NM-Assessment of Science Readiness: **Educator Guide to Reports**

Spring 2025

NEW MEXICO Public Education Department

NMASR NEW MEXICO ASSESSMENT OF SCIENCE READINESS

KU ACHIEVEMENT & ASSESSMENT INSTITUTE The University of Kansas

Assessment & Technology Solutions

Contents

About the NM-ASR

The NM-ASR is based on the New Mexico STEM Ready! Science Standards, which combine the NGSS and New Mexico's six specific standards. The standards focus on three important dimensions: disciplinary core ideas, scientific and engineering practices (e.g., asking questions, developing and using models), and crosscutting concepts (e.g., patterns, cause and effect, stability and change) that apply across scientific disciplines. These dimensions are embedded within three domains of science—Earth and Space Science, Life Science, and Physical Science—which together form the foundation for the content assessed in NM-ASR. The NM-ASR provides information regarding each student's progress toward the achievement of essential knowledge and skills that will help them explain and make sense of phenomena in the world around them, solve problems, and apply their scientific literacy to understand the scientific dilemmas they may face as adults. The NM-ASR is administered in either computer-based test (CBT) or paper-based test (PBT) formats.

Participation in state-wide summative testing is required. New Mexico will administer the NM-ASR to all eligible students enrolled in grades 5, 8, and 11. PED will hold all schools accountable for participation in the NM-ASR. Based on district policy, students in grade 10 and 12 who have not previously taken the NM-ASR may also be required to take the grade 11 assessment.

About Kite, AAI, and ATS

The Kite® Suite is developed by Assessment and Technology Solutions (ATS), which is a center under the Achievement and Assessment Institute (AAI). AAI is a service and research entity within the School of Education and Human Sciences at the University of Kansas.

The Kite® Suite consists of these main components (i.e., portals):

- Kite Content Portal (CP) – Used by assessment professionals to create engaging test items including technology-enhanced (TE) items mapped to national and state standards.
- Kite Educator Portal (EP) – Used by administrators to manage data, monitor test completion, and access reports.
- Kite Student Portal (SP) – Used by students to take assessments.
- Kite Scoring Portal (ScP) – Used by educators and scoring professionals to score human-scored items such as extended response or audio-capture items.
- Kite Parent Portal (PP) – Used by parents to view student score reports.

Changes to the Guide

The following table lists the changes made to this guide since the last major release of the documentation.

Date	Page	Change

Overview

This manual assists test coordinators (TCs) and teachers in accessing and interpreting the results of their students' NM-ASR scores. Access is provided through Kite Educator Portal (EP), part of the Kite Suite, where assessments are managed. TCs typically have the role of District Test Coordinator (DTC) or Building Test Coordinator (BTC) in EP while teachers have a Teacher (TEA) role.

Graphics

Every effort was made to ensure the graphics in this manual match what users will see. Expect some slight differences depending on the operating system used. Names, IDs and organizations shown are fictitious.

Disclaimer

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Getting Help

The Kite Service Desk provides support to educators through phone calls, email, and live chat in EP. The Service Desk is closed on weekends and the week between Christmas and New Year's Day. Contact the Kite Service Desk or view the program website using the methods below.

Table 1: Contact and Program Resources

Resource	Location
Program Name	New Mexico Assessment of Science Readiness (NM-ASR)
Kite Service Desk Phone Number	855-519-0571
Kite Service Desk Email Address	nm-asr-support@ku.edu
Kite Live Chat in Kite Educator Portal	https://educator.kiteaai.org
Hours	Mon-Fri, 6:00 am to 4:00 pm MT
Program Website	https://nmassessments.org
Kite Student Portal (Name)	Kite Student Portal
Kite Student Portal (Icon)	

NOTE: Kite Suite may also be used by your state for the Dynamic Learning Maps® (DLM®) alternate assessments.

Personally Identifiable Information (PII)

Do not send any Personally Identifiable Information (PII) (e.g., first name, last name, date of birth, and social security) for a student via email or Live Chat. This is a federal violation of the Family Education Rights and Privacy Act (FERPA). PII information may also include combinations of data such as a student ID and school name.

Do send the student ID number only and the error or concern you are reporting regarding the test taker.

Live Chat

Live Chat in EP may be used to contact the Kite Service Desk during normal business hours.

Required Software

To use EP, your machine should have a supported browser (i.e., Mozilla Firefox, Google Chrome, Microsoft Edge, or Safari), a PDF viewer such as Adobe Acrobat, and a spreadsheet program such as Microsoft Excel or Google Sheets.

NM-ASR Score Overview

NM-ASR scores are based on how well students perform across the three dimensions of the science standards:

- **Crosscutting Concepts** – ideas that apply across all areas of science (such as patterns, cause and effect, and systems thinking). Crosscutting Concepts help provide students with an organizational structure for understanding the world.
- **Science and Engineering Practices** – activities that scientists and engineers engage in to either understand the world or to solve a problem (like asking questions, analyzing data, or designing solutions).
- **Disciplinary Core Ideas** – the key content knowledge in science (such as energy, ecosystems, or Earth's systems). Disciplinary Core Ideas are concepts in science and engineering that have broad importance within and across disciplines as well as relevance to people's lives.

These dimensions are assessed across three domains of science:

- **Life Science** (e.g., plants, animals, ecosystems),
- **Physical Science** (e.g., matter, energy, motion), and
- **Earth and Space Science** (e.g., weather, planets, geology).

Student performance is first measured by totaling the points they earned on the test questions. No points are deducted for incorrect answers, and some questions may be worth more than one point. This total is called a **raw score**.

