Illinois Standards Achievement Test

# Guide to the 2·0·0·1 Illinois State Assessment

Illinois State Board of Education · Division of Assessment
Ronald J. Gidwitz, Chairman · Glenn W. McGee, State Superintendent

In April 2001, students in grades 3, 5, and 8 took Illinois Standards Achievement Tests (ISAT) in reading, mathematics, and writing. Students in grades 4 and 7 took ISAT tests in science and social science. Grade 4 and 7 students also participated in statewide studies in fine arts and physical development and health.

ISAT measures the extent to which students are meeting the Illinois Learning Standards (1997). Illinois teachers and curriculum experts developed the ISAT tests in cooperation with the Illinois State Board of Education (ISBE).

Schools and districts receive a summary report and student roster for each grade tested, Individual Student Reports for each student, and a student data disk for each school or district. Districts receive a District Roster comprising a roster of schools in the district. No individual student results are reported for fine arts or physical development and health. Superintendents also receive a "District Summary," which is a roster by grade of the results of all schools in the district.

## School/District Reports

The ISAT scales for reading, mathematics, science, and social science range from 120 to 200. The ISAT scales for writing range from 6-32.

A school or district receives one four-page ISAT Performance Profile for each grade tested. The Profile is a summary of a school or district's performance on ISAT. These reports were designed so that the same general format encompasses all ISAT areas tested. Differences between the reading/mathematics/writing reports and the science/social science reports are noted below.

Page 1 of the ISAT school/district Profile presents the percent of students in each of four performance levels relative to the Illinois Learning Standards. The four performance levels are defined in the report and in Table 1. The numeric cutoff scores are presented in a separate table at the end of this section.

The "Standards Analysis" section that follows shows the percent of multiple-choice test items answered correctly for sets of standards within each learning area. These standard sets are defined in Table 2. The data reported in this section are for all students. To determine your school's strengths and weaknesses, comparisons should only be made between the school results in a particular standard set and corresponding district or state results. Because of potential differences in difficulty of items from one standard set to another, avoid direct comparisons among different standard sets. Only comparisons involving the same standard set are meaningful.

The Standards Analysis section also includes the average writing score for each of the three prompt types and the percent of students at each feature score point.

For reading and mathematics tables show how well students performed on the two extended-response items. The mathematics questions are scored on three dimensions: mathematics knowledge, strategic knowledge, and explanation. The reading questions are scored on one dimension. Each of the dimensions are scored on a scale of 0-4, with 4 representing the highest level of skill. The tables show the percent of scores at each score level.

The National Quarter Comparisons chart shows how students scored relative to national norms.[1] National norms are not reported for writing. The data reported in this section are for all students.

The final table presents the percent of student scores in each of the four performance levels for subgroups designated by gender, race/ethnicity, income, English proficiency, disability, and migrant status.

**Table 1**
**ISAT Performance Level Descriptions**

| |
|---|
| Exceeds Standards: Student work demonstrates advanced knowledge and skills in the subject. Students creatively apply knowledge and skills to solve problems and evaluate the results. |
| Meets Standards: Student work demonstrates proficient knowledge and skills in the subject. Students effectively apply knowledge and skills to solve problems. |
| Below Standards: Student work demonstrates basic knowledge and skills in the subject. However, because of gaps in learning, students apply knowledge and skills in limited ways. |
| Academic Warning: Student work demonstrates limited knowledge and skills in the subject. Because of major gaps in learning, students apply knowledge and skills ineffectively. |

[1] In order to provide national comparison data, samples of Illinois students took the ISAT tests and the Stanford Achievement Test, 9th Edition, a nationally normed test.

**Table 2**
**Definitions of Standards Sets Reported in School/District and Individual Student Reports**

Reading

*Comprehension: Literary Works:* Understanding of passages taken from sources such as novels, short stories, and periodicals. (Standards 1B, 1C, 2A, 2B, 5A, 5B, 5C)
*Comprehension: Informational Sources:* Understanding of nonfiction texts such as student periodicals, newspapers, and trade journals. (Standards 1B, 1C, 2A, 2B, 5A, 5B, 5C)
*Application of Strategies: Explicit Ideas:* Identifying important information directly stated in the text. (Standards 1B, 5A)
*Application of Strategies: Inferences from Text:* Analyzing important information in the text to draw logical conclusions about the text. (Standards 1C, 2A, 2B, 5B, 5C)
*Vocabulary:* Using contextual clues and other skills to understand key words, phrases, and concepts in literary and informational texts. (Standard 1A)
*Word Analysis (3rd grade only):* Using phonics, word pattern, and other word analysis skills to recognize new words. (Standard 1A)

