Idaho Standards Achievement Test (ISAT) in Science

2023–2024

Volume 6:
Score Reporting System and Interpretation Guide

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1. IDAHO SCORE REPORTS

In spring 2024, pursuant to Chapter 8 of the Idaho Century Code (08.02.03), the Idaho Standards Achievement Test (ISAT) in science was administered to Idaho students in grades 5, 8, and 11.

The purpose of this *Score Reporting System and Interpretation Guide* is to document the features of the reporting system that are designed to assist stakeholders in reviewing, downloading, understanding, and appropriately using the results of the state assessments. This volume also describes the score types reported for the spring 2024 administration, the appropriate uses and inferences that can be drawn from these score types, and the features of the score report. Based on the Idaho State Science Standards, the ISAT in Science is a criterion-referenced test established using principles of evidence-centered design to yield overall and discipline-level test scores at the student level and other levels of aggregation that reflect student achievement. In the following examples of Idaho score reports, student performance in comparison with achievement standards, which results in performance levels, has reflected the criterion-referenced testing nature of the ISAT Science assessments.

1.1 OVERVIEW OF IDAHO'S SCORE REPORTS

The ISAT in Science was administered in spring 2024. The Reporting System for the spring 2024 assessment became available to districts and schools starting on March 11, 2024. Test scores for the spring 2024 assessment were provided to districts and schools through the Reporting System, starting on March 25, 2024.

The Reporting System (https://id.reporting.cambiumast.com/) is a web-based application that provides ISAT in Science results at various levels. The Reporting System provides information on student performance and aggregated summaries at four levels of authorization: (1) state, (2) district, (3) school, and (4) roster. Test results are available to users based on their roles and the privileges they receive based on the authentication granted to them. There are four levels of user access: (1) district, (2) school, (3) teacher, and (4) roster. Each user is granted drill-down access to reports in the system on the basis of their assigned role. This means that users can access data at and below their assigned level. For example, teachers can access data for their roster(s) of students only, schools can access data for the students only in their school, and districts can access data for all schools and students in their district only. Access to reports is password protected.

The following users have access to the system:

- **State-level users** have access to all data at the state, district, school, teacher, and student levels.

- **District administrator (DA) and District test coordinator (DTC)** have access to all data for their district and the schools and students in their district.

- **School test coordinator (SC)** have access to all data for their school and the students in their school.

- **Teachers (TE) and test administrators (TA)** have access to all aggregate data for their roster(s) and the students within their roster(s).

Access to reports is password protected, and users can access data at and below their assigned level. For example, an SC user can access the school report of students for their school, but not for another school.

1.2 OVERALL SCORES AND DISCIPLINE-LEVEL SCORES

Each student receives a single scale score for each subject tested if there is a valid score to report. The validity of a score is determined using invalidation rules which define a set of parameters under which a student's test may be scored. A student's score will be automatically invalidated if they fail to respond to at least one test item on the science tests. Normally, a student takes and submits a test in the Test Delivery System (TDS). The TDS then forwards the test for scoring before the Reporting System reports the scores. However, tests may also be manually invalidated before reaching the Reporting System if testing irregularities occur (e.g., cheating, unscheduled interruptions, loss of power or Internet access).

A student's score is based only on the operational items in the assessment. A scale score is used to describe how well a student performed on a test and can be interpreted as an estimate of a student's knowledge and skills measured. The scale score is transformed from a theta score, which is estimated based on item response theory (IRT) models, as described in Volume 1. Low scale scores can be interpreted as an indication that the student does not possess sufficient knowledge and skills as measured by the test. Conversely, high scale scores can be interpreted as an indication that the student has proficient knowledge and skills as measured by the test. Interpretation of scale scores is more meaningful when the scale scores are used along with achievement levels and achievement-level descriptors (ALDs).

On the basis of the scale score, a student will receive an overall achievement level. Achievement levels are proficiency categories on a test. For the ISAT in Science, scale scores are mapped into the following four achievement levels:

- Level 1—Below Basic

- Level 2—Basic

- Level 3—Proficient

- Level 4—Advanced

The ALDs establish the content-area knowledge and skills that students at each achievement level are expected to possess. ALDs are determined by comparing students' scale scores against carefully determined cut scores, which are unique to each grade and subject. Cut scores are listed in Section 2.5, Cut Scores. Additional details, including the standard-setting process for recommending cut scores, can be found in Volume 3 of this report.

Achievement levels can be interpreted based on ALDs, which represent a more descriptive analysis of students' abilities based on their achievement level. Generally, students performing on the ISAT in Science at Levels 3 and 4 are considered on track to demonstrate progress toward mastery of the knowledge and skills necessary for college and career readiness.

In addition to an overall score, students will receive reporting category scores (also referred to as discipline-level scores for science). Reporting categories represent distinct groups of knowledge within each grade and subject. For the ISAT in Science, students' performance on each reporting category are reported using the following three achievement levels[1]:

1. Below Standard

2. Approaching Standard

3. Above Standard

Unlike the achievement levels for the overall test, student performance on each of the disciplines is evaluated with respect to meeting the reporting category proficiency cut score (i.e., the *Meets Standard* standard). Student performance at either *Below Standard* or *Above Standard* can be interpreted as student performance clearly below or above the *Meets Standard* cut score for a specific discipline. Student performance at *Approaching Standard* can be interpreted as student performance that does not provide enough information to tell whether students reached the *Meets Standard* mark for the specific discipline. Table 1 displays the reporting categories for science, by grade.

Table 1. Reporting Categories for Science

Grade	Reporting Category
5, 8 and 11	1. Earth and Space Sciences 2. Life Sciences 3. Physical Sciences

1.3 REPORTING SYSTEM

The Reporting System generates a set of online score reports that describe student performance for students, parents, educators, and other stakeholders. The online score reports are produced immediately after students complete tests or after the tests are handscored. Because the score reports on students' performance are updated each time students complete tests, or each time that the tests are handscored, authorized users (e.g., school principals, teachers) can quickly have available information on students' performance on the tests and use it to improve student learning. In addition to individual students' score reports, the Reporting System also produces aggregate score reports by class, school, district, and state. The timely accessibility of aggregate score reports could help users monitor students' performance in each subject by grade area, evaluate the effectiveness of instructional strategies, and inform the adoption of strategies to improve student learning and teaching during the school year.