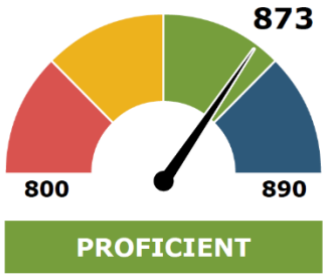
This raw score is then converted to a **scale score**, which adjusts for differences in test difficulty across years and versions, allowing for fair comparisons of student performance. Scale scores fall within defined ranges and are grouped into four **performance levels**: **Novice**, **Nearing Proficiency**, **Proficient**, and **Advanced**. Each level describes how well the student demonstrated understanding of grade-level science content and practices.

The chart below shows the scale score ranges for each performance level in grades 5, 8, and 11. Teachers can use these ranges to determine where a student falls and what that indicates about their grasp of the science standards.

		Scale Score Range			
Subject	**Grade**	**Novice**	**Nearing Proficiency**	**Proficient**	**Advanced**
Science	5	500–543	544–559	560–574	575–590
	8	800–844	845–859	860–881	882–890
	11	1100–1153	1154–1159	1160–1180	1181–1190

Overall Scale Score and Performance Level

Students receive an overall scale score and based on that score, are placed in one of four performance levels, with Level 3 (Proficient) indicating the student is on target and Level 1 (Novice) indicating the student needs support.



The Performance Level indicates a score range which is defined by a student's overall scale score and is used to report overall student performance by describing how well students meet the expectations for their grade level. There are four performance levels for NM-ASR:

- **Level 4: Advanced** – Students at the Advanced level can demonstrate evidence of **thorough** understanding and use of all three dimensions (Crosscutting Concepts, Science & Engineering Practices, and Disciplinary Core Ideas) to make sense of phenomena and/or to design solutions to problems in Physical Science, Life Science, and Earth and Space Science.
- **Level 3: Proficient** – Students at the Proficient level can demonstrate evidence of **satisfactory** understanding and use of all three dimensions (Crosscutting Concepts, Science & Engineering Practices, and Disciplinary Core Ideas) to make sense of phenomena and/or to design solutions to problems in Physical Science, Life Science, and Earth and Space Science.
- **Level 2: Nearing Proficiency** - Students at the Nearing Proficiency level can demonstrate evidence of **partial** understanding and use of all three dimensions (Crosscutting Concepts, Science & Engineering Practices, and Disciplinary Core Ideas) to make sense of phenomena and/or to design solutions to problems in Physical Science, Life Science, and Earth and Space Science.
- **Level 1: Novice** – Students at the Novice level demonstrate evidence of **emerging** understanding and use of all three dimensions (Crosscutting Concepts, Science & Engineering Practices, and Disciplinary Core Ideas) to make sense of phenomena and/or to design solutions to problems in Physical Science, Life Science, and Earth and Space Science.

Novice	Nearing Proficiency	Proficient	Advanced
Students show **emerging** understanding of all 3 dimensions in making sense of phenomena and designing solutions.	Students show **partial** understanding of all 3 dimensions in making sense of phenomena and designing solutions.	Students show **satisfactory** understanding of all 3 dimensions in making sense of phenomena and designing solutions.	Students show **thorough** understanding of all 3 dimensions in making sense of phenomena and designing solutions.

Reporting Category Performance Indicators

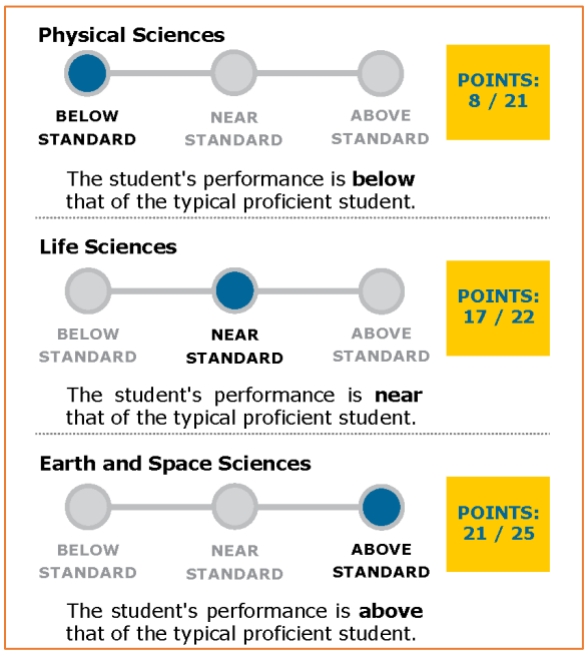
Each reporting category represents one of the three science domains assessed on the NM-ASR: Physical Science, Life Science, and Earth and Space Science. For each domain, the student receives a raw score (the number of points earned out of the total possible) and a performance indicator that shows how the student's performance compares to that of a typical proficient student.

The three possible performance indicators are:

- **Above Standard** – The student's score is higher than the average score of students who performed at the Proficient level.
- **Near Standard** – The student's score is close to the average score of students who performed at the Proficient level.
- **Below Standard** – The student's score is lower than the average score of students who performed at the Proficient level.

The raw score is calculated by totaling the points earned in each domain. Most questions on the NM-ASR are worth one point, but some—particularly extended response questions—may be worth up to four points. A student's performance in each domain is then compared to the statewide average for Proficient students to determine whether their performance in that domain is above, near, or below expectations.

These indicators provide educators with valuable, domain-specific information to help target instruction. For example, a student who is Near Standard in Life Science, but Above Standard in Earth and Space Science may benefit from additional support or review in the Life Science domain. By breaking down the student's performance by reporting category, the NM-ASR helps educators better understand student strengths and areas for growth within each of the three domains of science.



