

# Using Data in the OSTP Data Portal to Monitor COVID Recovery

Considerations for  
Educators



**OKLAHOMA**  
Education



# Overview guide

## Connecting with Families to Support Students

### How can assessment reports help us to work with families and support students?

In any year, a single assessment score does not provide a complete measure of student achievement. This year, it is still important to use other information about a student's experience (e.g., learning environment, access to grade-level content, attendance, course grades) to provide a more complete picture of how well students progressed, in light of COVID disruptions.

Paper reports for each student in grades 3-8 who took a state assessment in spring 2022 are now available to print through the Parent Portal application. Additionally, we will be available in mid-October. Paper reports provide an opportunity to talk with families about their student's progress and to plan next steps.

### What additional tools are available to support this work?

- [Sample Logins](#) to be used by educators so that they know what is in the portal
- [Parent Portal Overview video](#) shows families how to access the portal
- [Understanding Your Student's Scores](#) provides information about test scores to support families and teachers in working together
- [Oklahoma Family Guides](#) provides ways families can support students at home

## OSTP Data for Districts and Schools

### Where can I find my school site's performance, enrollment, and participation data?

Different levels of performance-related data are available through the Accountability Reporting application in [Single Sign-On](#) and [OSTP Data Portal](#), as shown *here*:



The Accountability Reporting application in Single Sign-On aggregates student-level into the Assessment Performance and Student Progress reports. These various data help administrators answer questions about how enrollment changed and how students recovered and progressed.



The [OSTP Data Portal](#) aggregates different reports and displays OSTP performance related data for performance levels, OPI scale scores, and Reporting Category subscores. These data are presented by grade level, student group, and school year. This information helps educators examine how well interventions and strategies worked.

**Note:** Access to both of these data portals are granted through the district.

# Administrator's Toolkit

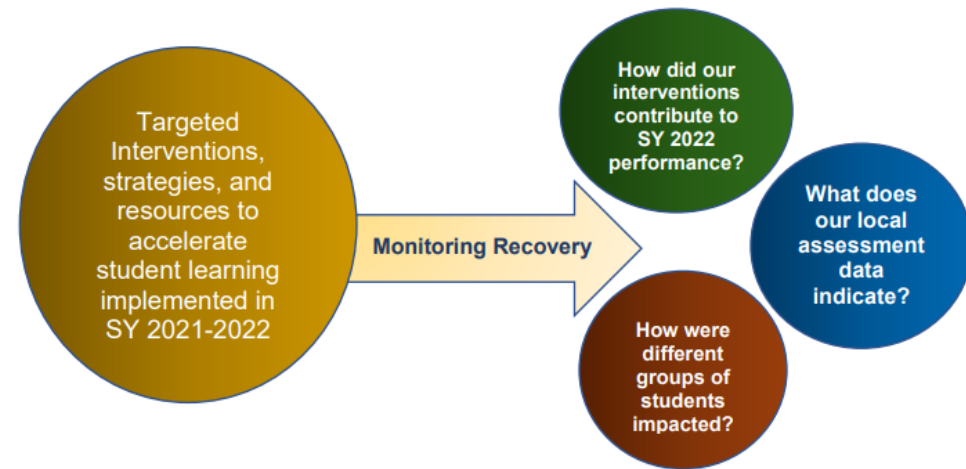
## How can I access and use data in the Accountability Reporting application?

Assessment related data displayed in the Accountability Reporting application provides information to help you answer the following questions:

- Who received instruction this year that might be different from last year?
- Did we get back to 95% participation rate or more?
- How did my students perform this year (i.e., Spring 2022)?
- Based on those students who tested in spring 2022, how did they perform in spring 2021?
- When connected with our local data, how did the strategies, interventions, or resources we invested in contribute to our performance in spring 2022?

## Using spring 2022 state assessment data to monitor recovery

Students and educators have faced disruptions throughout the SY 2019–2020 and 2020–2021 academic school years. Spring 2021 results reflected the pandemic-related challenges and those results serve as a baseline that represents a new, post-pandemic reality. When connected with **local data**, spring 2022 results help provide an honest appraisal of where students are today and what impact interventions and strategies implemented in SY 2021–2022 had on student learning.



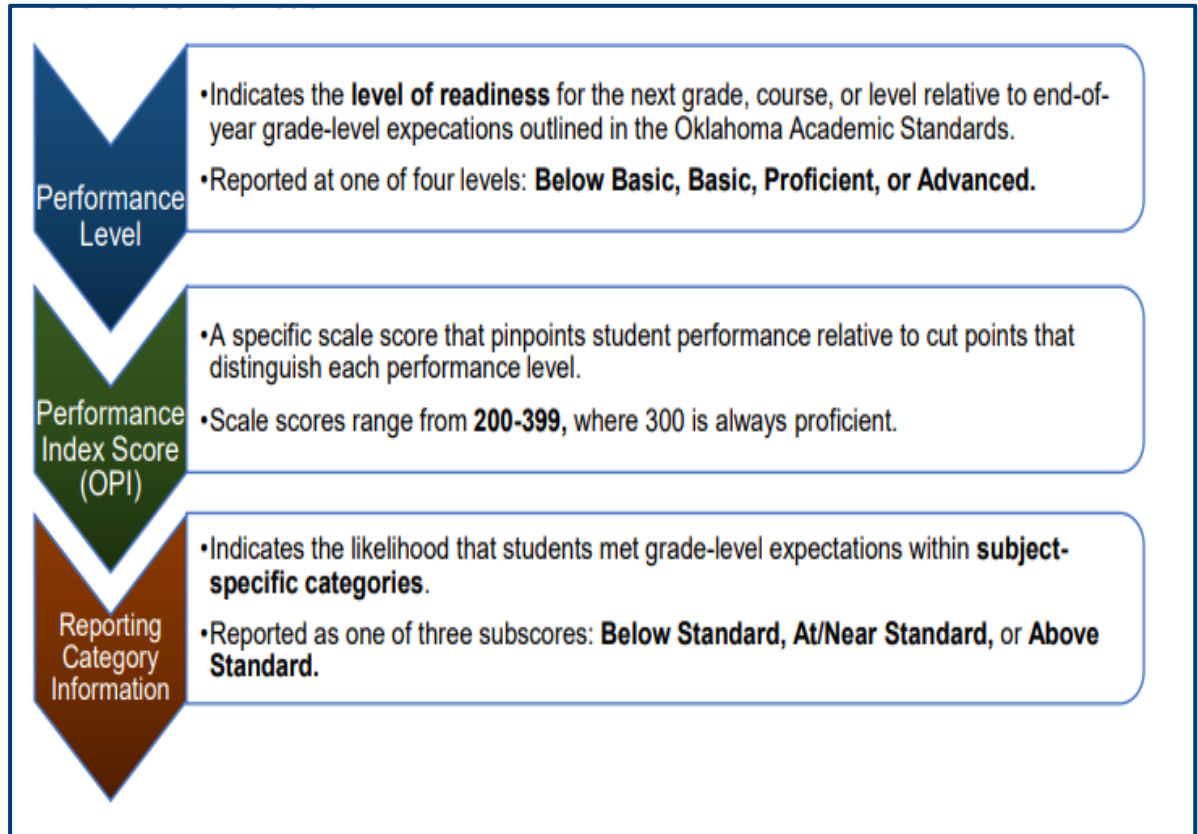
# Educator's Toolkit

## Assessment Data in the OSTP Data Portal

### How can I access and use data in the OSTP Data Portal?

Performance related data displayed in the OSTP data portal can be aggregated and disaggregated to compare performance across student groups to help answer the following questions:

- How did students perform relative to grade-level expectations?
- In which area(s) did students make progress?
- In which area(s) might students have struggled?
- How well did the interventions, strategies, and resources we implemented in SY 2021– 2022 work?
- How does state summative assessment performance compare with our local observations?
- Where might we need to scaffold?
- Where might we need to consider curricular changes?



