested on WKCE.
**2 Basic**
Demonstrates some academic knowledge and skills tested on WKCE.
**1 Minimal Performance**
Demonstrates very limited academic knowledge and skills tested on WKCE.

**Observations** **F**
The **bold** number above the shaded bar for each subject indicates the student's scale score. A scale score is a measure of performance of this student on the WKCE subject area test. The numbers in italics in each of the columns indicate the scale score range for each of the proficiency levels. This allows you to see how close the student's score is to the upper and lower boundaries of the proficiency level. A student's scale scores do not have the same meaning across subjects, but may be compared to the student's scores for the same subject over time and to average scores of groups of students in that subject. For more information about scale scores and understanding this report see the *Interpretive Guide for Students and Parents* on the web at: http://www.dpi.state.wi.us/oea/kce_publn.html.

**WKCE Writing**    **Mode: Persuasive** **E**

**Composition: 3.0**
**Conventions: 1.5**    **Total Score: 4.5**
The extended writing sample is scored with two holistic rubrics. A six-point composing rubric evaluates students' ability to control purpose/focus, organization/coherence, development of content, sentence fluency, and word choice. A three-point conventions rubric evaluates students' ability to control punctuation, grammar, capitalization, and spelling. Points received on these two rubrics are combined to produce a single score on this report. Maximum possible score is nine points. The points earned on the extended writing sample are not included in either the Reading or Language Arts scale scores at grades 4 and 8. At grade 10, these points are included in the Language Arts scale score.

**A sample of page 2 of the Individual Profile Report is found on page 9 of this guide.**

## Wisconsin Student Assessment System (WSAS)

This report provides information about student performance on WSAS Supplemental Assessments and WSAS Alternate Assessments (WAA), if taken by the student. Using this report, parents and educators can compare student performance to define proficiency levels and identify areas of relative strength and need.

**Ⓐ** **Identifying Information:** The student's name, grade, and birth date are shown in the left-hand panel of the report. You will also find the student's test date, school, and district name listed in the lower part of this panel.

**Ⓑ** **Purpose:** This statement indicates what the report contains and how to use the data. This helps teachers and parents/guardians interpret the test results.

**Ⓒ** **WSAS Supplemental Assessment:** WSAS Supplemental Assessments are designed to assess content standards that do not lend themselves to statewide standardized testing. No WSAS Supplemental Assessments were administered in 2003–2004.

**Ⓓ** **WSAS Alternate Assessments (WAA):** The Wisconsin Student Assessment System Alternate Assessments section provides information on the WSAS Alternate Assessments, which are standards-based alternatives to the WKCE tests at grades 4, 8, and 10, and consist of DPI-approved protocols and rubrics for the local collection and local scoring of student work. Limited English-proficient students whose academic English skills are insufficient to support taking the WKCE test in English in the subject area with allowable language accommodations and students with disabilities who are not able to demonstrate some of the knowledge and skills on the WKCE test in the subject areas with allowable accommodations are required to take WSAS Alternate Assessments.

**Ⓔ** **WAA-LEP (WAA for Limited English-Proficient Students):** Students at English Proficiency level 1 or level 2 are required to participate in this assessment. Proficiency levels used in reporting WAA-LEP results correspond to those set for WKCE.
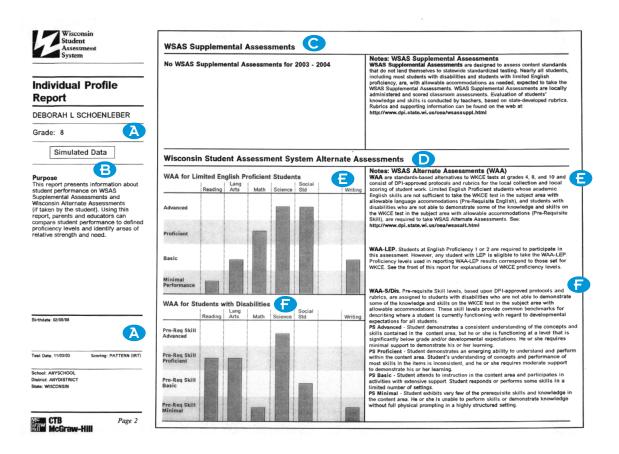
**F** **WAA S/Dis:** The WSAS Alternate Assessments are based upon DPI-approved protocols and rubrics, and are available to students with disabilities who are not able to demonstrate some of the knowledge and skills measured on the WKCE test in the subject area with allowable accommodations.