NM-ASR Reports

The reports in EP are created after Summative testing ends and the scores are processed and recorded. Reports available for TCs include Individual Student Reports, District and School Summary Reports, and Interactive Reports. While district-level users can see all data on these reports, building-level users can only see school-level data on these reports.

Reports Available

1. Individual Student Reports
2. District and School Summary Reports
3. Interactive Reports

Reporting Categories

The reporting categories for the NM-ASR Assessment are based on the science domains in the New Mexico STEM Ready! Science Standards. At each tested grade (5, 8, and 11), students are assessed on their ability to apply **scientific and engineering practices** and **crosscutting concepts** across all three science domains: **Life Science**, **Physical Science**, and **Earth and Space Science**. This ensures that students demonstrate not only content knowledge, but also the ability to think and reason scientifically across disciplines.

Individual Student Report

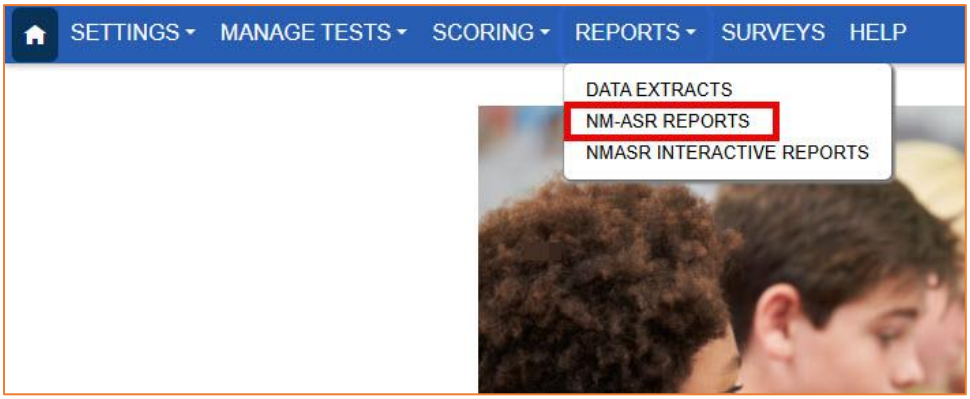
AUDIENCE: STUDENTS, PARENTS AND GUARDIANS, EDUCATORS

The Individual Student Report describes your student's overall science performance. The results reflect a single measure and should be supplemented with other information received from the classroom and school for a more comprehensive look at your child's progress.

Accessing Individual Student Report

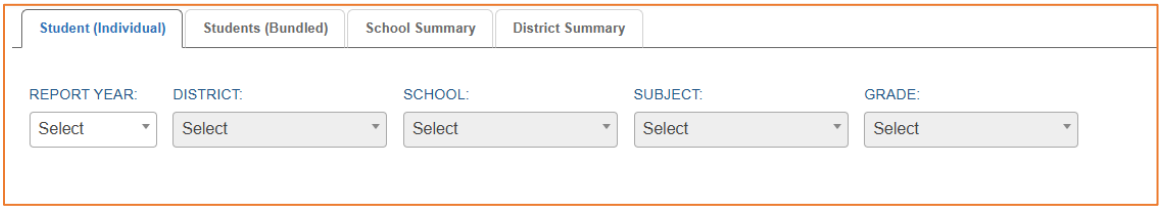
Individual Score Reports (ISRs) can be accessed by DTCs, DUs, BTCs, and BUs in Kite Educator Portal. To access Individual Student Reports, perform the following steps.

1. Select **Reports**.
2. Select **NM-ASR Reports**.



3. Select the desired report tab.
    a. **Student (Individual)** has a link to download a single student's report.
    b. **Student (Bundled)** allows you to bundle student reports into one file based on selected criteria.

4. Use the dropdowns to select the report criteria. Some drop-down menus auto-populate.



Interpreting Individual Student Reports

The Individual Student Report (ISR) offers a detailed snapshot of a student's science performance across three domains—Physical Science, Life Science, and Earth and Space Science—as well as their overall achievement level (e.g., Proficient). This information, when paired with classroom observations and local assessments, helps teachers identify both strengths and areas for targeted support.

Diagnose Learning Needs

The report breaks down the student's performance by domain and compares it to typical Proficient-level performance. Educators can use this to identify which domains need reteaching, enrichment, or individualized intervention.

Inform Differentiated Instruction

Students performing Above Standard in certain domains may benefit from extension activities or deeper explorations of scientific concepts. Those performing Below Standard can receive additional instructional support, such as small group instruction or scaffolded learning opportunities aligned with the relevant disciplinary core ideas and practices.

Plan Standards-Based Instruction

Because the report reflects performance aligned to the three dimensions of science learning—Science & Engineering Practices, Crosscutting Concepts, and Disciplinary Core Ideas—it supports planning that aligns with NGSS or NM STEM Ready! Science Standards instructional goals. Teachers can prioritize concepts where many students show partial or emerging understanding.

Support Family Engagement

The report includes suggestions for how families can support learning at home. Teachers can build on this by discussing the report with families during conferences and offering specific strategies or resources tailored to the student's needs.

Collaborate for Intervention

Teachers can use ISR data in professional learning communities (PLCs) or grade-level teams to identify trends, share strategies, and develop targeted instructional plans, especially for groups of students with common learning needs.

School and District Reports

AUDIENCE: EDUCATORS

The School and District Reports show aggregated scores.