# Questions to Consider



How do state assessments fit into a system of assessment and what does assessment-related data tell us about student learning?



How can assessment-related data in the OSTP Data portal help us understand how well interventions implemented in SY 2021 worked?

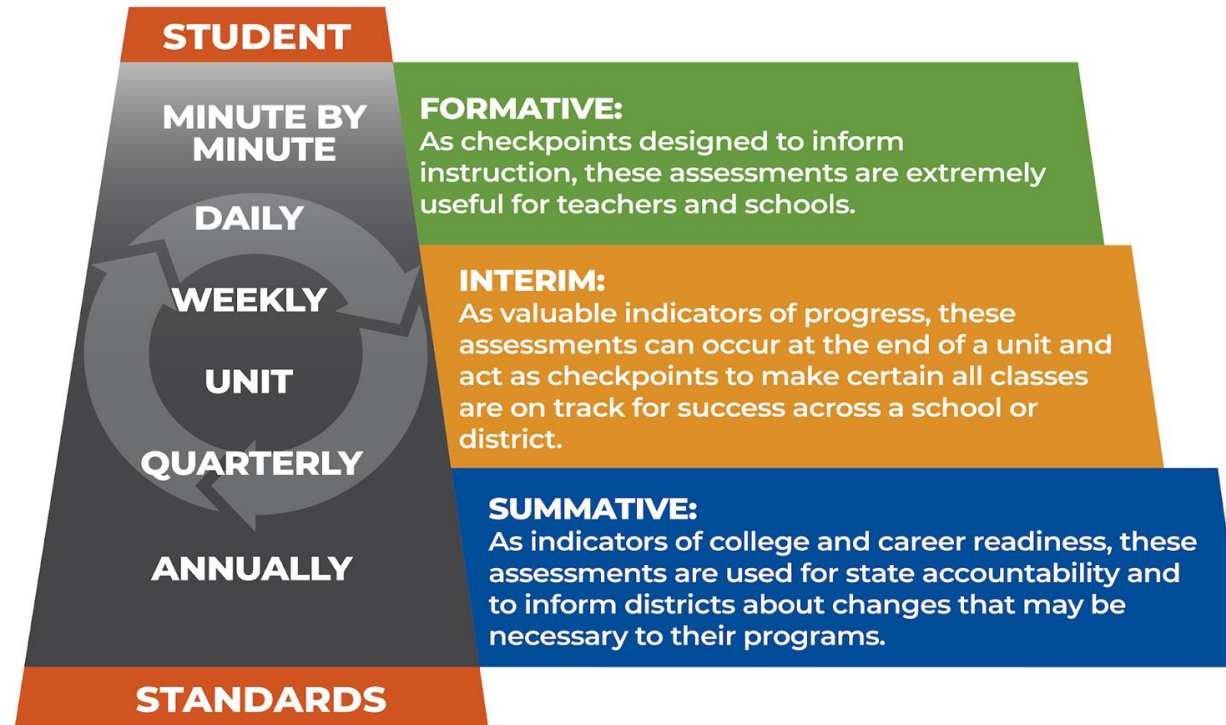


How can assessment-related data in the OSTP Data portal inform curricular and instructional decisions for this year?

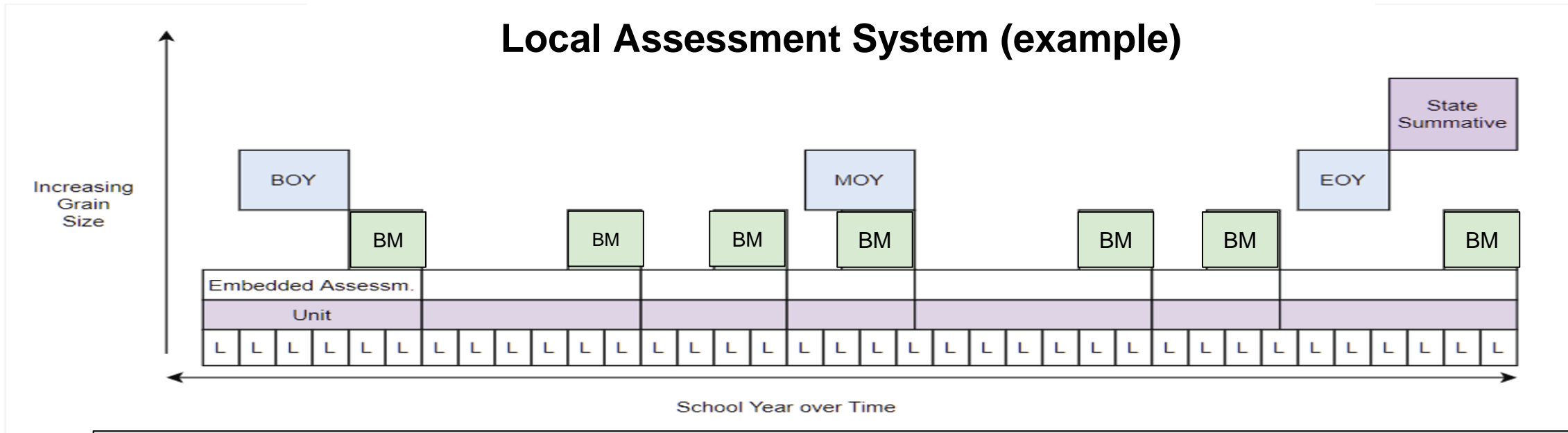
# What is the Purpose of State Summative Assessments?

# State summative assessments are part of a system

Classroom, district, and state summative assessments can **work together** in a **coherent system** to produce **multiple pieces of evidence** at different points in time.



Doing so can provide educators with **timely and actionable information** to monitor student learning and **make adjustments** so that summative results **corroborate local observations**.



