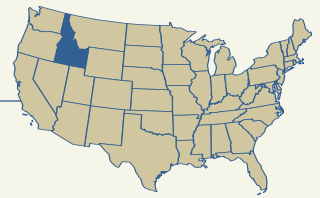


Idaho



Introduction

This study used data from the 2002 and 2006 administrations of Idaho’s state reading and math tests. We found that, compared with the other 25 states in this study, Idaho’s definition of “proficiency” in reading and mathematics is relatively consistent with the cut scores set by other states. In other words, Idaho’s tests are about average in terms of difficulty. However, Idaho’s cut scores for third-grade mathematics are less difficult than they are for eighth-grade students, meaning that the state might be overstating the number of younger students who are actually on track academically. Idaho policymakers might consider adjusting their cut scores to ensure equivalent difficulty at all grades so that parents and schools can be assured that elementary school students scoring at the proficient level are truly prepared for success later in their educational careers.

What We Studied: Idaho Standards Achievement Tests (ISAT)

Idaho currently uses the Idaho Standards Achievement Tests (ISAT), which test students in grades 2 through 10 in reading, mathematics, and language usage. Science is also tested in grades 5, 7, and 10. The version of ISAT administered during the study period was derived from NWEA’s Measures of Academic Progress (MAP) and constructed specifically for use with students in Idaho. The current study shows how proficiency levels in Idaho, as determined by cut scores on the ISAT/MAP, compare with the cut scores in use in other states. Because Idaho used NWEA’s scale for its state assessment, Idaho’s proficiency cut scores could be compared directly to those of other states without need to convert cut scores.

Part 1: How Difficult are Idaho’s Definitions of Proficiency in Reading and Math?

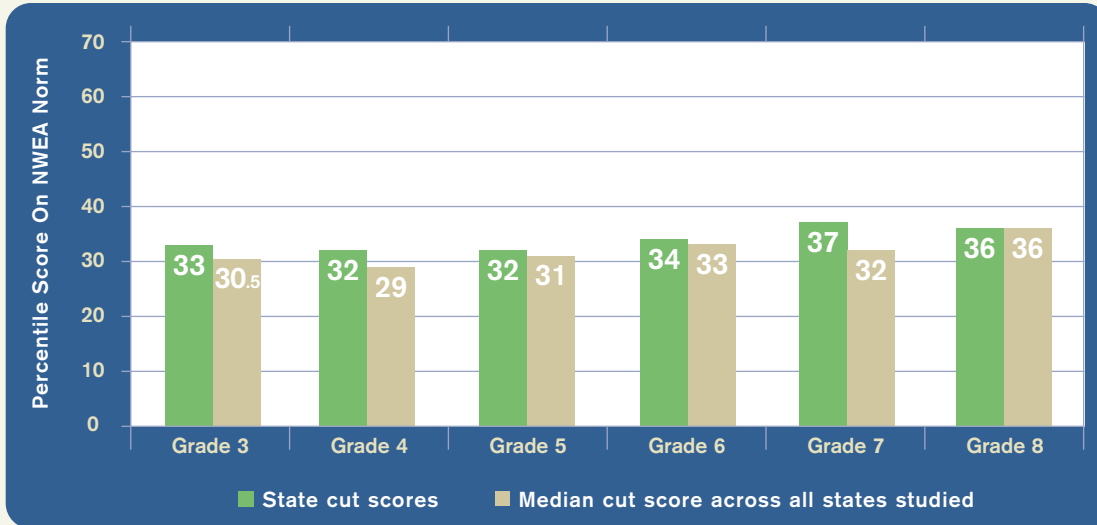
One way to evaluate the difficulty of a standard is to determine how many people attempting to attain it are likely to succeed. How do we know that a two-foot high bar is easy to jump over? We know because, if we asked 100 people at random to attempt such a jump, perhaps 80 would make it. How do we know that a six-foot high bar is challenging? Because only one (or perhaps none) of those same 100 individuals would successfully meet that challenge. The same principle can be applied to academic standards. Common sense tells us that it is more difficult for students to solve algebraic equations with two unknown variables than it is for them to solve an equation with only one unknown variable. But we can figure out exactly how much more difficult by seeing how many eighth graders nationwide answer both types of questions correctly.