Accessing School and District Reports

To access Individual Student Reports, perform the following steps.

1. Select **Reports**.
2. Select **NM-ASR Reports**.
3. Select the desired report tab: **School Summary** or **District Summary**.
4. Use the dropdowns to select the report criteria. Some drop-down menus auto-populate.

Interpreting School Reports

The School Report provides a summary of performance on the NM-ASR, comparing results from your school to those of your district and the state. It includes the number of students tested, the mean score for each organization, and the distribution of student performance across the four NM-ASR performance levels. Results are displayed both as raw counts and as percentages to support easy comparisons across groups of different sizes.

Educators can use this report to reflect on overall science achievement at the school level and to evaluate how their students are performing relative to district and state averages. This information can be used to guide instructional planning, inform school improvement efforts, and support conversations about effective teaching practices, curriculum alignment, and student support strategies.

Example of School Report

SCHOOL REPORT: COTTONWOOD SCHOOL / #S1001
New Mexico Assessment of Science Readiness (NM-ASR)
DISTRICT: SUNFLOWER DISTRICT / #D1001

2024-2025

The NM-ASR assessments measure students' understanding of the New Mexico Standards at each grade. The science assessment asks students to answer questions about data presented in narratives, equations, graphs, tables, and diagrams. Students show what they know about science by selecting or providing the right answer; sorting, ordering, or matching items; and labeling pictures.
Note: '-' indicates categories with fewer than 20 students, which are not reported for privacy

Comparing Grade 5 Student Mean Scores (Score Range: 500 - 590)		
Organization	**Valid N**	**Mean Score**
NEW MEXICO	22,120	554
SUNFLOWER DISTRICT	157	560
COTTONWOOD SCHOOL	74	564

Comparing Grade 5 Student Performance Levels by Valid N Counts					
Organization	**Level 1**	**Level 2**	**Level 3**	**Level 4**	**Total**
NEW MEXICO	4,879	9,714	6,317	1,210	22,120
SUNFLOWER DISTRICT	8	52	75	22	157
COTTONWOOD SCHOOL	4	17	43	10	74

Comparing Grade 5 Student Performance Levels by Percentage				
Organization	**Level 1**	**Level 2**	**Level 3**	**Level 4**
NEW MEXICO	22%	44%	29%	5%
SUNFLOWER DISTRICT	5%	33%	48%	14%
COTTONWOOD SCHOOL	5%	23%	58%	14%

Interpreting District Reports

The District Report provides a summary of student performance across the schools within a district. On **page 1**, a table displays the mean scale scores for each tested grade, comparing district-level results to statewide averages. The "Valid N" column shows the number of students with valid assessment scores, and the mean score reflects the average among those students.

On **page 2**, performance levels are disaggregated by school within the district. Each column shows the number of students at each school who performed at Levels 1 through 4. The "Total" column indicates the number of students with valid scores at each school.

Districts can use this report to examine performance across schools, identify trends, and compare school- and district-level outcomes to the state. These insights can help inform instructional planning and guide program-level decisions.

Example of Page 1 of District Report

DISTRICT REPORT: Sunflower District / #D1001

2024–2025

New Mexico Assessment of Science Readiness (NM-ASR)

The NMASR assessments measure students' understanding of the New Mexico Standards at each grade. The science assessment asks students to answer questions about data presented in narratives, equations, graphs, tables, and diagrams. Students show what they know about science by selecting or providing the right answer; sorting, ordering, or matching items; and labeling pictures.

Comparing Student Mean Score

Organization	District		State	
	Valid N	Mean Score	Valid N	Mean Score
Grade 5 (Score Range: 500-590)	441	550	31,352	548
Grade 8 (Score Range: 800-890)	489	851	30,066	847
Grade 11 (Score Range: 1100-1190)	461	1146	29,578	1139

Example of Page 2 of District Report

DISTRICT REPORT: Sunflower District / #D1001

2024–2025

New Mexico Assessment of Science Readiness (NM-ASR)

Comparing District and State Performance by School

	Organization Name	Level 1	Level 2	Level 3	Level 4	TOTAL
Comparing 5th Grade Student Performance Levels by Valid N Counts	**New Mexico**	**4,584**	**13,753**	**22,922**	**4,584**	**45,843**
	Bison Elementary	34	147	96	13	**290**
	Cottonwood Elementary	4	26	8	1	**39**
	Eisenhower Elementary	5	22	17	2	**46**
	Honeybee Elementary	0	0	3	0	**3**
	Meadowlark Elementary	3	17	10	0	**30**
	Snapper Elementary	13	45	40	9	**107**
	Western Elementary	9	37	18	1	**65**

Comparing 8th Grade Student	Organization Name	Level 1	Level 2	Level 3	Level 4	TOTAL
	New Mexico	4,387	14,387	14,387	4,387	43,873