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[1] Refer to Section 6.7.1, Strengths and Weaknesses for Disciplines Relative to Proficiency Cut Score in Volume 1 for derivation.

1.4 TYPES OF SCORE REPORTS

The Reporting System is designed to help educators and students answer questions about what students' performance on the tests mean in terms of students' progress toward and attainment of the state standards in science. The Reporting System is the online tool that provides educators and other stakeholders with timely, relevant score reports. The Reporting System for the ISAT in Science assessment has been designed with stakeholders, who are not technical measurement experts, in mind in order to make score reports easy to read and understand. This is achieved by using language that is straightforward and of less technical terminologies or measurement jargons so that stakeholders can quickly understand assessment results and make inferences about student achievement. The Reporting System is also designed to present student performance in a uniform format. For example, similar colors are used for groups of similar elements, such as achievement levels, throughout the design. This design strategy allows readers to compare similar elements and to avoid comparing dissimilar elements.

Once authorized users log in to the Reporting System, the dashboard page shows overall test results for all tests that the students have taken grouped by test family (e.g., Summative Science). Once the user clicks the test family that they want to explore further, the Reporting System will take the user to the detailed dashboard, where the results are shown by test (e.g., grade 5 science). Additionally, when authorized state-level users log in to the Reporting System and select "State View," the Reporting System generates a summary of students' performance data for the selected test across the entire state.

Generally, the Reporting System provides two categories of online score reports: (1) aggregate score reports and (2) student score reports. Table 2 summarizes the types of online score reports available at the aggregate level and the individual student level. Detailed information about the online score reports and instructions on how to navigate the Reporting System can be found in the *Reporting System User Guide*, located via a help button on the Reporting System.

Table 2. Types of Online Score Reports by Level of Aggregation

Level of Aggregation	Types of Online Score Reports
State District School Teacher Roster	• Number of students tested and percentage of students proficient (for overall students and by subgroup) • Average scale score and standard error of average scale score on the overall test and reporting category (for overall students and by subgroup) • Percentage of students at each achievement level on the overall test (for overall students and by subgroup) • Performance category in each target (for overall students)* • On-demand student roster report
Student	• Total scale score and SEM • Achievement level on overall score with ALDs • Student reporting category performance in each reporting category • Average scale scores and standard errors of average scale scores for student's school, district, and state • Student growth in scale score and achievement level over time

*Performance category in each target is provided for all aggregate levels except for state.

Aggregate score reports at a selected aggregate level are provided for overall students and by subgroup. Users can see student assessment results by any of the subgroups. Table 3 presents the types of subgroup and subgroup categories provided in the Reporting System.

Table 3. Types of Subgroups

Subgroup	Subgroup Category
EL Category	EL student first year identified (L1)
	Current EL students (LE)
	Current EL student whose parent waived EL services (EW)
	Exited student in 1st year of monitoring status (X1)
	Exited student in 2nd year of monitoring status (X2)
	Exited student in 3rd year of monitoring status (X3)
	Exited student in 4th year of monitoring status (X4)
	Formerly EL (FL)
	Screened Out (SO)
EL Status	Yes No
Ethnicity	American Indian or Alaskan Native Asian or Pacific Islander Asian Black or African American Hispanic or Latino Native Hawaiian or Other Pacific Islander White Multi-Racial
Gender	Female Male
Grade	05 08 11
Section 504 Status	Yes No
Special Education Status	Yes No

1.5 REPORTS

1.5.1 Dashboard

The first page users see when they log in to the Reporting System contains summaries of student performance by test family (e.g., summative science). District personnel see district summaries, school personnel see school summaries, and teachers see summaries of their students.
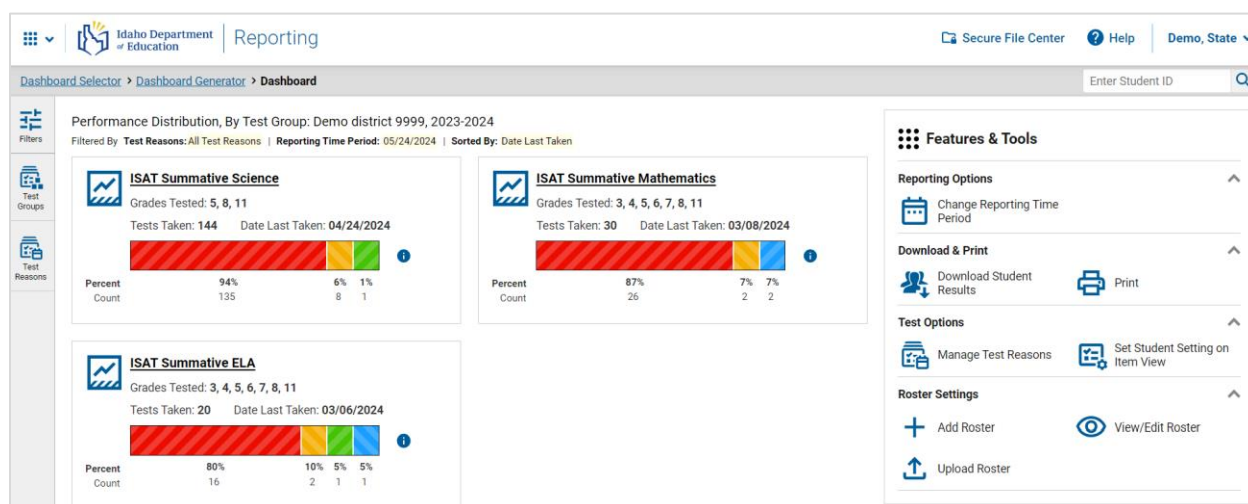
The dashboard summarizes students' performance by test family, including

   (1) the number of students tested;

   (2) the grades of the students who have tested; and

   (3) the percentage and counts of students at each performance level.