We evaluated the difficulty of Idaho’s proficiency cut scores by estimating the proportion of students in NWEA’s multi-state norm group who would perform above the Idaho cut score on a test of equivalent difficulty. The following two figures show the difficulty of Idaho’s proficiency cut scores for reading (Figure 1) and mathematics (Figure 2) in 2006 in relation to the median cut score for all the states in the study. The proficiency cut scores for **reading** in Idaho range between the 32nd and 37th percentiles with respect to the NWEA norm group, with the seventh grade being most challenging. In **mathematics**, the proficiency cut scores ranged between the 30th and 47th percentiles, with the eighth grade being most challenging.

Idaho’s cut scores for reading and mathematics tend to fall at about the median level of difficulty among the 26 states studied. Note, too, that the difficulty of Idaho’s reading cut scores is lower than the corresponding mathematics cut scores except in third grade. Thus, reported differences in achievement between the two subjects may be more a product of differences in cut score difficulty than in actual student achievement. In other words, Idaho students may be performing worse in reading and better in mathematics than is apparent by looking at the percentage of students passing state tests in those subjects.

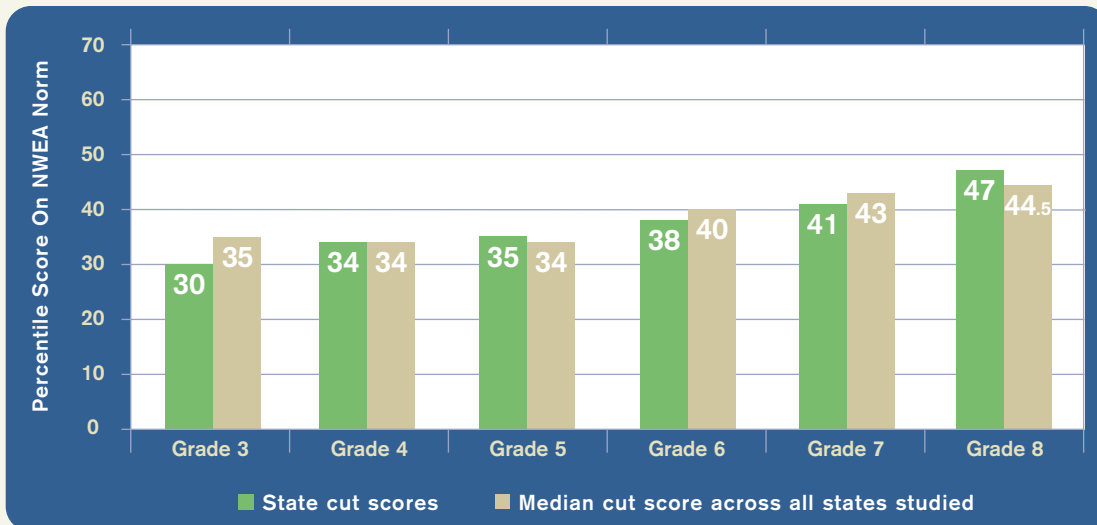
Another way of assessing difficulty is to evaluate how Idaho’s proficiency cut scores rank relative to other states. Table 1 shows that the Idaho cut scores generally rank in the middle third in difficulty among the 26 states studied for this report.

Figure 1 – Idaho Reading Cut Scores in Relation to All 26 States Studied, 2006
(expressed in MAP Percentiles)



Note: This figure compares reading test cut scores (“proficiency passing scores”) as percentiles of the NWEA norm. Idaho’s percentiles are compared with the median cut scores of all 26 states reviewed in this study. Idaho’s cut scores are consistently at or above the median.