PS Advanced—Student demonstrates a consistent understanding of the concepts and skills contained in the content area, but he or she is functioning at a level that is significantly below grade and/or developmental expectations. He or she requires minimal support to demonstrate his or her learning.

PS Proficient—Student demonstrates an emerging ability to understand and perform within the content area. Student's understanding of concepts and performance of most skills in the items is inconsistent, and he or she requires moderate support to demonstrate his or her learning.

PS Basic—Student attends to instruction in the content area and participates in activities with extensive support. Student responds or performs some skills in a limited number of settings.

PS Minimal—Student exhibits very few of the prerequisite skills and knowledge in the content area. He or she is unable to perform skills or demonstrate knowledge without full physical prompting in a highly structured setting.

# WKCE Proficiency Definitions and
# Scale Score Performance Ranges

| | Proficiency Definitions |
|---|---|
| **Advanced** | Students demonstrate in-depth understanding of the academic knowledge and skills tested on the WKCE. |
| **Proficient** | Students demonstrate competency in the academic knowledge and skills tested on the WKCE. |
| **Basic** | Students demonstrate some academic knowledge and skills tested on the WKCE. |
| **Minimal Performance** | Students demonstrate very limited academic knowledge and skills tested on the WKCE. |

For more information about the academic proficiency definitions, see the DPI Web site at:
http://www.dpi.state.wi.us/oea/profdesc.html.

| Grade 4 | | | | | |
|---|---|---|---|---|---|
| | **Reading** | **Language Arts** | **Mathematics** | **Science** | **Social Studies** |
| **Advanced** | 653 – 780 | 658 – 757 | 649 – 770 | 663 – 799 | 639 – 763 |
| **Proficient** | 616 – 652 | 621 – 657 | 614 – 648 | 614 – 662 | 611 – 638 |
| **Basic** | 585 – 615 | 592 – 620 | 602 – 613 | 579 – 613 | 592 – 610 |
| **Minimal Performance** | 433 – 584 | 465 – 591 | 403 – 601 | 421 – 578 | 460 – 591 |

| Grade 8 | | | | | |
|---|---|---|---|---|---|
| | **Reading** | **Language Arts** | **Mathematics** | **Science** | **Social Studies** |
| **Advanced** | 698 – 820 | 702 – 819 | 730 – 872 | 717 – 857 | 693 – 803 |
| **Proficient** | 654 – 697 | 668 – 701 | 682 – 729 | 682 – 716 | 662 – 692 |
| **Basic** | 633 – 653 | 644 – 667 | 659 – 681 | 660 – 681 | 639 – 661 |
| **Minimal Performance** | 507 – 632 | 523 – 643 | 502 – 658 | 487 – 659 | 523 – 638 |

| Grade 10 | | | | | |
|---|---|---|---|---|---|
| | **Reading** | **Language Arts** | **Mathematics** | **Science** | **Social Studies** |
| **Advanced** | 711 – 838 | 740 – 835 | 769 – 892 | 740 – 893 | 714 – 821 |
| **Proficient** | 694 – 710 | 696 – 739 | 723 – 768 | 710 – 739 | 695 – 713 |
| **Basic** | 676 – 693 | 672 – 695 | 702 – 722 | 697 – 709 | 689 – 694 |
| **Minimal Performance** | 529 – 675 | 535 – 671 | 530 – 701 | 501 – 696 | 548 – 688 |