- **Classroom Level:** L- Lesson-level formative, **BM**- Benchmarking (e.g., Common Formative, Unit Benchmark)
- **District Level:** **BM**- District Benchmark, **BOY**- Beginning of the Year, **MOY**- Middle of the Year, and **EOY**- End of the Year
- **State Level:** State Summative

Source: [D'Brot, 2022](#)



# Performance-related data from state summative assessments helps us understand how well students did relative to end-of-year expectations.

## Grade-Level expectations outlined in the standards

- Is about proficiency on grade-level knowledge
- Is a single snapshot and does not tell the whole story
- Should be used in conjunction with district and classroom assessments to monitor progress and overall achievement

Where students  
are relative to end-  
of-year  
expectations

# Uses of performance-related data in a typical year

In a **typical year**, performance-related data from state summative assessments helps us understand **system-level decisions** about

- ❑ how groups of students are learning standards;
- ❑ how district or school curriculum might be working; and
- ❑ where additional professional development may be needed (e.g., content specific, best practices, curriculum, etc.).

# Performance-related data as a new post-pandemic reality

- Students and educators have faced disruptions in both the 2019-2020 and 2020-2021 school years.
- **Spring 2021** results reflected the pandemic-related challenges, and those results serve as a **baseline** that represents a **new, post-pandemic reality**.



# Performance-related data as a way to monitor recovery

When connected with **local data**, spring 2022 results help provide an **honest appraisal** of

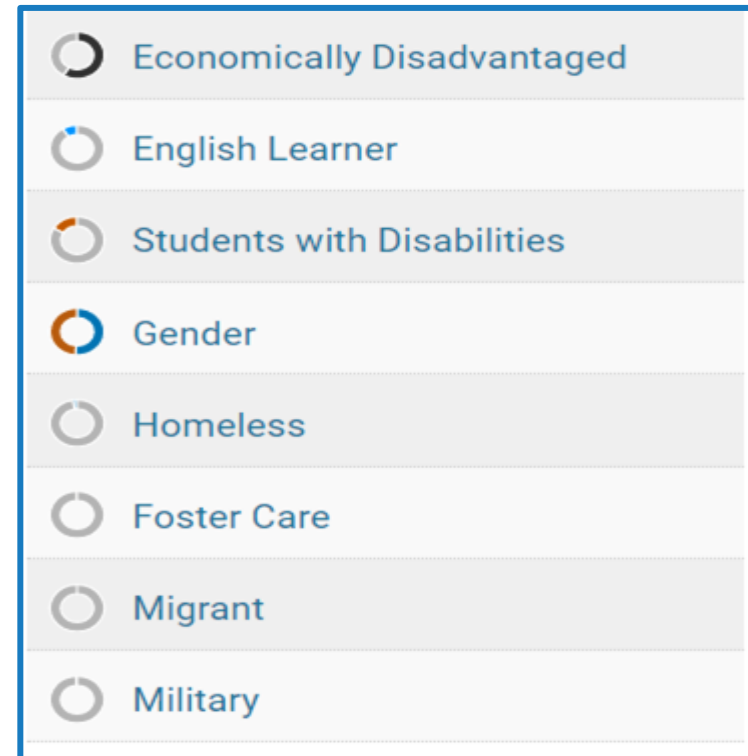
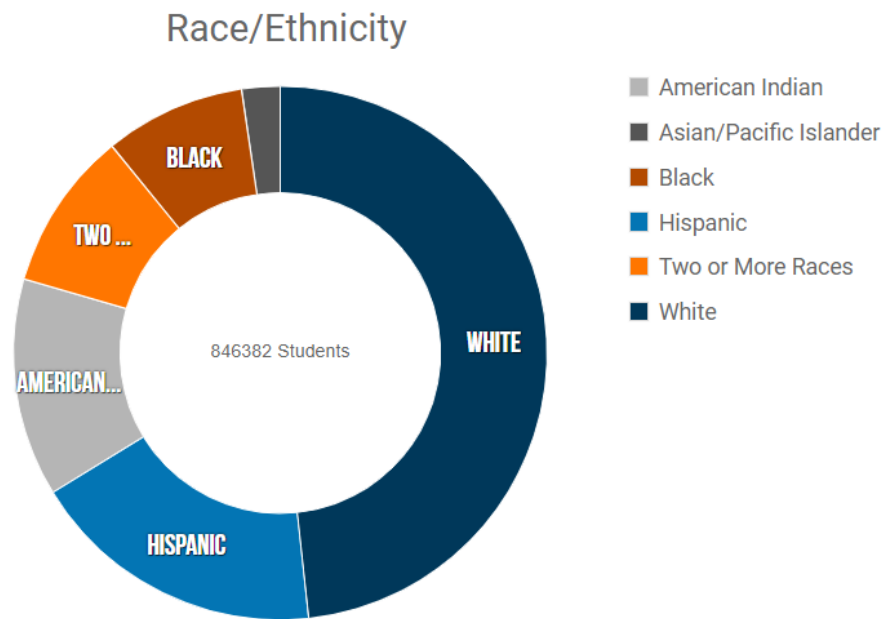
- ❑ where students are **today** and
- ❑ what **impact** interventions and strategies implemented in SY 2021–2022 had on **student learning**.



# What are the Considerations for Comparing SY 2021 and SY 2022 Data?

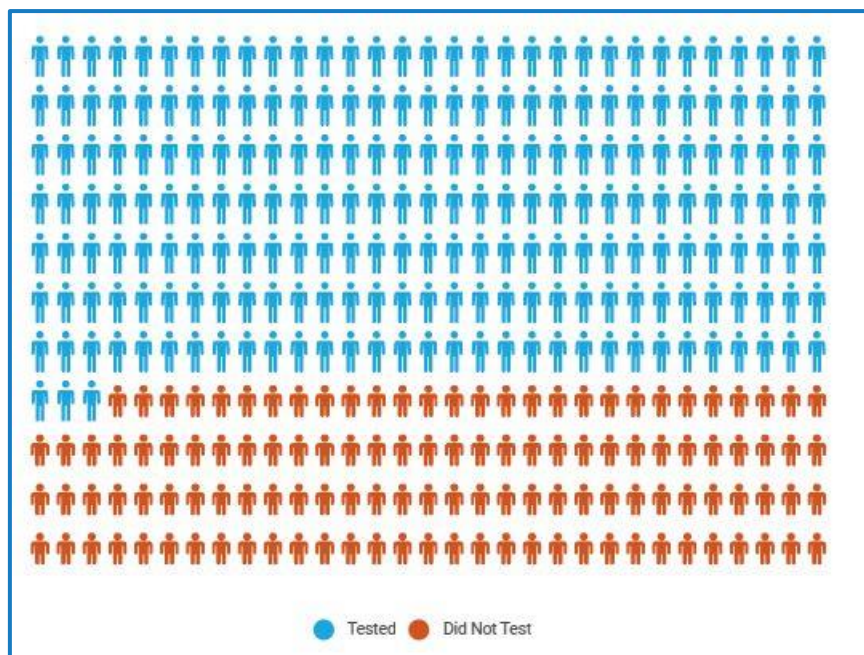
# Who was instructed?