Figure 1 presents a sampled dashboard page at the district level.

Figure 1. Dashboard

Educators can click the subject group to view individual test results for the selected test group. Once the user clicks the test family that they want to explore further, the detailed dashboard page will appear. The detailed dashboard summarizes students' performance by test, including the number of students tested, the average score and standard error of the means, and the percentage and counts of students at each performance level. Figure 2 presents a sampled detailed dashboard page for the ISAT in Science at the district level.

Figure 2. Detailed Dashboard: District Level
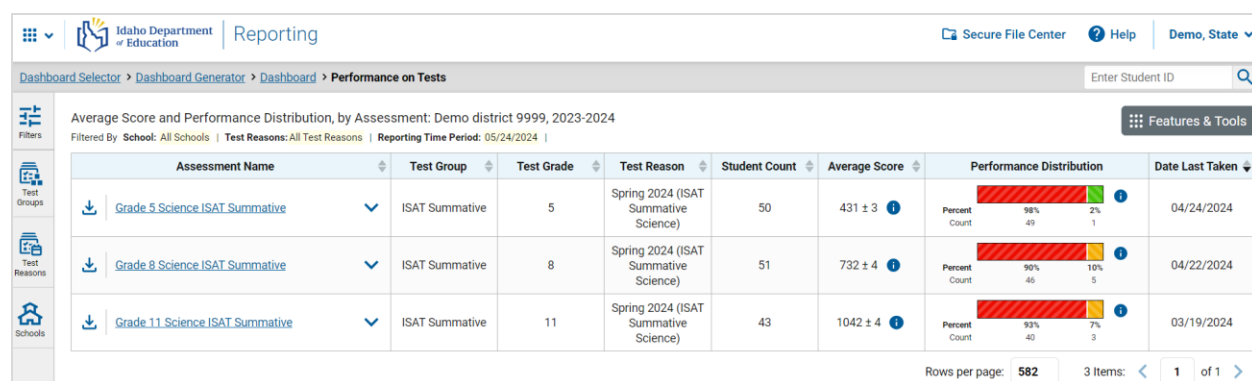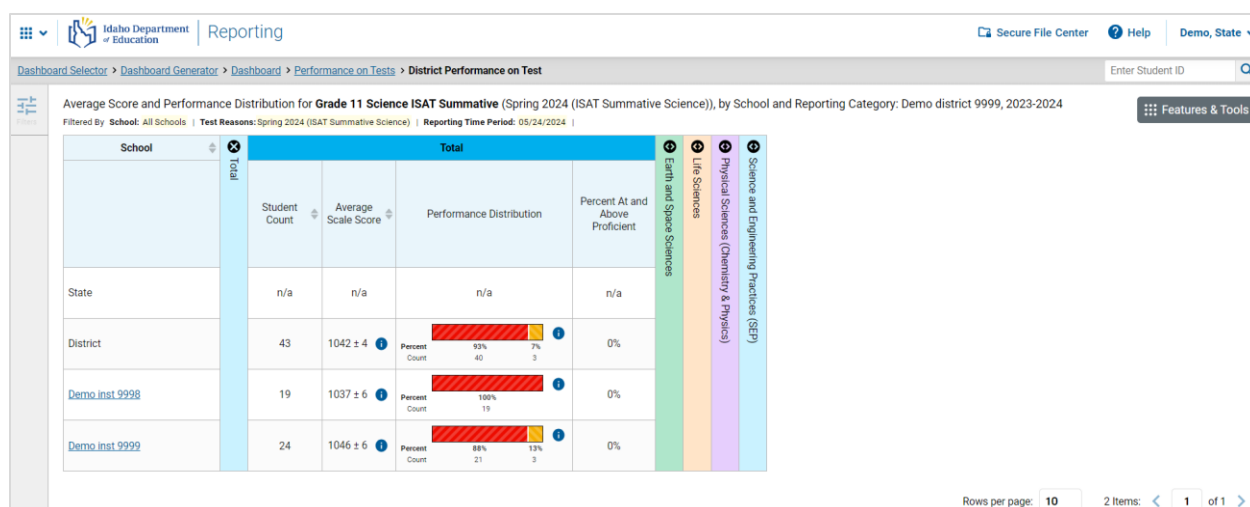
1.5.2 Subject Summary Results

Detailed summaries of student performance for each grade in a subject area for a selected aggregate level are presented when users select a specific assessment name. On each aggregate report, the summary report presents the summary results for the selected aggregate unit and the summary results for the state and the aggregate unit above the selected aggregate. For example, if a school is selected, the summary results of the state and district of the school are provided above the school summary results so that school performance can be compared with the aggregate levels.

The aggregated subject summary report provides the summaries on a specific subject area, including

- the number of students tested;

- the average scale score and standard error associated with the average scale score;

- the percentage of proficient students; and

- the percentage and counts of students in each achievement level.

The summaries are also presented for students overall and by subgroup. Figure 3 presents an example of a subject summary results for grade 11 science at the district level.

*Figure 3. Subject Summary Results for Grade 11 Science: District Level*

1.5.3 Reporting-Category-Level Results

Aggregated reporting category results are available on the same report page as the subject-level results. The reporting category results provide aggregate summaries of student performance in each reporting category for a particular grade and subject. In addition to reporting overall average scale scores for the test, the results show average scale scores in each reporting category.

Like the subject-level results, the summary report presents the summary results for the selected aggregate unit and the summary results for the state and aggregate unit above the selected aggregate. The summaries of reporting-category-level performance can be presented for overall students and by subgroup. Figure 4 shows an example of a reporting-category-level results for grade 11 science at the district level.