Mathematics

*Estimation/Number Sense/Computation:* Includes items that may require students to demonstrate an understanding of numbers and their representations, estimate and perform number operations involving addition, subtraction, multiplication, division, percentages, fractions, ratios, and proportions of rational and irrational numbers, as appropriate to grade level. (Standards 6A, 6B, 6C, 6D, 8C)
*Algebraic Patterns and Variables:* Includes items that may require students to identify, describe, and extend geometric and numeric patterns and to construct and solve problems using variables, as appropriate to grade level. (Standards 8A, 8D)
*Algebraic Relationships/Representations:* Includes items that may require students to represent and interpret algebraic concepts with words, diagrams, tables, function notations, number lines, coordinate graphs, equations and inequalities, as appropriate to grade level. (Standard 8B)
*Geometric Concepts:* Includes items that may require students to identify and describe points, lines, angles, two- and three-dimensional shapes and their properties (including the Pythagorean Theorem). This may also include topics involving symmetry, parallel and perpendicular lines, number of sides, faces, and vertices, as appropriate to grade level. (Standard 9A)
*Geometric Relationships:* Includes items that may require students to sort, classify, compare, and contrast geometric figures. This may include properties such as similarity and congruency, as appropriate to grade level. (Standards 9B, 9D)
*Measurement:* Includes items that may require students to estimate, measure, compare, and convert (within measurement systems) quantities using appropriate units and acceptable levels of accuracy. This may include items that involve computing area, surface area, and volume, as appropriate to grade level. (Standards 7A, 7B, 7C)
*Data Organization and Analysis:* Includes items that may require students to create, analyze, display, and interpret data using a variety of graphs. This may include items such as pictures, tallies, tables, charts, bar graphs, and Venn diagrams, and the computation of mean, median, mode, and range for a set of data, as appropriate to grade level. (Standards 10A, 10B)
*Probability:* Includes items that may require students to determine, describe, and apply the probability of an event and to use fundamental counting principles, such as permutations and combinations of simple and complex events, as appropriate to grade level. (Standard 10C)

Writing Rubric Features

*Focus:* Maintaining a clear main idea/theme or point of view. (Standards 3B, 3C)
*Support:* Elaborating and/or explaining the main idea/theme or point of view by evidence and detailed reasons. (Standards 3B, 3C)
*Organization:* Exhibiting a clear structure or plan of development and a logical flow of ideas. (Standards 3A, 3B, 3C)

*Conventions:* Minimizing errors that interfere with communication, the number of errors in relation to the amount written, and the kinds of errors. (Standards 3A, 3B, 3C)
*Integration:* Using focus, support, organization, and conventions effectively to address the assignment. For persuasive tasks, students clearly and convincingly explain the position they took. For expository tasks, students clearly and coherently support the main point by specific details. For narrative tasks, students coherently develop the story through elaboration of actions, participants, and situations. (Standards 3B, 3C)

Science

*Scientific Inquiry:* Understanding and applying knowledge of experimental and technological design, including data analysis, use of scientific instruments, and the metric system. (Standards 11A, 11B)
*Life Sciences:* Understanding and applying knowledge of biology and ecology. (Standards 12A, 12B)
*Physical Sciences:* Understanding and applying knowledge of chemistry and physics. (Standards 12C, 12D)
*Earth and Space Sciences:* Understanding and applying knowledge of geology, weather, renewable resources, astronomy, and space science. (Standards 12E, 12F)
*Science, Technology, and Society:* Understanding and applying knowledge of safety, valid sources of data, and ethical practices. Understanding and applying knowledge of the history and sociology of science, ethics, environmental issues, and recycling. (Standards 13A, 13B)

Social Science

*Government:* Understanding and applying knowledge of political systems, including the basic principles and traditions of the U.S. government, the structure and functions of government, the election process, and foreign policy. (Standards 14A, 14B, 14D, 14F, 18B)
*Economics:* Understanding and applying knowledge of economic systems and the nature of the U.S. economy, including the choices people make in the production and distribution of goods and services and the relationship of governments to trade and economic practices. (Standards 15A, 15B, 15C, 15D, 15E)
*Geography:* Demonstrating the ability to locate places, regions, and features; to understand characteristics of Earth's physical system and the relationship between geographic factors and society; and to understand the historical significance of geography. (Standards 17A, 17B, 17C, 17D)
*United States History:* Understanding and analyzing the development of political events, economic systems, and social systems. (Standards 16A, 16B, 16C, 16D, 16E, 18A, 18B, 18C)
*Global Perspectives:* Understanding and applying knowledge of the political, economic, historical, social, and environmental events and conditions in the world beyond the United States. (Standards 14B, 14E, 16A, 16B, 16C, 16D, 16E, 18A, 18B, 18C)

## Individual Student Reports

Individual Student Reports help teachers and parent/guardians understand students' strengths and weaknesses in the areas tested. The reports also compare each student's achievement to other students in the school, district, and state. The Parent/Guardian Guide ("Understanding Your Child's ISAT Scores") that accompanies the Individual Student Reports describes all elements of the reports.