Figure 2 – Idaho Mathematics Cut Scores in Relation to All 26 States Studied, 2006
(expressed in MAP Percentiles)



Note: Idaho’s math test cut scores are shown as percentiles of the NWEA norm and compared with the median cut scores of all 26 states reviewed in this study. Idaho’s cut scores are consistently within 5 percentiles of the median.

Table 1 – Idaho Rank for Proficiency Cut Scores Among 26 States in Reading and Mathematics, 2006

Ranking (Out of 26 States)						
	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
Reading	9	10	11	12	11	9
Mathematics	14	13	11	14	15	11

Note: This table ranks Idaho’s cut scores relative to the cut scores of the other 25 states in the study. In third-grade reading, for example, Idaho ranks ninth out of 26, meaning that it surpassed 17 states and had lower cut scores than eight states.

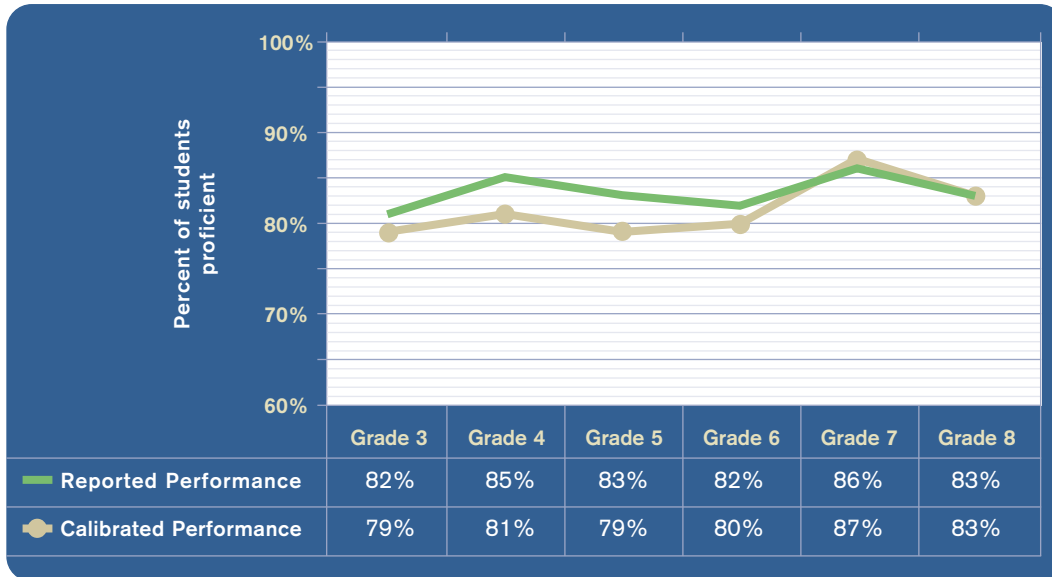
Part 2: Calibration across Grades*

Calibrated proficiency cut scores are those that are relatively equal in difficulty across all grades. Thus, an eighth-grade cut score would be no more or less difficult for eighth graders to achieve than a third-grade cut score is for third graders. When cut scores are so calibrated, parents and educators have some assurance that achieving the third-grade proficiency cut score puts a student on track to achieve the standards at eighth grade. It also provides assurance to the public that reported differences in performance across grades are a product of differences in actual educational attainment and not simply differences in the difficulty of the test.

Examining Idaho’s cut scores, we find that they are not well calibrated across grades. Figures 1 and 2 indicated the relative difficulty of Idaho’s reading and mathematics cut scores across grades, showing that, while the reading cut scores were fairly well calibrated, the math cut scores in the earlier grades were considerably easier than in the later grades. The following two figures show Idaho’s reported performance in reading (Figure 3, page 76) and mathematics (Figure 4, page 77) on the state test and the rate of proficiency that would be achieved if the cut scores were all calibrated to the grade 8 standard. Because the reading cut scores are fairly well calibrated across grades, Figure 3 shows little difference between the reported proficiency rates and the rates that would be expected if the cut scores were fully calibrated. Figure 4 shows that when differences in grade-to-grade difficulty of the mathematics cut score are removed, student performance is more consistent at all grades.