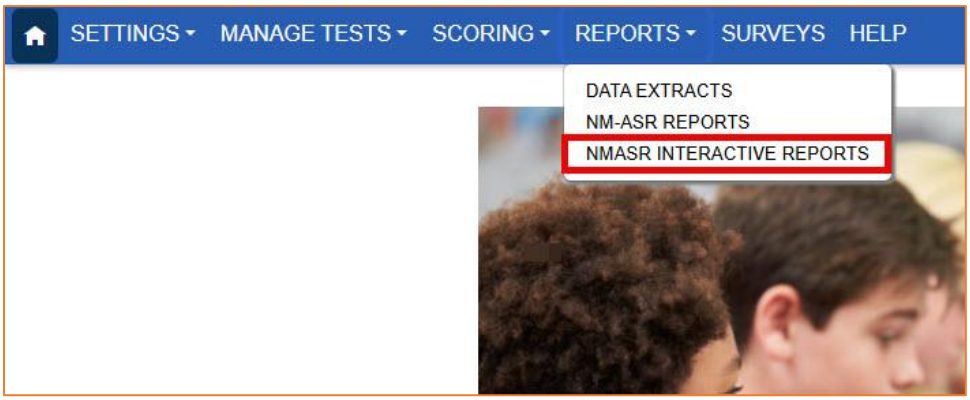
Interactive Reports

AUDIENCE: EDUCATORS

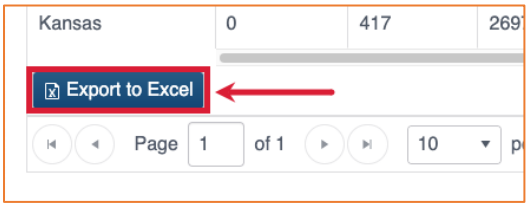
Accessing Interactive Reports

To access these reports, perform the following steps.

1. Select **Reports**.
2. Select **NM-ASR Interactive Reports**.

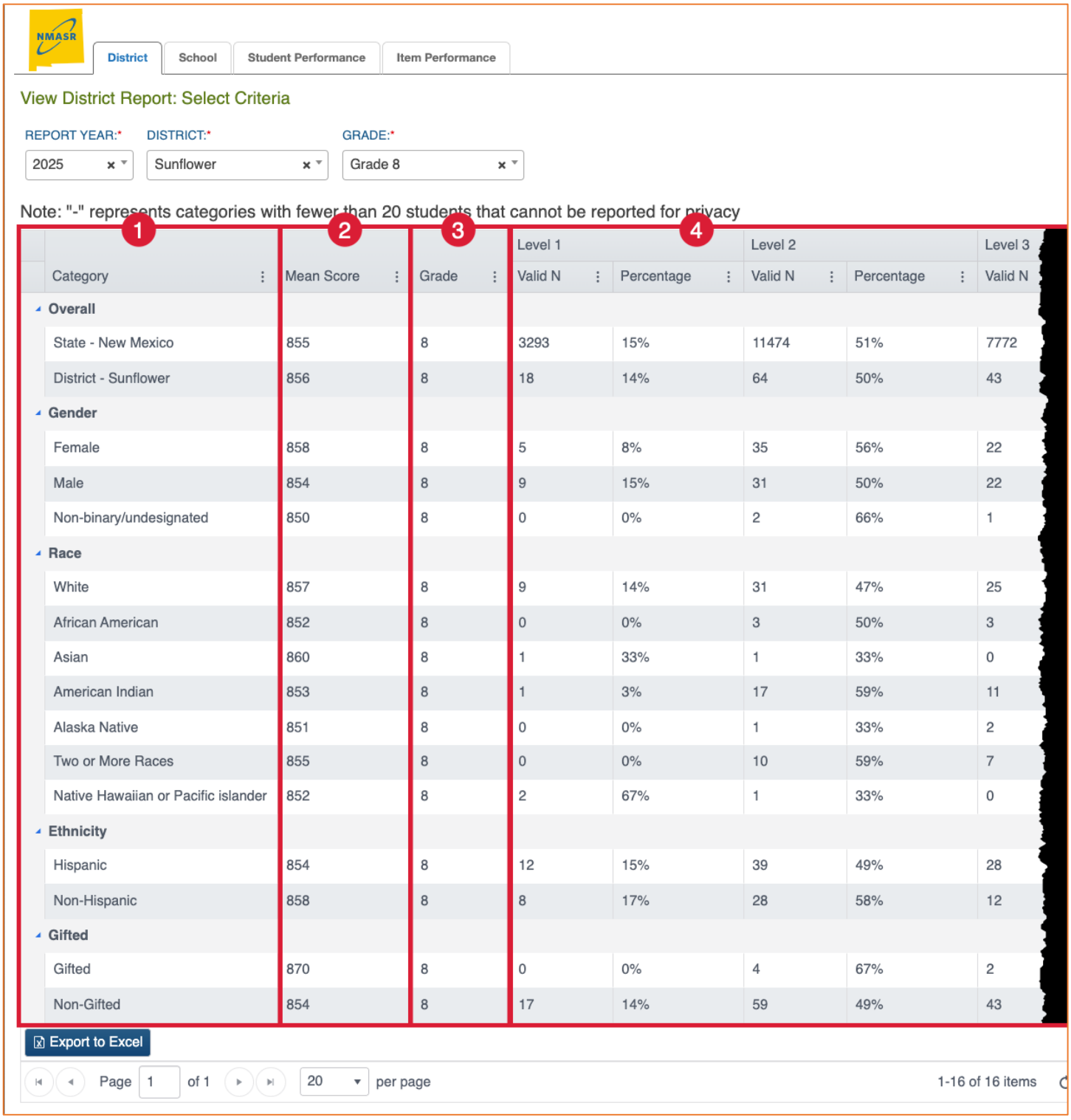


3. The NM-ASR Interactive Reports summary tab displays.
4. Select the **District**, **Student**, **Student Performance** or **Item Performance** tab.
5. Select criteria from the drop-down menus. Menus with a red asterisk (*) are required.
6. To export the report, select **Export to Excel** at the bottom of the table. The file will download automatically.