To determine student strengths and weaknesses in reading, mathematics, science, and social science, comparisons in Chart C should be made from the student results in a particular standard set to corresponding school, district, or state results. Because of potential differences in difficulty of items from one standard set to another, avoid direct comparisons among different standard sets for a given student.

Some blanks may appear in individual student reports. If any section of the report contains an "NA," it means that these ISAT scores are not available. This could occur, for example, because of student absences during testing.

## 2001 Statewide Results (All Students)

School/District Performance Profiles present statewide results for comparative purposes. The next section of this Guide provides statewide results that may be useful in interpreting the reports. It also provides a table of score ranges that are used to define the student performance levels.

The first series of ISAT charts shows student performance statewide relative to the four performance levels. The School/District Profiles present this information separately by grade. These charts simultaneously show all grades assessed within a learning area for comparative purposes.

The second series of ISAT charts shows the breakdown by national quarters. In 1999 for reading and mathematics and 2000 for science and social science a representative group of students at each grade took both ISAT and the Stanford Achievement Test, 9th edition, which was nationally normed in 1995. Statistical links between these two sets of scores allow national quarters data to be estimated for all tested students at each grade. National quarters data are not available for writing.

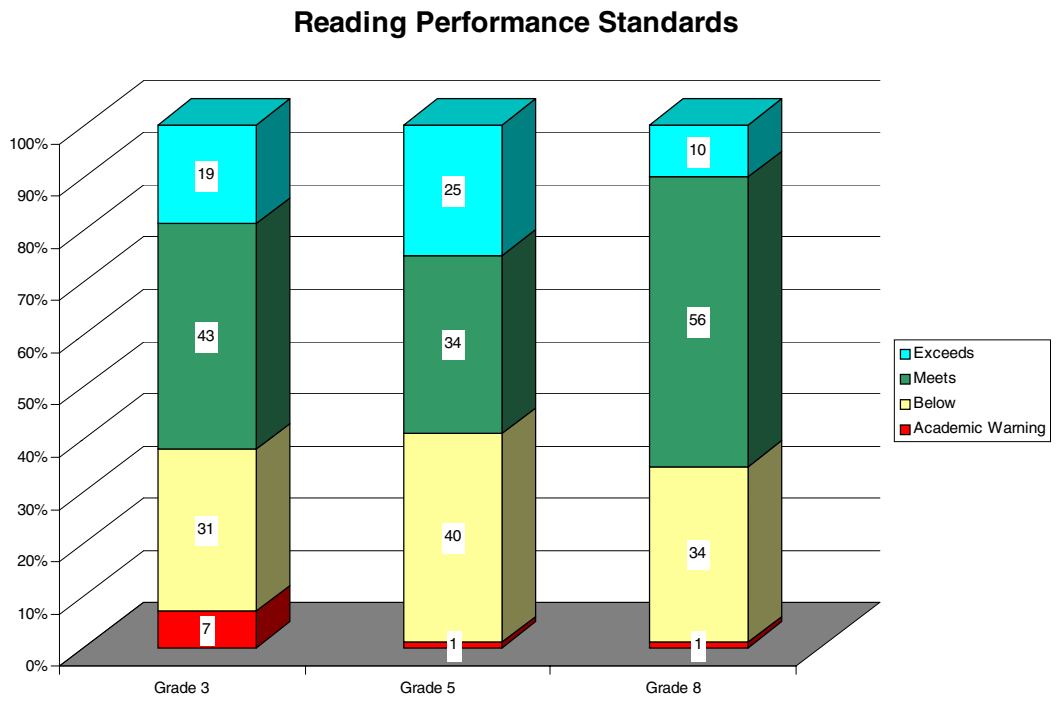
Table 4 shows the scale scores used to define each of the ISAT student performance levels. These cutoff scores do not change annually although the percent of students who fall at each level may shift from year to year.