Did you experience changes to your enrollment between SYs 2020–2021 and 2021–2022?

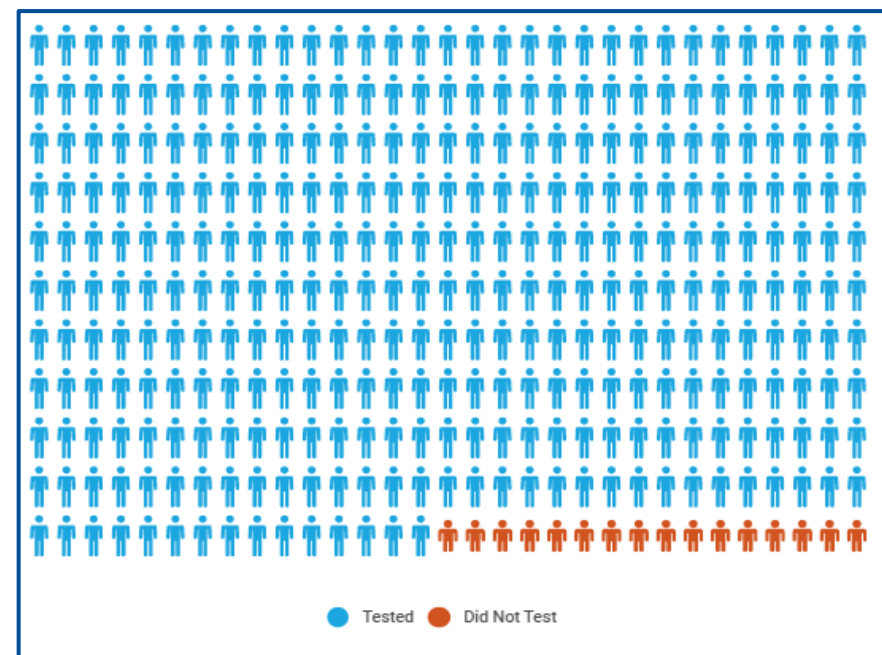
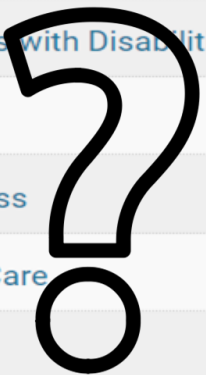


# Who tested?

Were there changes in the demographics of the students that tested in spring 2022 compared to students that tested in spring 2021?



- Economically Disadvantaged
- English Learner
- Students with Disabilities
- Gender
- Homeless
- Foster Care
- Migrant
- Military



# Lower Participation Requires Context

***We urge caution when comparing summary reports because of the possibility of differences in the testing populations between SYs 2020– 2021 and 2021– 2022.***

Participation Rate	Potential Interpretations
95% or greater	Presumes student representativeness and no data missingness concerns.
80 - 94.9%	Requires advanced research; interpretation <i>possible</i> but not for all student groups.
Below 80%	Concerns! Highly unlikely that assessment scores can be comparable to any prior reporting.



# School Profile Change over Time



## 2021 school profile:

- 232 total students
- 14% American Indian, 13% Hispanic, and 52% White
- 75% Economically Disadvantaged
- 13% Students with Disabilities

97% ELA participation rate, overall

- Grade 3: 95% (7% Prof/Adv)
- Grade 4: 99% (13% Prof/Adv)
- Grade 5: 99% (28% Prof/Adv)



## 2022 school profile:

- 140 total students
- 17% American Indian, 14% Hispanic, and 57% White
- 57% Economically Disadvantaged
- 20% Students with Disabilities

99% ELA participation rate, overall

- Grade 3: 98% (11% Prof/Adv)
- Grade 4: 100% (9% Prof/Adv)
- Grade 5: 100% (27% Prof/Adv)

# Performance

How does student performance from spring 2022 compare with spring 2021?

## Improvements

- How did the interventions contribute to improvement?
- How did schools climate contribute?
- What local assessment evidence corroborates improvement?

## Stable

- How did the interventions support students in maintaining performance?
- How were different student groups impacted?
- What does local assessment evidence indicate?

## Decline

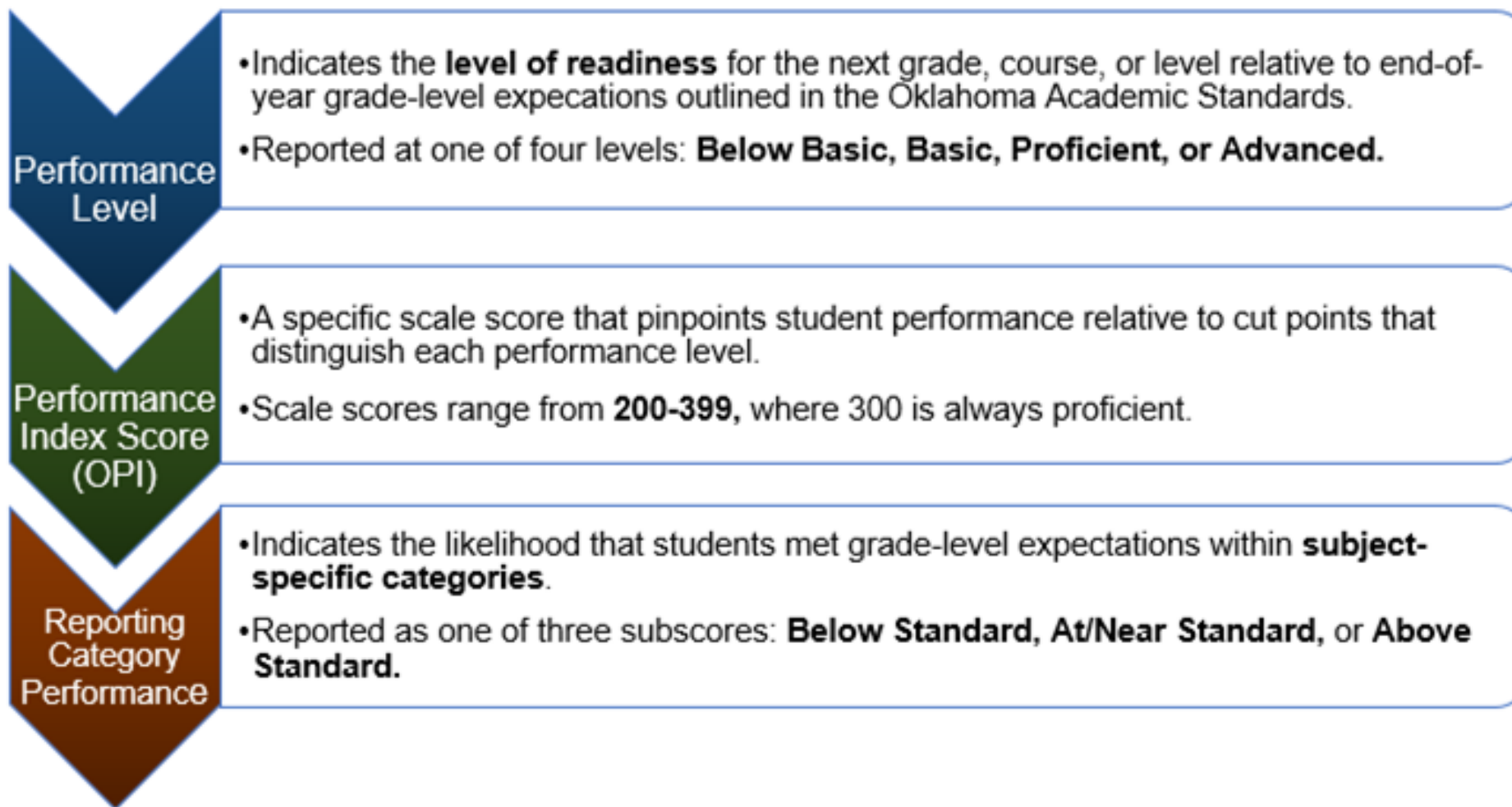
- Why didn't the interventions support impact performance?
- How were interventions selected, implemented, monitored, and adjusted based on data?
- What does local assessment evidence indicate?