Interpreting Interactive Reports

District



Category	Mean Score	Grade	Level 1 Valid N	Level 1 Percentage	Level 2 Valid N	Level 2 Percentage	Level 3 Valid N
Overall							
State - New Mexico	855	8	3293	15%	11474	51%	7772
District - Sunflower	856	8	18	14%	64	50%	43
Gender							
Female	858	8	5	8%	35	56%	22
Male	854	8	9	15%	31	50%	22
Non-binary/undesignated	850	8	0	0%	2	66%	1
Race							
White	857	8	9	14%	31	47%	25
African American	852	8	0	0%	3	50%	3
Asian	860	8	1	33%	1	33%	0
American Indian	853	8	1	3%	17	59%	11
Alaska Native	851	8	0	0%	1	33%	2
Two or More Races	855	8	0	0%	10	59%	7
Native Hawaiian or Pacific islander	852	8	2	67%	1	33%	0
Ethnicity							
Hispanic	854	8	12	15%	39	49%	28
Non-Hispanic	858	8	8	17%	28	58%	12
Gifted							
Gifted	870	8	0	0%	4	67%	2
Non-Gifted	854	8	17	14%	59	49%	43

This District Report screen provides a detailed view of student performance on the NM-ASR for a selected district, grade level, and report year. Educators can use this report to analyze how student subgroups performed on the assessment across four achievement levels.

The table is divided into several key sections, highlighted in red for clarity:

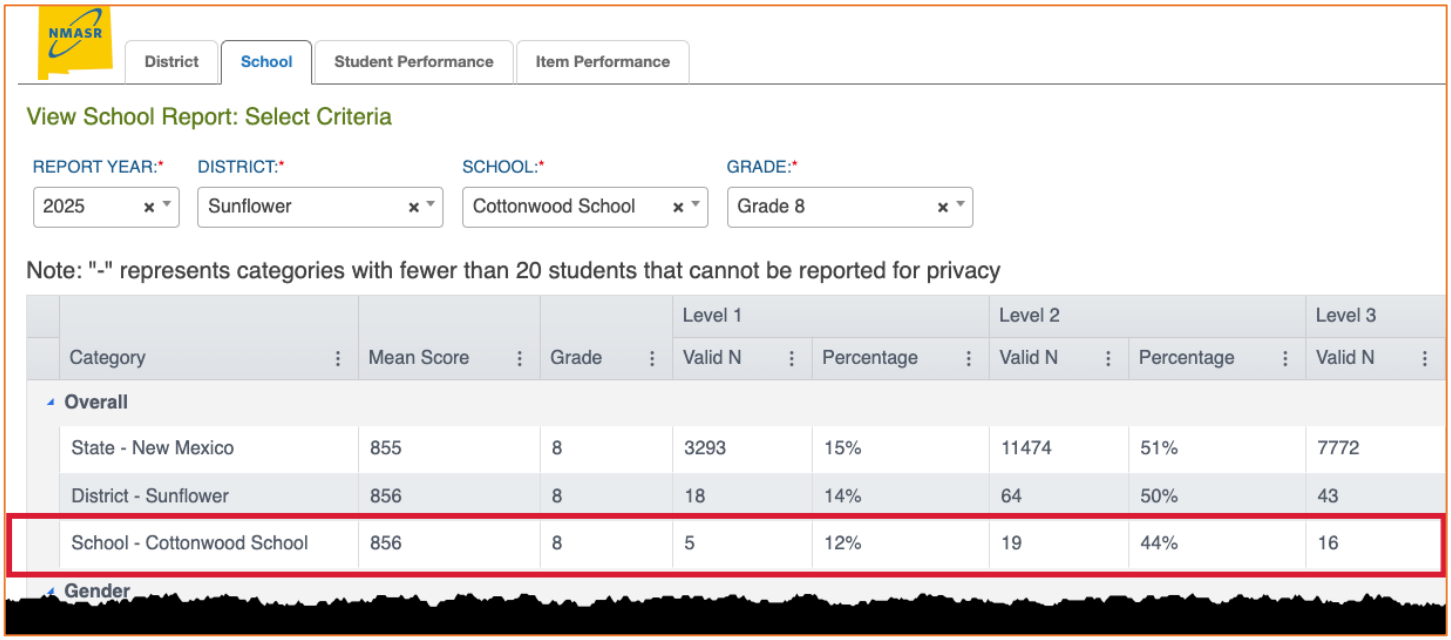
1. **Category** – This column lists all comparison groups in the report, including overall state and district-level results, as well as subgroups for gender, race, ethnicity, and gifted status. These categories help educators examine how different populations performed on the assessment.
2. **Mean Score** – Displays the average scale score for each category. This value provides a general sense of how each group performed numerically on the assessment, with higher scores indicating stronger overall performance.
3. **Grade** – Indicates the tested grade level—Grade 8 in this example.
4. **Performance Level Breakdown** – This section shows how students are distributed across NM-ASR performance levels. For each level, both the number of students (Valid N) and the percentage of the subgroup are provided. This breakdown helps identify patterns of performance within and across student groups.

Educators can use this screen to:

- Compare subgroup performance to the district and state averages.
- Identify gaps in achievement among student groups.
- Make informed decisions about instructional priorities, interventions, and equity-focused supports.