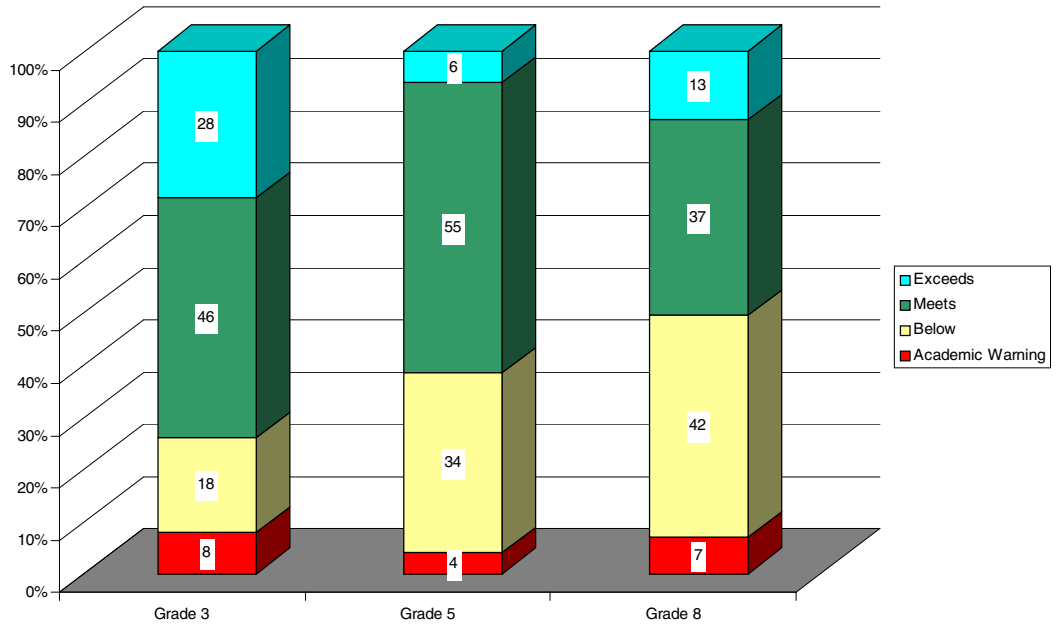
Table 4 shows ranges for each learning area on its respective scale. In reading, for example, a grade 3 student must obtain a scale score of 156 or higher to meet standards and a scale score of 174 or higher to exceed standards.

Table 5 shows the percent of students at each of these performance levels for 2001 as well as for 1999 and 2000.

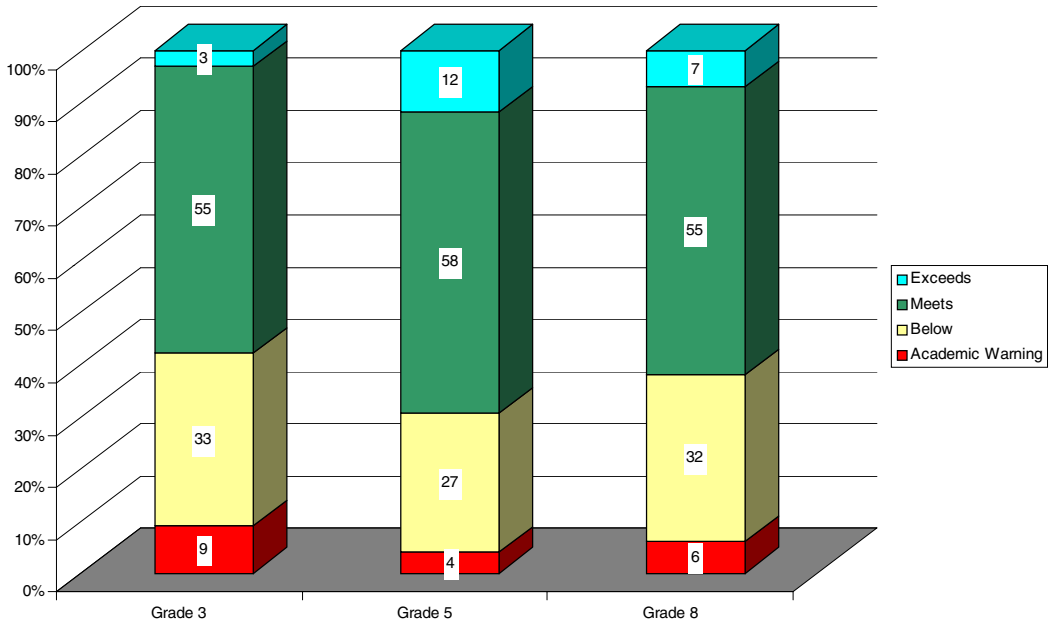
Note: For the 2000 ISAT the cut score range for Academic Warning for grade 4 science was changed from 120–129 to 120–138. The new cut score range is listed in Table 4 and the percents in performance levels in Table 5 reflect the change.