## Enrollment and Participation

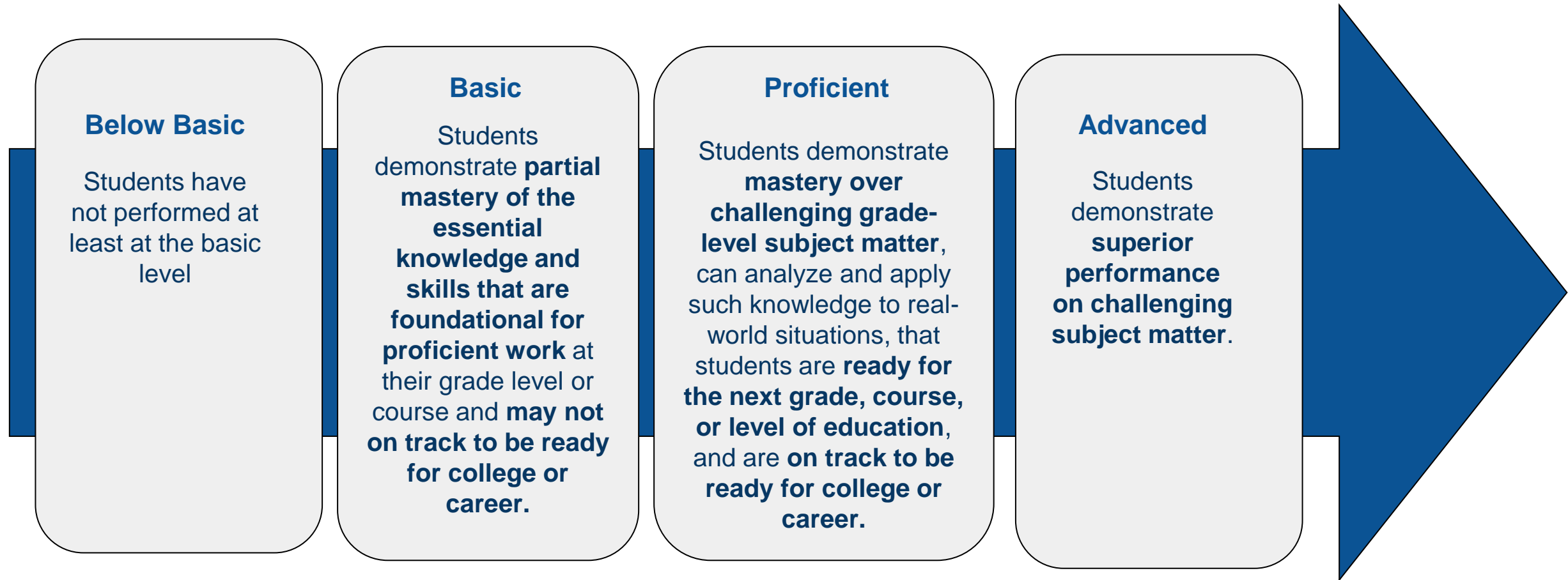
- Are your **enrollment demographics** for your SY 2021– 2022 school year comparable to SY 2020– 2021 (By grade level? By student group?)
- Did you acquire transfer students or reclaim students that may have had **different access to grade-level learning** during SY 2020– 2021?
- Were the students that **tested** in SY 2021– 2022 **representative of the students** who tested in SY 2020– 2021 (By grade level? By student group?)

# What does Assessment-Related Data Tell Us About Student Learning?

# OSTP performance data



# Performance Levels: how ready are students for the next grade, course, or level?

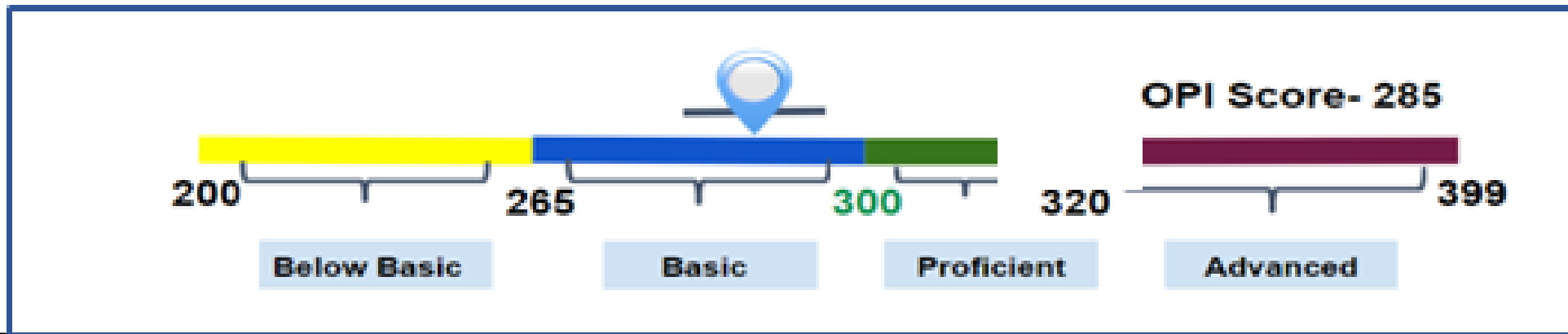


Source- [Senate Bill 1197](#)

# Performance Levels are defined by Performance Index Scores (OPI)

- A student's **OPI score** is used to place them in one of four performance levels.

Grade 5 Math OPI Score Ranges and Performance Levels



- OPIs are obtained by **translating raw scores** onto a common scale to account for **differences in item complexity across test forms** so that comparisons between test takers can be made.

# Performance index (OPI) scores

- Performance Index (OPI) Scores supplement performance-level data by **pinpointing where a score** is relative to the performance level cut-points.