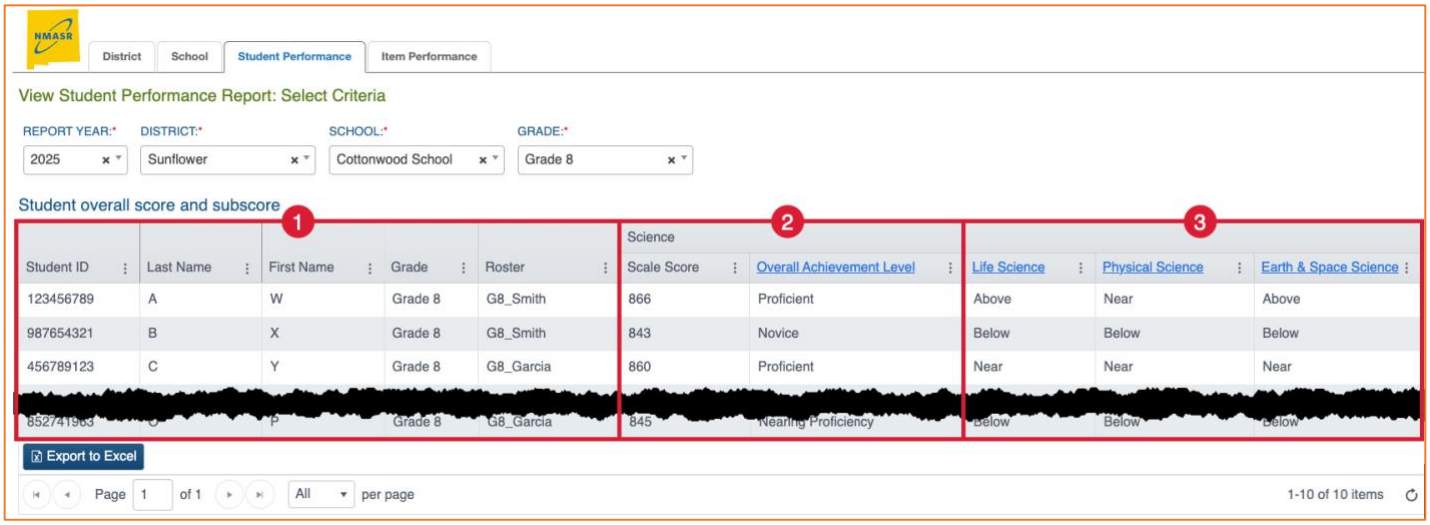
NOTE: Select **Export to Excel** to download the data for an Excel file containing this data.

School



The School Report presents the same data elements as the District Report but disaggregated at the school level. In the Overall section, the school is listed as its own category, and all reported subgroups are included as part of the school's total population.

Student Performance



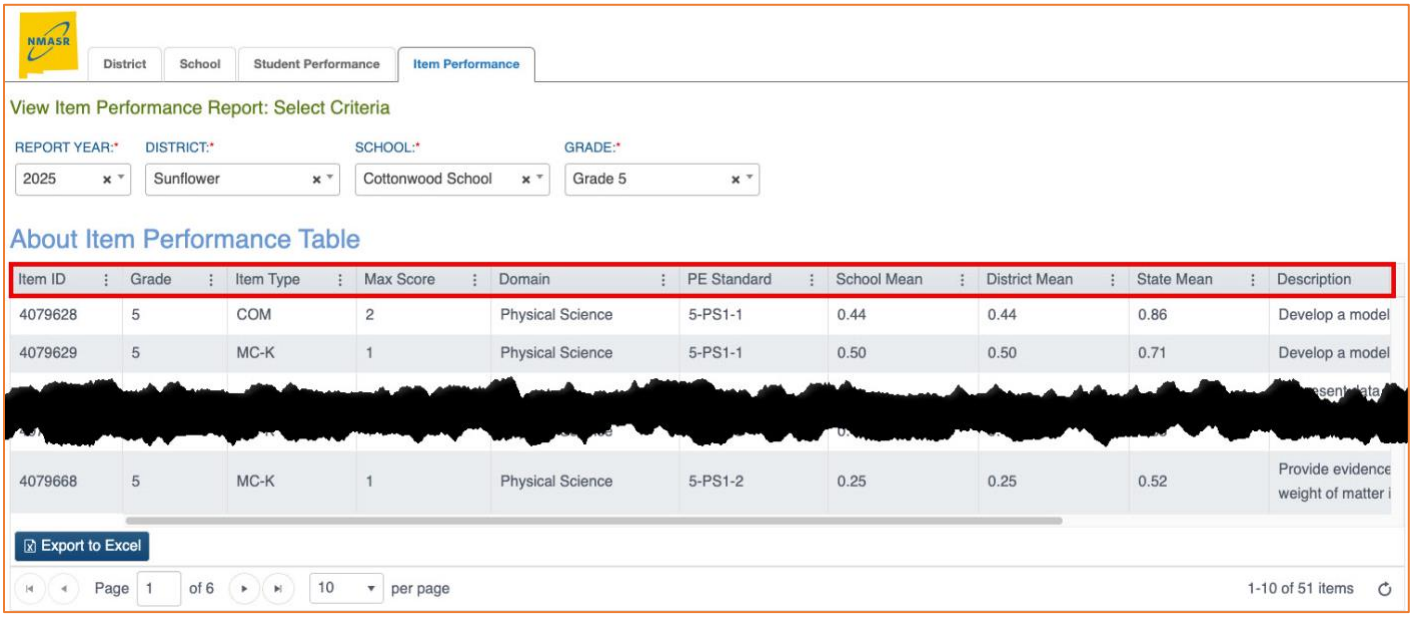
This screen displays the Student Performance Report, which provides detailed, student-level assessment results for a selected school and grade level. Filters at the top allow educators to select the year, district, school, and grade(s) to refine the data shown.