# ISAT: Percent of Students in Each Performance Level (All Students)

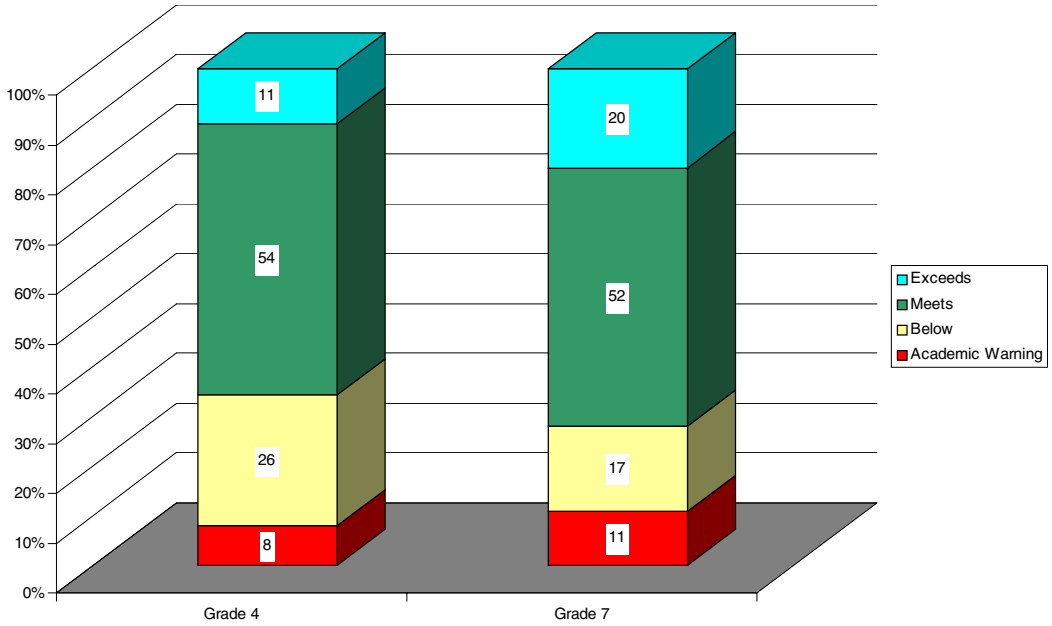


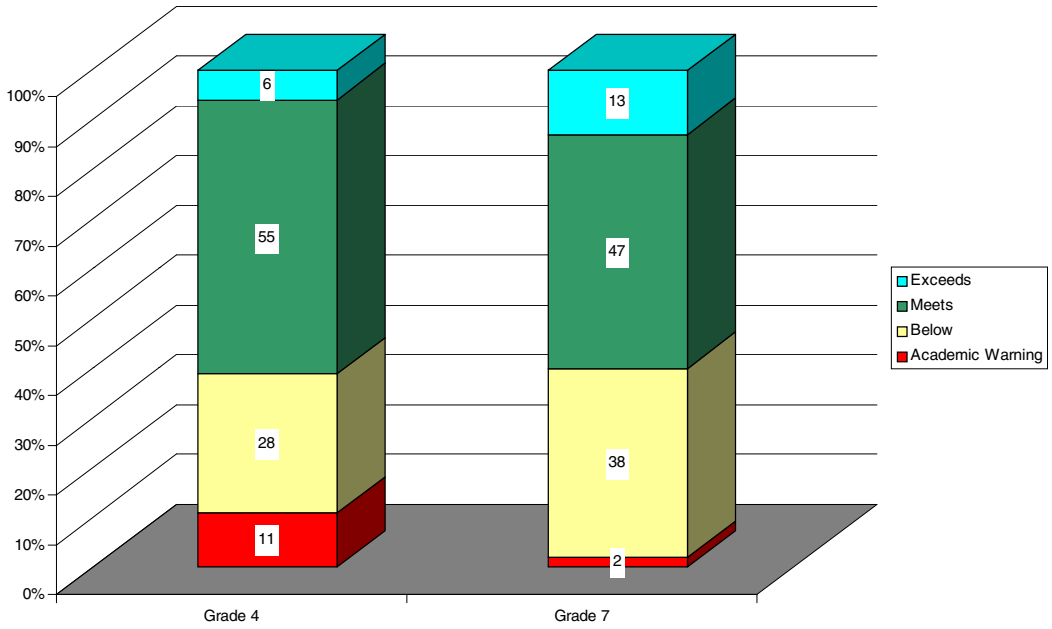
## Writing Performance Standards



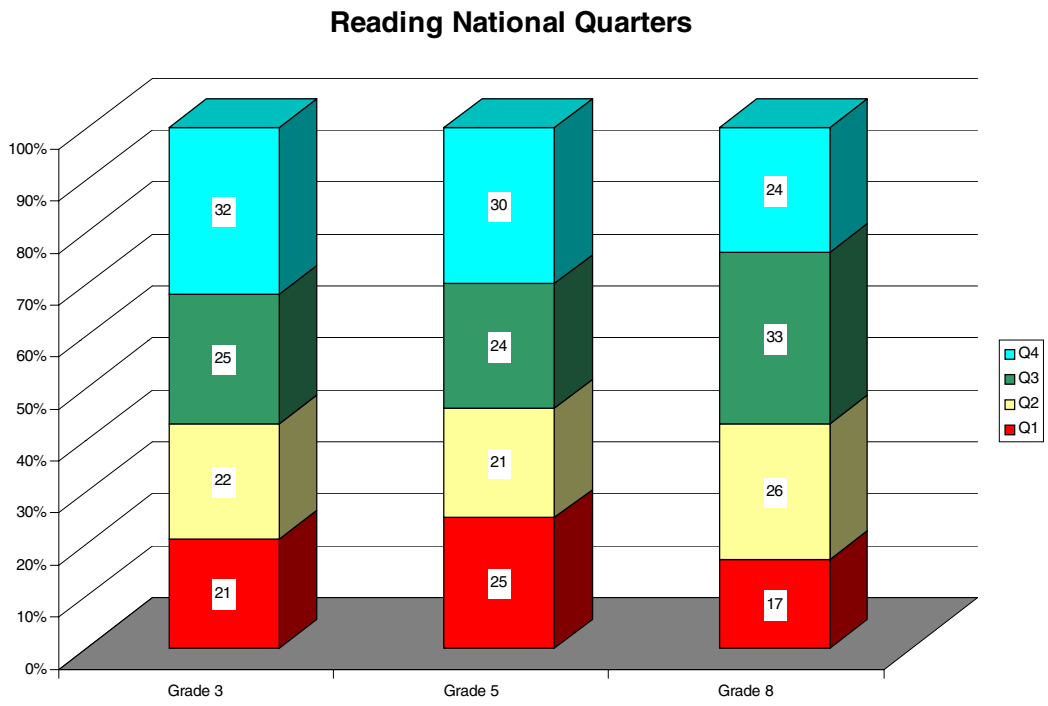
## Science Performance Standards

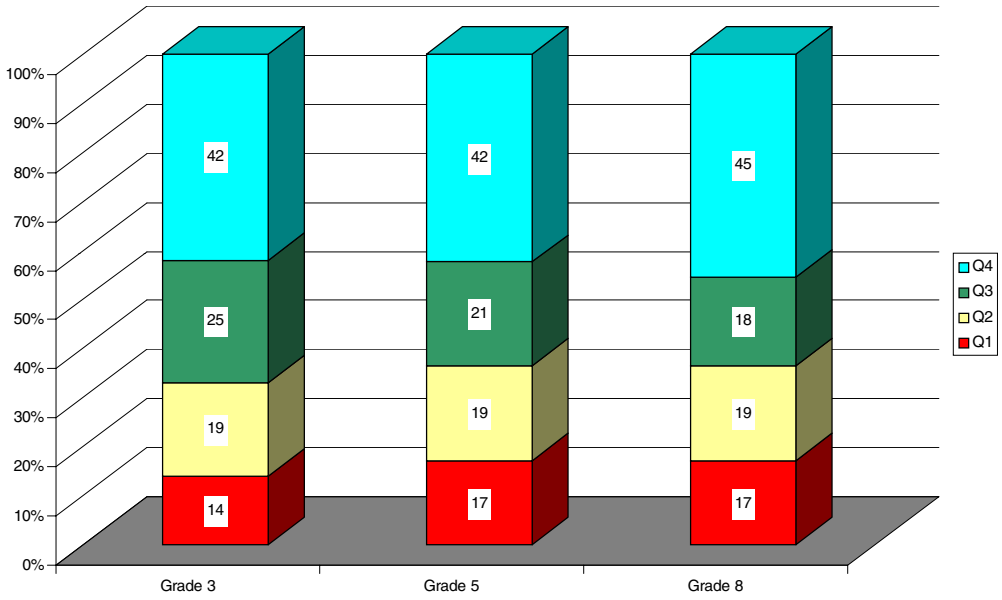



## Social Science Performance Standards

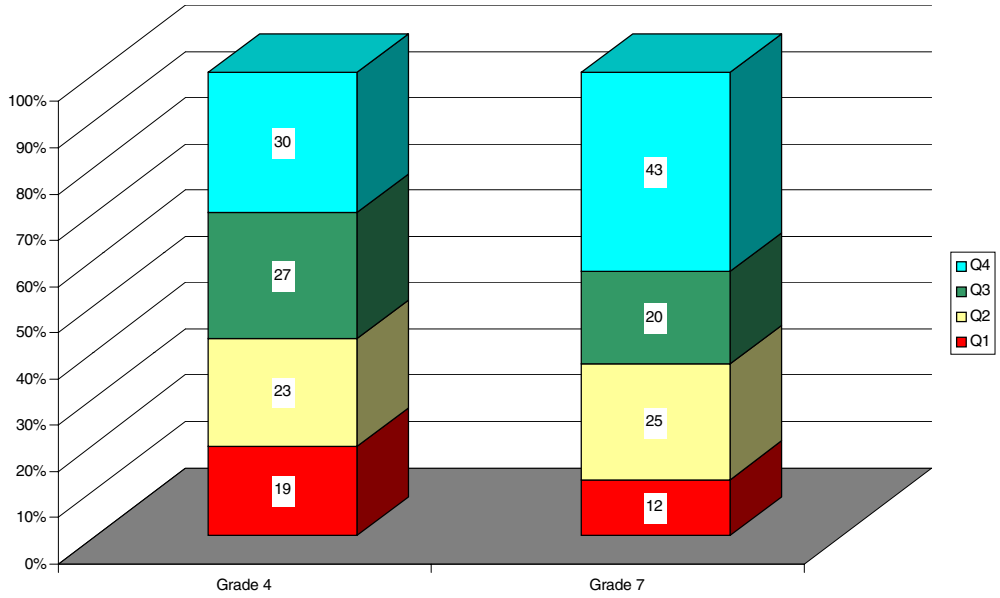


# ISAT: Percent of Students in Each National Quarter (All Students)



## Science National Quarters




## Social Science National Quarters

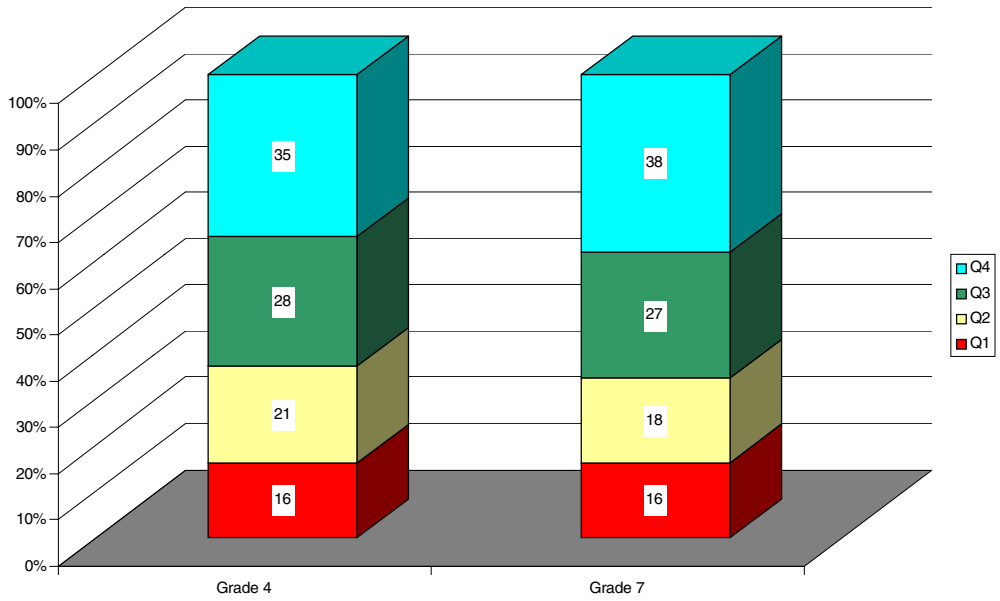


**Table 4**
**Scale Score Ranges That Define ISAT Student Performance Levels**

| Grade | Academic Warning | Below Standards | Meets Standards | Exceeds Standards |
|---|---|---|---|---|
| | | READING | | |
| 03 | 120-137 | 138-155 | 156-173 | 174-200 |
| 05 | 120-129 | 130-155 | 156-170 | 171-200 |
| 08 | 120-128 | 129-151 | 152-172 | 173-200 |
| | | MATHEMATICS | | |