Grade/Content Tested	Form	Scaled Score Range	Performance Level
Grade 5 ELA	Spring	200 – 270	Below Basic
		271 – 299	Basic
		300 – 322	Proficient
		323 – 399	Advanced

OPI- 289

- OPI scores range from 200-399 where 300 is always proficient.
- Average or **mean OPI** scores allow for **comparison of student groups**.

# OPIs: where are students today?

Grade/Content Tested	Form	Scaled Score Range	Performance Level
Grade 5 ELA	Spring	200 – 270	Below Basic
		271 – 299	Basic
		300 – 322	Proficient
		323 – 399	Advanced
Grade 5 Math	Spring	200 – 265	Below Basic
		266 – 299	Basic
		300 – 320	Proficient
		321 – 399	Advanced
Grade 5 Science	Spring	200 – 271	Below Basic
		272 – 299	Basic
		300 – 329	Proficient
		330 – 399	Advanced

Mean OPI scores pinpoint overall performance within a performance level.

Grade 11 OPI scale scores for ELA and Math are displayed in the Accountability Reporting application in the Assessment Performance Report.

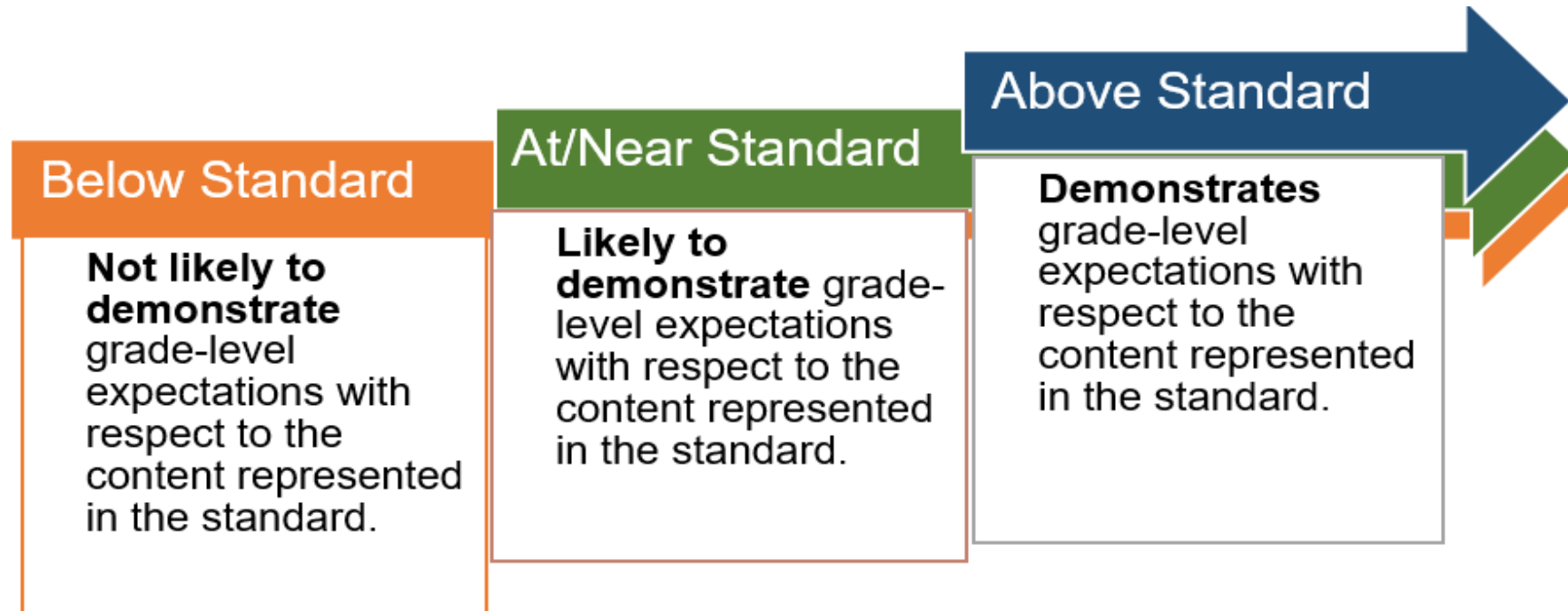
[Grade 3-8 OSTP Performance Level Lookup Table](#)

Grade 11: [ACT/SAT OPI Conversion](#)



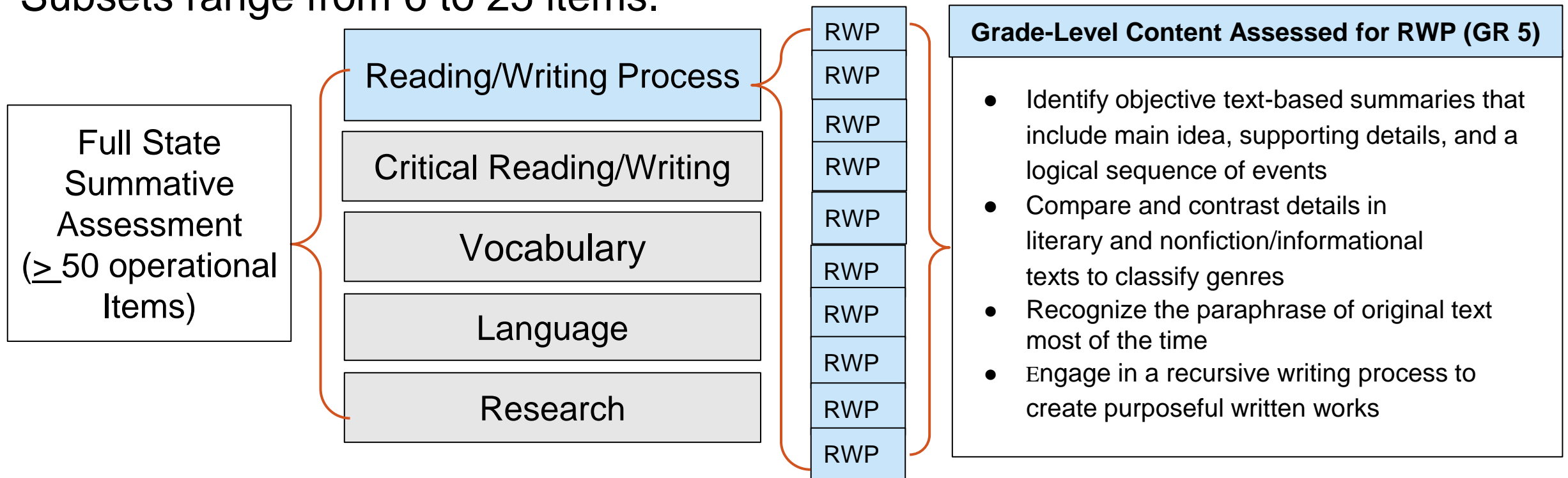
# Reporting Category Performance

Reporting Category Performance indicates the likelihood that a student or group of students demonstrated grade-level performance expectations within content-specific categories (e.g., critical reading and writing for ELA).