Figure 4. Reporting-Category-Level Results for Grade 11 Science: District Level
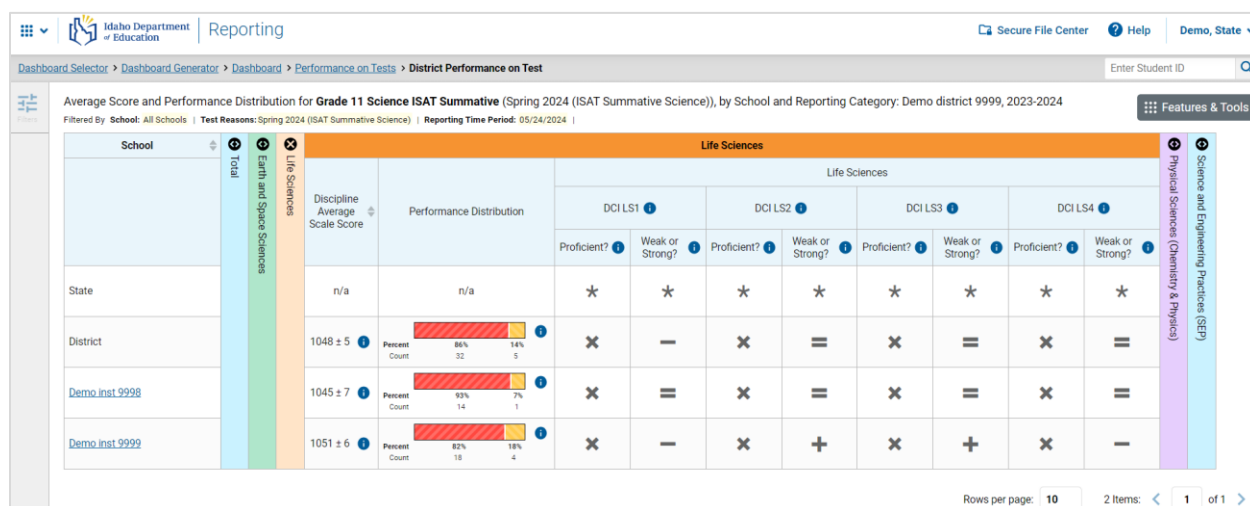
1.5.4 Target-Level Results

The target-level results provide the aggregated summaries of student performance in target areas. Strength and weakness indicators are supplied for each target and are computed in two ways (i.e., performance relative to proficiency, performance relative to the test as a whole). In the target-level results, strengths and weaknesses are reported for groups of students based on whether there is a statistically significant difference between that group's performance on each target and the group's performance on the rest of the test. A target-level result also includes group performance relative to the expected performance of a student at the proficiency cut score. Figure 5 presents an example of target-level results for grade 11 science at the district level.

*Figure 5. Target-Level Results for Grade 11 Science: District Level*
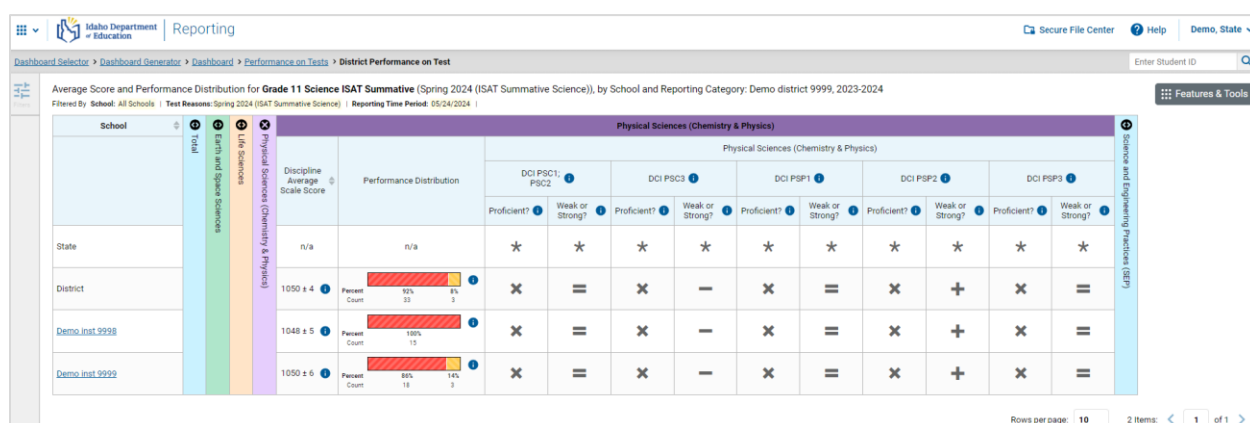
1.5.5 Roster Performance Report

Class, teacher, and school roster reports provide performance data for a group of students belonging to a system-defined or user-defined class. The roster performance report includes two metrics each student:

1. overall subject scale scores with SEM, and

2. the performance level.

Figure 6 shows a sample roster performance report for grade 11 science.

Figure 6. Roster Performance Report for Grade 11 Science
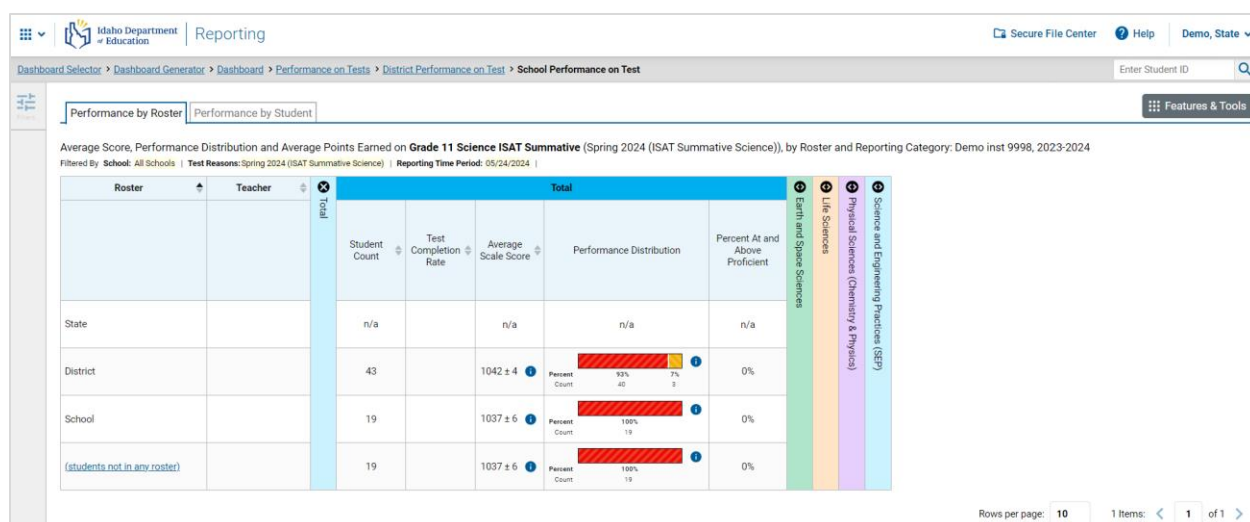
1.5.6 Cross-Sectional Report