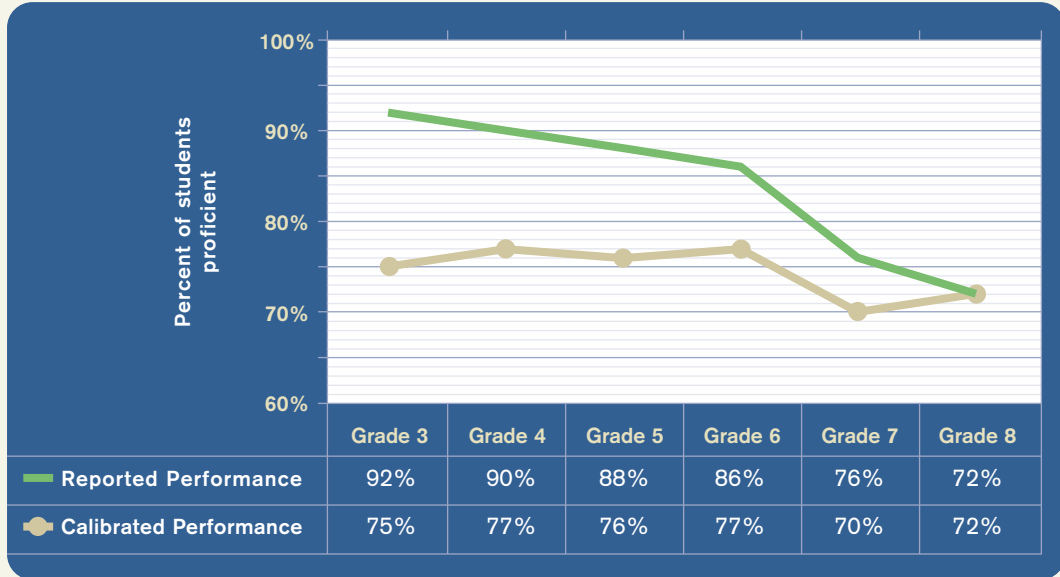
*Idaho is unique among the states in this report because it used NWEA’s MAP as its official state assessment during the course of this study. This means that Idaho is the only state in which the cut scores were not derived by comparing the performance of a group of students on two instruments, but simply by reading Idaho’s state test cut scores directly on the NWEA scale. It is impossible, therefore, to use the MAP as an independent ruler to determine whether Idaho’s estimated cut scores inadvertently changed over time.

Figure 3 – Idaho Reading Performance as Reported and as Calibrated to the Grade 8 Standard, 2006



Note: This graphic shows, for example, that if Idaho's grade 3 reading cut score was as difficult as its grade 8 cut score, 79 percent of third graders would achieve the proficient level, rather than 82 percent, as was reported by the state.

Figure 4 – Idaho Mathematics Performance as Reported and as Calibrated to the Grade 8 Standard, 2006



Note: This graphic shows, for example, that if Idaho's grade 3 mathematics cut score was set at the same level of difficulty as its grade-8 cut score, 75% of third graders would achieve the proficient level, rather than 92%, as was reported by the state.

Policy Implications

When setting its cut scores for what students must know and be able to do in order to be considered proficient in reading and math, Idaho is about in the middle of the pack, at least compared with the other 25 states in this study. Unfortunately, these cut scores are not smoothly calibrated across grades, particularly in mathematics. Students who are proficient in third-grade mathematics are not necessarily on

track to be proficient by the eighth grade. Idaho policymakers might consider raising their cut scores in the early grades so that parents and schools can be assured that young students scoring at the proficient level are truly prepared for success later in their education careers.