# Reporting Category scores are based on a subset of content-specific items.

Performance in each Reporting Category is determined by a student's performance on a subset of content-specific items for each reporting category. Subsets range from 6 to 25 items.



# Reporting category scores: what's working? where might students need extra support?

- **Performance by Reporting Category** provides an additional piece of information that when connected with your local assessment data, helps educators understand where students are demonstrating grade-level expectations and where they may need extra support in each subject.

English Language Arts	Mathematics	Science	U.S. History
<ul style="list-style-type: none"><li>● Reading/Writing Process</li><li>● Critical Reading and Writing</li><li>● Language</li><li>● Vocabulary</li><li>● Research</li></ul>	<ul style="list-style-type: none"><li>● Number and Operations</li><li>● Algebraic Reasoning</li><li>● Geometry and Measurement</li><li>● Data and Probability</li></ul>	<ul style="list-style-type: none"><li>● Life Science</li><li>● Physical Science</li><li>● Earth and Space Science</li></ul>	<ul style="list-style-type: none"><li>● <b>U.S. History</b></li><li>● <b>Civics</b></li></ul>

# How can Performance Levels, OPIs, and Reporting Category Subscores be Used to Prioritize Content?

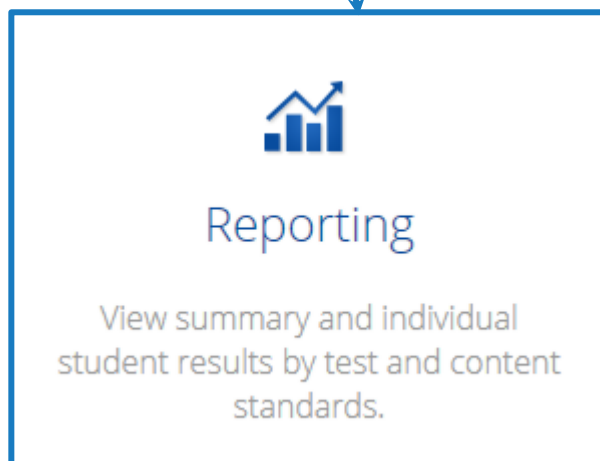
OSTP Data Portal

# Accessing data in the OSTP Data Portal



Login with your Username and Password. Click reporting and then choose the report and school or district for which you wish to review data

Access to the OSTP Data Portal is granted at the district level



Program: OSTP  Last Name

Report: Group Summary: Performance Levels

Admin:  2022  2021  2019  2018  2017

Grade:  Grade 03  Grade 04  Grade 05  Grade 06  Grade 07  Grade 08

Release:  Final

# Assessment-related data in the OSTP Data Portal helps you answer key questions

- How did students perform relative to grade-level expectations?
- In which area(s) did students make progress?
- In which area(s) might students have struggled?
- How well did the interventions, strategies, and resources we implemented in SY 2021– 2022 work?
- How does state summative assessment performance compare with our local observations?
- Where might we need to scaffold?
- Where might we need to consider curricular changes?

# Types of reports

Report	Data Available
Group Summary: Performance Levels	<ul style="list-style-type: none"> <li>● <b>Single grade</b>-performance level data including OPI, percent scoring at each performance level and reporting category.</li> <li>● Data can be disaggregated by student group for comparison purposes using the disaggregate</li> </ul>
Group Summary PL: All Grades	<ul style="list-style-type: none"> <li>● <b>Multiple grades</b>- performance level data including OPI, percent scoring at each performance level and reporting category by subject.</li> <li>● Data can be disaggregated by student group for comparison purposes</li> </ul>
Group Summary PL: All Selections	<ul style="list-style-type: none"> <li>● <b>Single Grade</b>- performance level data for <b>all student groups</b> including OPI, percent scoring at each performance level and reporting category by subject.</li> </ul>
Summary Counts	<ul style="list-style-type: none"> <li>● Provides summary counts for online, not other placement, total tested, and total did not attempt</li> </ul>
Longitudinal Roster	<ul style="list-style-type: none"> <li>● Provides student level performance across grades for students enrolled at a site multiple years (For example, grade 3 in 2018, grade 4 in 2019 and grade 6 in 2021)</li> </ul>
Data Tools	<ul style="list-style-type: none"> <li>● Provides data options to dig deeper into performance index scores: distribution, cross-tab comparisons, and scatter plots to compare subjects.</li> </ul>

# What the group summary report tells us

Group Summary: Performance Levels: OSTP, Cyber Elem A (101), 2022, Grade 05, Final							Options	Save	Download	Print		
Group	Subject	Administration	Total N	Valid N	Mean OPI	% in Each Performance Level				% in Each Reporting Category Performance Level		
						Below Basic	Basic	Proficient	Advanced	Below Standard	At/Near Standard	Above Standard
						%	%	%	%	%	%	%
Cyber Elem A (101)	ELA	2022	2,239	2,098	263	61	27	9	3			

**Total N:** the number of students enrolled at the time of testing.

**Valid N:** the number of students who tested and had a valid score.

**Mean OPI:** the average performance index score for a group of students. OPIs range from 200-399, where 300 is always proficient.

**% in Each Performance Level:** shows where students are relative to end-of-year expectations.

**% in Each Reporting Category:** shows where students are likely or unlikely to demonstrate grade-level knowledge and skills in a subject-specific category (i.e., reading and writing process). **Reminder:** *students scoring **At/Near or Above Standard** are likely to meet grade-level expectations based on their performance on the state summative test.*



# Using OPIs and reporting category scores

Grade 6: Group Summary PL					Options Save Download Print Table Chart Transpose						
Subject	Administration	Total N	Valid N	Mean OPI	% in Each Performance Level				% in Each Reporting Category Performance Level		
					Below Basic	Basic	Proficient	Advanced	Below Standard	At/Near Standard	Above Standard
					%	%	%	%	%	%	%
ELA	2022	126	124	274	42	43	11	4			
Reading/Writing Process	2022		124						62	26	12
Critical Reading/Writing	2022		124						75	19	6
Vocabulary	2022		124						65	25	10
Language	2022		124						44	40	16
Research	2022		124						48	35	18
Mathematics	2022	126	124	268	48	36	11	4			
Number & Operations	2022		124						74	13	13
Algebraic Reasoning	2022		124						72	17	11
Geometry & Measurement	2022		124						65	21	15
Data & Probability	2022		124						64	23	13

**Mean OPI:** Average index score for all students that tested. Scores range from 200-399

**% in Each Reporting Category:** likelihood that students demonstrated grade-level expectations

# OPIs- where are students scoring relative to the cut-point?

- The mean OPI in ELA is at the midpoint of Basic.
- The mean OPI in math is slightly above the lowest Basic index score.