| 03 | 120-141 | 142-152 | 153-172 | 173-200 |
| 05 | 120-137 | 138-157 | 158-190 | 191-200 |
| 08 | 120-137 | 138-161 | 162-184 | 185-200 |
| | | WRITING | | |
| 03 | 6-13 | 14-21 | 22-29 | 30-32 |
| 05 | 6-13 | 14-20 | 21-27 | 28-32 |
| 08 | 6-14 | 15-20 | 21-27 | 28-32 |
| | | SCIENCE | | |
| 04* | 120-138 | 139-153 | 154-178 | 179-200 |
| 07 | 120-141 | 142-150 | 151-174 | 175-200 |
| | | SOCIAL SCIENCE | | |
| 04 | 120-141 | 142-156 | 157-183 | 184-200 |
| 07 | 120-132 | 133-156 | 157-178 | 179-200 |

* For the 2000 ISAT the cut score range for Academic Warning for grade 4 science was 120-129

**Table 5**
**Percent of Students Falling Into Each ISAT Performance Level**

| | | READING | | |
|---|---|---|---|---|
| Grade 3 | Academic Warning | Below Standards | Meets Standards | Exceeds Standards |
| 1999 | 8 | 31 | 44 | 17 |
| 2000 | 6 | 32 | 41 | 21 |
| 2001 | 7 | 31 | 43 | 19 |
| Grade 5 | | | | |