The Cross-Sectional Report, which was available to users as of March 2024, allows users to compare three years of data side by side. The Cross-Sectional Report allows school- and district-level users to view a school or district's performance for a tested grade across multiple years. This report helps the user understand how the institution's performance has improved or declined across student populations. The Cross-Sectional Report does not track a particular set of students. The set of students varies across years, depending on which students were enrolled and took the tests at the time. A school-level user can view a report for their school. A district-level user can view a report for their district or any school within it. The measures Proficient? and Strength? are provided. This helps the user see how the school (or district) is improving or declining over time at each Target.

Figure 7 presents an example of the Cross-Sectional Report for grade 8 science by District and Reporting Category for Overall and Reporting Category Level Performance. Figure 8 presents an example of the Cross-Sectional Report for grade 5 science by Target Level.
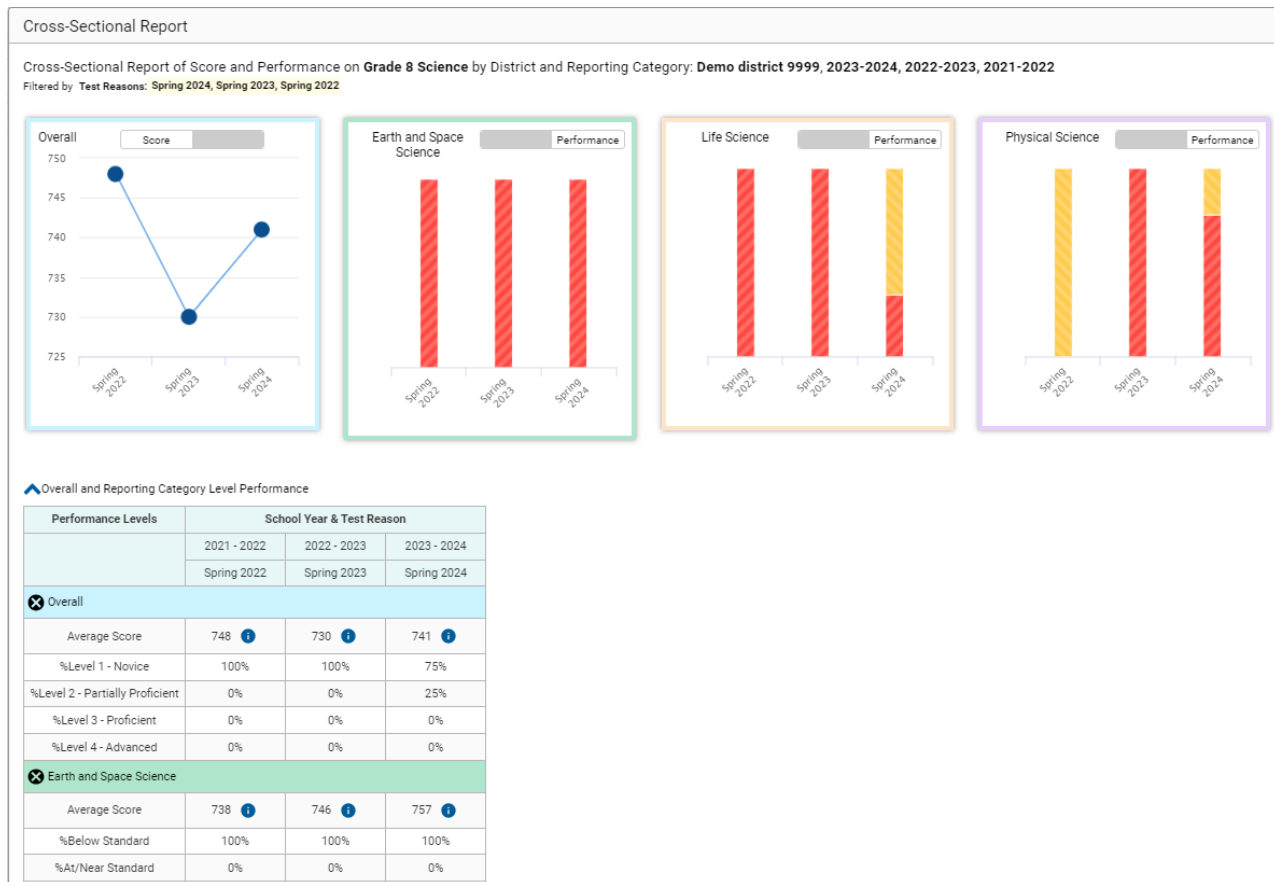
Figure 7. Cross-Sectional Report for Grade 8 Science