In the table above, educators can review the following:

1. **Student Details** – This section includes each student's state-issued ID number, last and first name, grade level, and assigned roster (typically the teacher or class grouping).
2. **Score and Achievement Level** – This section shows the student's scale score and their corresponding Overall Achievement Level (Novice, Nearing Proficiency, Proficient, or Advanced).
3. **Science Domain Performance** – This section breaks down the student's performance by science domain: Life Science, Physical Science, and Earth & Space Science. For each domain, a performance indicator—Above, Near, or Below—shows how the student performed compared to the typical Proficient student.

This view helps educators identify student strengths and areas for support, both overall and within specific science domains, allowing for more targeted instruction and intervention.

Item Performance



This screen shows the Item Performance Report, which presents item-level data for a selected grade and school. Filters at the top allow educators to narrow the data by district, school, grade, and other criteria.

Each row in the report corresponds to a single test item, and the columns provide the following details:

- **Item ID** – A unique identifier for each test item on the assessment.
- **Grade** – Indicates the grade level for which the item was administered.
- **Block/Standalone** – Shows the organizational grouping of the item—whether part of a block of questions or as a standalone item.
- **Item Type** – Identifies the format of the question. See Table 2 for available item types and their abbreviations.
- **Max Score** – The maximum number of points that could be earned on the item.
- **Domain** – Specifies the science domain the item aligns with: Physical Science, Life Science, or Earth & Space Science.
- **PE (Standard)** – Indicates the Performance Expectation or standard being assessed by the item. These codes (e.g., 5-PS1-1) correspond to NM STEM Ready! Science Standards.
- **School/District/State Mean** – The average score earned by students at that location on this particular item. This helps educators identify how students performed relative to the maximum possible score and students elsewhere.
- **Description** – Identifies the specific content being tested by the item.

This report enables educators to analyze item-level trends, assess strengths and weaknesses in specific science standards, and make informed instructional adjustments.

Table 2: Item Types

Item Type	Abbreviation	Description
Extended Response	ER	Open-ended, free response item where students provide their own answer
Multiple-Choice Keyed	MC-K	Question followed by several answer options, where only one correct option is predefined or "keyed."
Multiple-Choice, Multi-Select	MC-MS	Question with several answer options, where more than one option may be correct. Students must select all the correct options to receive full credit.
Technology Enhanced Item	TEI	Interactive item such as drop-down, matrix, drag-and-drop, etc.

Appendix A: Parent Guide to Reports

The NM-ASR Parent Guide can be a valuable tool to explain the NM-ASR and Individual Student Reports to parents. The NM-ASR Parent Guide is available as a PDF in English and Spanish and can be translated into any language on the NM-ASR website (https://nmassessments.org/).

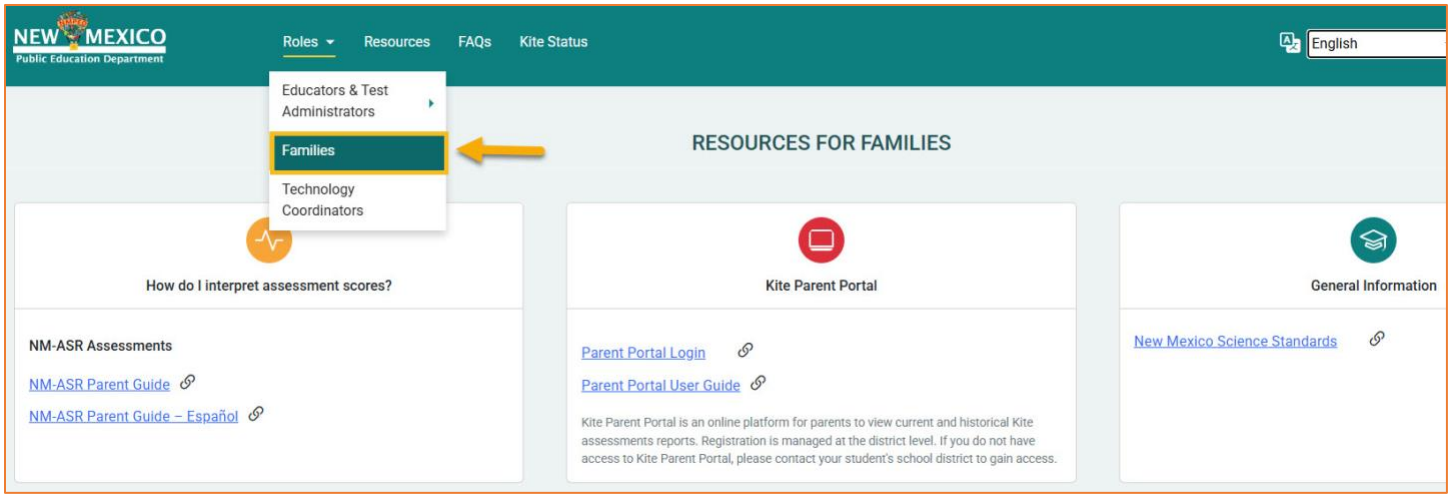
This guide can assist you in communicating with parents. Specifically:

- **Understanding Program Placement** – The assessment results are used by teachers, schools, and districts to determine the appropriate level of support and participation for the student.
- **Providing Clarity**– Help parents interpret their child's performance in each tested domains—Physical Sciences, Life Sciences and Earth and Space Sciences—as well as their overall proficiency level.
- **Progress Monitoring** – A student is considered to be on target with a Level 3 performance.

Where to Find Resources

Additional resources to share with families are available on the NM-ASR website.

1. Navigate to the NM-ASR website: https://nmassessments.org/.
2. At the top of the page, select **Roles**.
3. Select **Families**.



This page provides several resources, which can be translated into several languages. To translate the page into a different language, select the drop-down menu at the top of the page.