| 1999 | 1 | 38 | 37 | 24 |
| 2000 | 0 | 41 | 39 | 20 |
| 2001 | 1 | 40 | 34 | 25 |
| Grade 8 | | | | |
| 1999 | 1 | 27 | 54 | 18 |
| 2000 | 0 | 28 | 56 | 16 |
| 2001 | 1 | 34 | 56 | 10 |

**Table 5 (continued)**

| MATHEMATICS | | | | |
|---|---|---|---|---|
| Grade 3 | Academic Warning | Below Standards | Meets Standards | Exceeds Standards |
| 1999 | 12 | 20 | 47 | 21 |
| 2000 | 10 | 21 | 46 | 23 |
| 2001 | 8 | 18 | 46 | 28 |
| | | | | |
| Grade 5 | | | | |
| 1999 | 6 | 39 | 53 | 3 |
| 2000 | 6 | 37 | 52 | 5 |
| 2001 | 4 | 34 | 55 | 6 |
| | | | | |
| Grade 8 | | | | |
| 1999 | 5 | 52 | 36 | 7 |
| 2000 | 8 | 46 | 35 | 12 |
| 2001 | 7 | 42 | 37 | 13 |

| WRITING | | | | |
|---|---|---|---|---|
| Grade 3 | Academic Warning | Below Standards | Meets Standards | Exceeds Standards |
| 1999 | 9 | 35 | 50 | 6 |
| 2000 | 6 | 38 | 53 | 2 |
| 2001 | 9 | 33 | 55 | 3 |
| | | | | |
| Grade 5 | | | | |
| 1999 | 2 | 23 | 52 | 23 |
| 2000 | 3 | 26 | 57 | 14 |