Figure 8. Cross-Sectional Report for Grade 3 ELA, Target Level

Cross-Sectional Report

⌃ Target Level Performance

Targets	School Year & Test Reason					
	2021 - 2022		2022 - 2023		2023 - 2024	
	Spring 2022		Spring 2023		Spring 2024	
	Proficient? ⓘ	Weak or Strong? ⓘ	Proficient? ⓘ	Weak or Strong? ⓘ	Proficient? ⓘ	Weak or Strong? ⓘ
⊗ **Reading Informational Text**						
Craft and Structure						
3.RI.4 ⓘ	✳	✳	✳	✳	✳	✳
3.RI.5 ⓘ	✖	—	✳	✳	✖	—
3.RI.6 ⓘ	✳	✳	✳	✳	✖	═
Integration of Knowledge and Ideas						
3.RI.7 ⓘ	✓	✚	✳	✳	✳	✳
3.RI.8 ⓘ	✳	✳	✳	✳	✖	—
3.RI.9 ⓘ	✖	—	✳	✳	✳	✳
Key Ideas and Details						
3.RI.1 ⓘ	✖	—	✳	✳	✳	✳
3.RI.2 ⓘ	◒	✳	✳	✳	✖	—
3.RI.3 ⓘ	✖	—	✳	✳	✖	—
⊗ **Reading Literary Text**						
Craft and Structure						
3.RL.4 ⓘ	✳	═	✳	✳	✖	═
3.RL.5 ⓘ	✳	✳	✳	✳	✳	✳
3.RL.6 ⓘ	✳	═	✳	✳	✳	✳
Integration of Knowledge and Ideas						
3.RL.7 ⓘ	✳	✳	✳	✳	✳	✳
3.RL.9 ⓘ	✖	═	✳	✳	✖	—
Key Ideas and Details						
3.RL.1 ⓘ	✳	═	✳	✳	✖	—
3.RL.2 ⓘ	✖	—	✳	✳	◒	═

1.5.7 Individual Student Report

When a student completes a test, an individual student score report (ISR) will be generated by the Reporting System. The ISR shows an individual student's performance on the test. Figure 9 contains a sample ISR for grade 11 science. In each subject area, the ISR provides the following metrics:

- scale score and SEM;

- achievement level for overall test;

- average scale scores for the student's state, district, and school; and

- performance in each reporting category

The student's name, scale score with the SEM, and achievement level are shown at the beginning of the report. In the middle section, the student's performance is described in detail using a barrel chart, which presents the student's scale score with the SEM using a "±" sign. The SEM represents the precision of the scale score, or the range in which the student would likely score if a similar test were administered multiple times. The barrel chart also provides ALDs with cut scores at each achievement level. These cut scores define the content area knowledge, skills, and processes that test takers at each achievement level are expected to possess.

In addition to the individual student scores, the average scale scores and their standard errors are displayed by state, district, and school so that student achievement can be compared across aggregate levels. Note that the "±" figure next to the student's scale score is the SEM of an individual scale score, whereas the "±" figure next to the average scale scores for aggregate levels represents the standard error of the group's average scale scores.

Figure 9. Individual Student Report for Science
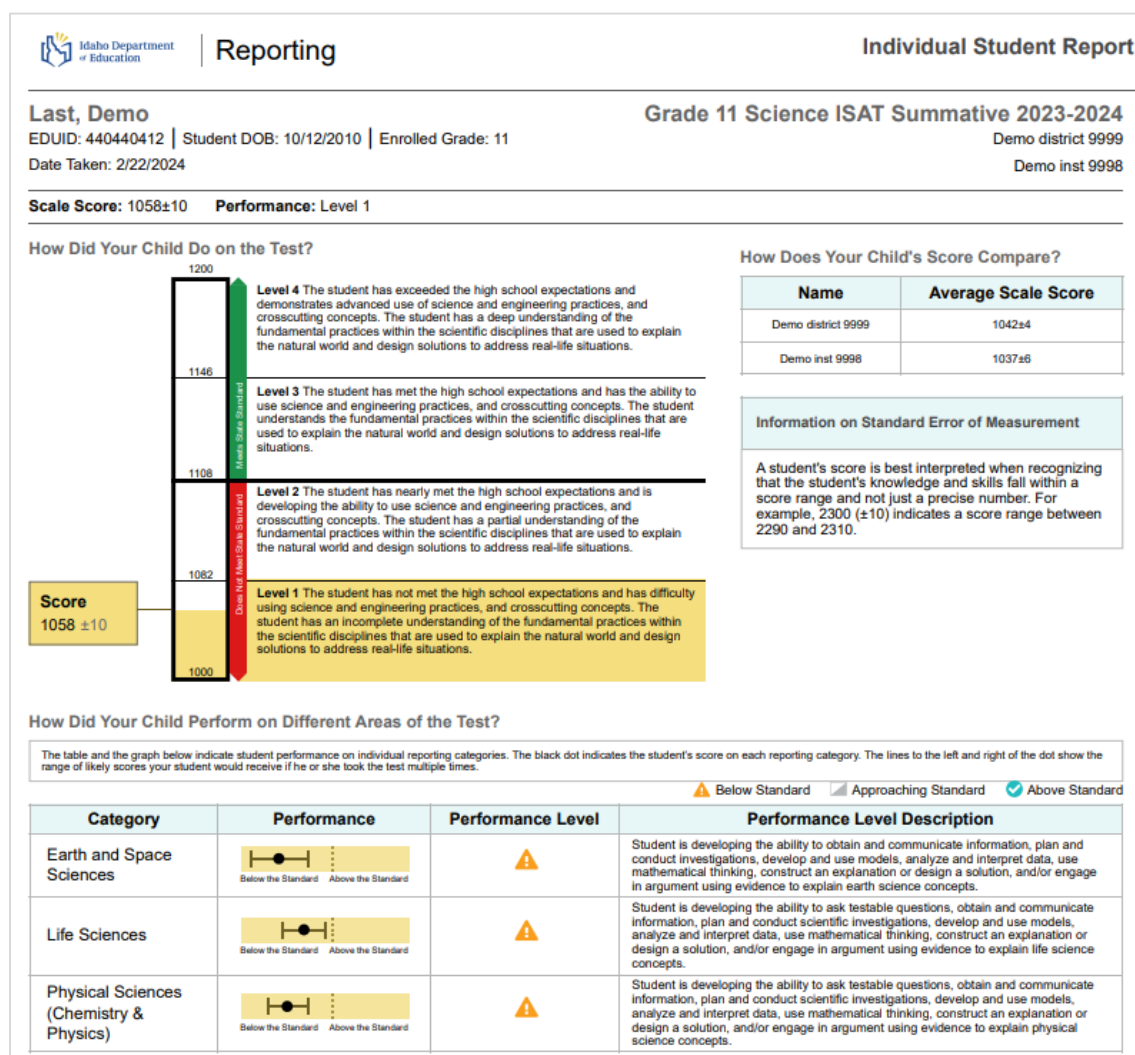
1.5.8 State-Level Summary

The Reporting System provides a state dashboard for authorized state-level users to track student performance for a test across the entire state. Users can specify the test and administration year to be displayed in the report. Figure 10 presents a sample state-level summary report for science.

Figure 10. State Dashboard for ISAT in Science
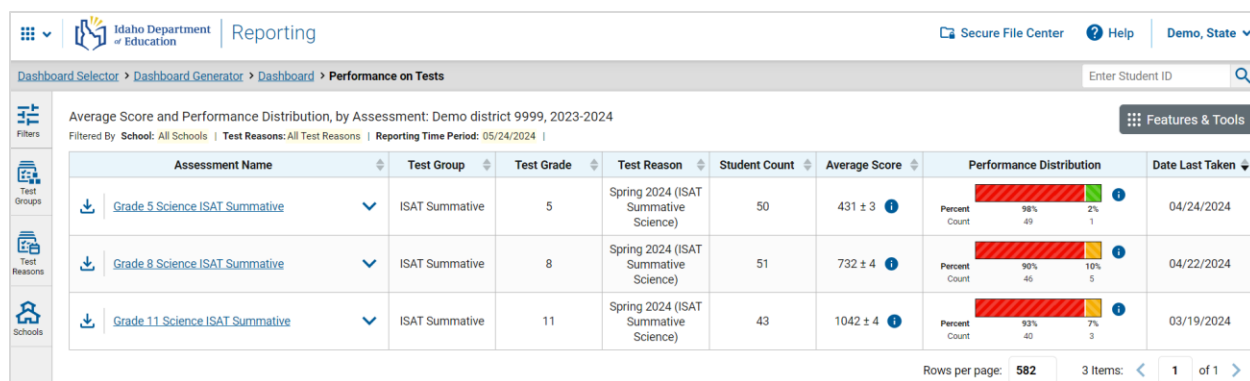
1.5.9   Data File

Reporting System users have the option to quickly generate a comprehensive data file of their students' scores. Data files, which can be downloaded in Microsoft Excel, CSV, or TXT format, contain a wide variety of data, including scale and reporting category scores, demographic data, and achievement levels (as shown in Figure 11). Data files can be useful resources for further analysis and can be generated at the district, school, teacher, or roster level, depending on a user's role-based permissions.

Figure 11. Data File

2.   INTERPRETATION OF REPORTED SCORES

A student's performance on a test is reported as a scale score and an achievement level for the overall test, and as an achievement level for each reporting category. A student's scores and achievement levels are summarized at the aggregate levels. This section describes how to interpret these scores.

2.1   SCALE SCORE

A *scale score* is the student's overall numeric score, and it describes how well a student performed on a test. This score can be interpreted as an estimate of a student's knowledge and skills as measured by their performance on the test. These scores fall on a continuous scale. The ISAT in Science scale scores are not expressed on a vertical scale, which means that scores from different grades cannot be compared.

Scale scores can be used to illustrate a student's current levels of achievement. Low scale scores can indicate that the student does not possess sufficient knowledge and skills measured by the test. Conversely, high scale scores can indicate that the student has proficient knowledge and skills measured by the test. When combined across a student population, scale scores can also describe school- and district-level changes in performance and reveal gaps in achievement among different groups of students. In addition, scale scores can be averaged across groups of students, allowing educators to use group comparison. Interpretation of scale scores is more meaningful when the scale scores are used along with achievement levels and achievement-level descriptors. It should be noted that the utility of scale scores is limited when comparing smaller differences among scores (or averaged group scores), particularly when the difference among scores is within the standard error of measurement (SEM). Furthermore, the scale score of individual students should be cautiously interpreted when comparing two scale scores, because small differences in scores may not reflect real differences in achievement.

2.2 STANDARD ERROR OF MEASUREMENT

A student's score is best interpreted when recognizing that the student's knowledge and skills fall within a score range and are not just precise numbers. If a student takes a similar test several times, the resulting scale scores will likely vary across administrations, sometimes being a little higher, a little lower, or the same. The SEM captures the precision of the scale score, or the range in which the student would likely score if a similar test were administered several times. The SEM can be interpreted as the degree of uncertainty of a student's score based on a statistical analysis of the student's answers on a test. When interpreting scale scores, it is recommended to always consider the range of scores that incorporate the SEM of the score range.

The "±" next to the student's scale score provides information about the certainty of, or confidence in, the score's interpretation. The boundaries of the score band are one SEM above and below the student's observed scale score, representing a range of score values that is likely to contain the student's true score. For example, 680 ± 10 indicates that if a student were tested again, they would be likely to receive a score between 670 and 690.

2.3 ACHIEVEMENT LEVEL

Achievement levels are proficiency categories on a test, which students fall into based on their scale scores. On the ISAT in Science, scale scores are mapped into four achievement levels (Level 1—Below Basic, Level 2—Basic, Level 3—Proficient, and Level 4—Advanced) using achievement standards or cut scores (see Section 2.5, Cut Scores). ALDs are descriptions of content area knowledge and skills that students at each achievement level are expected to possess. The achievement level is an indicator of whether a student has mastered the required skill for a given level. Thus, achievement levels can be interpreted on the basis of ALDs. Students performing on the ISAT in Science at Levels 3 and 4 are considered on track to demonstrate progress toward mastery of the knowledge and skills necessary for college and career readiness. Achievement levels are designed to classify of students in a class into a small number of groups based on the cut scores; therefore, they have limited use for measuring growth.

The Idaho State Science Standards are available on the Idaho Department of Education web page at https://www.sde.idaho.gov/academic/standards/ under the *Science* accordion.