| 2001 | 4 | 27 | 58 | 12 |
| | | | | |
| Grade 8 | | | | |
| 1999 | 5 | 36 | 56 | 3 |
| 2000 | 3 | 27 | 59 | 11 |
| 2001 | 6 | 32 | 55 | 7 |

| SCIENCE* | | | | |
|---|---|---|---|---|
| Grade 4 | Academic Warning | Below Standards | Meets Standards | Exceeds Standards |
| 2000 | 8 | 28 | 51 | 13 |
| 2001 | 8 | 26 | 54 | 11 |
| | | | | |
| Grade 7 | | | | |
| 2000 | 12 | 16 | 54 | 18 |
| 2001 | 11 | 17 | 52 | 20 |

| SOCIAL SCIENCE | | | | |
|---|---|---|---|---|
| Grade 4 | Academic Warning | Below Standards | Meets Standards | Exceeds Standards |
| 2000 | 11 | 30 | 53 | 6 |
| 2001 | 11 | 28 | 55 | 6 |
| | | | | |
| Grade 7 | | | | |
| 2000 | 3 | 39 | 46 | 12 |
| 2001 | 2 | 38 | 47 | 13 |

* The score range that defines the Academic Warning performance level was changed for the 2001 grade 4 science test. No comparisons should be made from 2000 to 2001 results for the Academic Warning and Below Standards categories.