2.4 ACHIEVEMENT LEVELS FOR REPORTING CATEGORY

Students' performance on each reporting category (i.e., discipline for science) is reported for three performance categories: *Below Standard*, *Approaching Standard*, and *Above Standard*. Unlike the achievement levels for the overall test, student performance on each of the reporting categories is evaluated with respect to the *Meets Standard* mark. Students performing at either *Below Standard* or *Above Standard* can be interpreted as having performance that is clearly below or above the *Meets Standard* mark for a specific reporting category. Students performing at *Approaching Standard* can be interpreted as having student performance that does not provide enough information to tell whether students reached the Meets Standard mark for the specific reporting category. Note that the diagnostic value of reporting-category achievement levels is limited by the degree of the calculated SEM of an individual student's scale score for the tested grade and subject.

2.5 CUT SCORES

For all grades and subjects assessed with the ISAT in Science, scale scores are mapped onto four achievement levels (Level 1—Below Basic, Level 2—Basic, Level 3—Proficient, and Level 4—Advanced). For each achievement level, there are minimum and maximum scale scores that define the range of scale scores students within each achievement level have achieved. Collectively, these minimum and maximum scale scores are defined as *cut scores*, and they constitute the cutoff points for each achievement level. Table 4 shows the grades 5, 8, and 11 cut scores for science.

Table 4. Cut Scores for Idaho Standards Achievement Test in Science

Grade	Level 1 Below Basic	Level 2 Basic	Level 3 Proficient	Level 4 Advanced
5	400–479	480–505	506–533	534–600
8	700–776	777–806	807–831	832–900
11	1000–1081	1082–1107	1108–1145	1146–1200

2.6 AGGREGATED SCORES

Students' scale scores are aggregated at the roster, teacher, school, district, and state levels to represent how a group of students performs on a test. When students' scale scores are aggregated, the aggregated scale scores can be interpreted as an estimate of knowledge and skills that a group of students possesses. This interpretation makes aggregated scores a powerful tool when comparing student performance across different groups of students, whether it be at a similar level of aggregation (e.g., school to school) or an analysis of a subgroup (e.g., comparing a teacher's roster to the overall school).

Given that student scale scores are estimates, the aggregated scale scores are also estimates and are subject to measures of uncertainty, as expressed using the calculated SEM for an aggregate average scale score. In addition to the aggregated scale scores, the percentage of students in each achievement level is reported at the aggregate level to represent how well a group of students performs overall and by reporting category.

2.7 RELATIVE STRENGTHS AND WEAKNESSES FOR REPORTING CATEGORY

A reporting-category performance indicator shows how a group of students in a class, school, or district performed in a specific reporting category as compared with the same group's performance on the test as a whole. When observed performance in the reporting category is greater than observed performance on the test as a whole, then the reporting unit (e.g., class, school, district) shows a relative strength in that reporting category. Conversely, when observed performance in the reporting category falls below the level of overall achievement, then the reporting unit shows a relative weakness in that reporting category.

2.8 APPROPRIATE USES FOR SCORES AND REPORTS

Assessment results can be used to provide information on student achievement levels. Overall, test scores demonstrate what students know and are able to do in specific subject areas and provide further information on whether students are on track to demonstrate the knowledge and skills necessary for college and career readiness. In addition, assessment results can be used to identify students' relative strengths and weaknesses in certain content areas. For example, reporting-category achievement levels can be used to identify students' relative strengths and weaknesses in reporting categories for a particular content area.

Assessment results, along with aggregate score reports for the teacher and school, provide information about students' strengths and weaknesses and can be used by teachers or schools to improve instruction and student learning. For example, a group of students may have performed well overall, but not as well in several reporting categories. In this case, teachers or schools can identify their students' strengths and weaknesses through analysis of group performance by reporting category and can then promote instruction in specific areas where students' performance is below overall performance. Furthermore, by narrowing the students' performance results by subgroup, teachers and schools can determine what strategies may need to be implemented in order to improve classroom instruction and student learning, particularly for students from historically disadvantaged subgroups. For example, teachers might see students' assessment results by gender and observe that a particular group is struggling with Life Sciences. Teachers can then provide additional instructions for this group in order to enhance its achievement of the benchmarks for Life Sciences.

In addition, assessment results can be used to compare the performance of individual students and various subgroups. Teachers can evaluate how their students perform in comparison with other students in schools and districts by comparing their overall scores and reporting-category achievement levels. Although all students are administered different sets of items under the adaptive test design, scale scores are comparable across student groups.

Although assessment results provide valuable information about students' performance, test scores and reports should be interpreted with caution. It is important to note that scale scores are estimates of true scores and hence do not represent a precise measure of student performance. Students' scale scores are associated with measurement errors; thus, users need to consider measurement errors when using students' scores to make decisions about student achievement. Moreover, although students' scores may be used to help make important decisions about students' placement and retention or teachers' instructional planning and implementation, the assessment results should not be relied on as the only source of information. Given that assessment results provide limited

information, other data on student achievement, such as classroom assessments and teacher evaluations, should be considered when making decisions on student learning. Finally, when student performance is compared across groups, users need to take into account the group size. The smaller the group, the larger the measurement error related to the aggregated data will be, requiring a more cautious interpretation.

3. SUMMARY

ISAT in Science results are reported online via the Reporting System. The results are released in near-real time as the tests are completed and scored.

The Reporting System is interactive. When educators or administrators log in, they see a summary of data about students for whom they are responsible (e.g., a principal will see the data for students in their school, a teacher will see the data for students in their class). Users can then drill down through various levels of aggregation all the way to individual student reports (ISRs). The system allows users to tailor the content more precisely, moving from subject area through reporting categories and even to standards-level reports for aggregated rest scores. Reports for subgroups are available at every level, and authorized users can print or download these reports (or the data on which they are based). ISRs can be produced individually or batched as PDF reports.

All authorized users can download files, including data about students for whom they are responsible, at any time. The various reports available may be used to inform stakeholders about student performance and instructional strategies. Individual schools in Idaho are responsible for making ISRs available to parents and guardians either electronically or in hard copy.