Grade 6: Group Summary PL				
Subject	Administration	Total N	Valid N	Mean OPI
ELA	2022	126	124	274
Reading/Writing Process	2022		124	
Critical Reading/Writing	2022		124	
Vocabulary	2022		124	
Language	2022		124	
Research	2022		124	
Mathematics	2022	126	124	268
Number & Operations	2022		124	
Algebraic Reasoning	2022		124	
Geometry & Measurement	2022		124	
Data & Probability	2022		124	

Grade 6 ELA		
	200 – 268	Below Basic
Spring	269 – 299	Basic
	300 – 329	Proficient
	330 – 399	Advanced

Grade 6 Math		
	200 – 266	Below Basic
Spring	267 – 299	Basic
	300 – 329	Proficient
	330 – 399	Advanced

# Reporting Category Performance- where might students need extra support?

Grade 6: Group Summary PL					% in Each Performance Level				% in Each Reporting Category Performance Level		
Subject	Administration	Total N	Valid N	Mean OPI	Below Basic	Basic	Proficient	Advanced	Below Standard	At/Near Standard	Above Standard
					%	%	%	%	%	%	%
ELA	2022	126	124	274	42	43	11	4			
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- In ELA we see that 75% of students did not meet grade-level expectations in the area of Critical Reading/Writing.
- In math, we see that 74% did not meet in Numbers and Operations and 72% did not meet in Algebraic Reasoning.

# How does evidence from state summative assessment performance compare with local observations?

Grade 6	
<b>Number &amp; Operations</b>	<b>Grade-Level Expectations</b>
<p><b>6.N.1</b> Read, write, and represent integers and rational numbers expressed as fractions, decimals, percents, and ratios; write positive integers as products of factors; use these representations in real-world and mathematical situations.</p> <p><b>6.N.2</b> Add and subtract integers in order to solve real-world and mathematical problems.</p> <p><b>6.N.3</b> Understand the concept of ratio and its relationship to fractions and percents and to the multiplication and division of whole numbers. Use ratios to solve real-world and mathematical problems.</p> <p><b>6.N.4</b> Multiply and divide decimals, fractions, and mixed numbers; solve real-world and mathematical problems with rational numbers.</p>	<p>Students receiving <b>At/Near or Above Standard</b> subscores are likely to be able to</p> <ul style="list-style-type: none"> <li>➤ read, order, represent, and explain rational numbers expressed as fractions, decimals, percents, and ratios</li> <li>➤ write positive integers as products of factors</li> <li>➤ estimate, illustrate, and simplify the addition and subtraction of integers and assess the reasonableness of an answer</li> <li>➤ identify and compare quantities and find equivalent fractions and percents</li> <li>➤ solve ratio and unit rate problems</li> <li>➤ calculate, estimate, and illustrate the multiplication and division of non-negative rational numbers</li> </ul>
<b>Algebraic Reasoning &amp; Algebra</b>	<b>Grade-Level Expectations</b>
<p><b>6.A.1</b> Recognize and represent relationships between varying quantities; translate from one representation to another; use patterns, tables, graphs and rules to solve real-world and mathematical problems.</p> <p><b>6.A.2</b> Use properties of arithmetic to generate equivalent numerical expressions and evaluate expressions involving positive rational numbers.</p> <p><b>6.A.3</b> Use equations and inequalities to represent real-world and mathematical problems and use the idea of maintaining equality to solve equations. Interpret solutions in the original context.</p>	<p>Students receiving <b>At/Near or Above Standard</b> subscores are likely to be able to</p> <ul style="list-style-type: none"> <li>➤ graph ordered pairs and represent reflective relationships between varying quantities</li> <li>➤ evaluate the validity of the value of a variable</li> <li>➤ evaluate the value of a variable in expressions, equations, and inequalities</li> <li>➤ generate expressions, equations, and inequalities</li> <li>➤ solve, graph, and interpret the solution of an equation assessing the reasonableness of the solution</li> </ul>

Math Strand and Standards

Grade-Level Expectations

# Connecting vertical progressions

## Standard 3: Critical Reading and Writing

Students will apply critical thinking skills to reading and writing.

**Reading** Students will analyze, interpret, and evaluate increasingly complex literary and informational texts that include a wide range of historical, cultural, ethnic, and global perspectives from a variety of genres.

Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
<b>3.3.R.1</b> Students will determine if the author's purpose is to entertain, inform, or persuade.	<b>4.3.R.1</b> Students will determine the author's purpose (i.e., entertain, inform, persuade) by identifying key details.	<b>5.3.R.1</b> Students will determine the author's purpose (i.e., entertain, inform, persuade), and draw conclusions to determine if the author's purpose was achieved.	<b>6.3.R.1</b> Students will compare and contrast stated or implied purposes of authors writing on the same topic from a variety of historical, cultural, ethnic, and global perspectives.	<b>7.3.R.1</b> Students will read works written on the same topic from a variety of historical, cultural, ethnic, and global perspectives and compare the methods the authors use to achieve their purposes.	<b>8.3.R.1</b> Students will analyze works written on the same topic from a variety of historical, cultural, ethnic, and global perspectives and analyze the methods the authors use to achieve their purposes.
<b>3-4.3.R.2</b> Students will determine whether a grade-level literary text is narrated in first- or third-person point of view.		<b>5.3.R.2</b> Students will determine whether a grade-level literary text is narrated in first- or third-person point of view (limited and omniscient) and describe its effect.	<b>6-7.3.R.2</b> Students will evaluate how perspective (e.g., historical, cultural, ethnic, and global) affects a variety of literary and informational texts.		<b>8.3.R.2</b> Students will evaluate perspectives (e.g., historical, cultural, ethnic, and global) and describe how they affect various literary and informational texts.

How do the knowledge and skills change?

Where might we need to scaffold?

Where might we need to consider curricular changes?

ELA Progressions: [PK-5](#), [Grades 3-8](#), [Grades 6-12](#)

# How does evidence from state summative assessment performance compare with local observations?

ELA Standards	Critical Reading and Writing	Grade-Level Expectations	Grade-Level Expectations
	<p>Students will apply critical thinking skills to reading and writing.</p> <ul style="list-style-type: none"> <li>• <b>Reading</b>—Students will comprehend, interpret, evaluate, and respond to a variety of complex texts of all literary and informational genres from a variety of historical, cultural, ethnic, and global perspectives.</li> <li>• <b>Writing</b>— Students will write for varied purposes and audiences in all modes, using fully developed ideas, strong organization, well-chosen words, fluent sentences, and appropriate voice.</li> </ul>	<p>Students receiving <b>At/Near</b> or <b>Above Standard</b> subscores are likely to apply critical thinking skills to</p> <ul style="list-style-type: none"> <li>➤ compare and contrast stated or implied purposes of authors' writing</li> <li>➤ evaluate literary devices, points of view, and perspectives</li> <li>➤ analyze how authors use key literary elements to contribute to the meaning of the text</li> <li>➤ categorize facts included in an argument</li> <li>➤ analyze textual evidence to support inferences and understanding within and between texts</li> <li>➤ use fully developed ideas, strong organization, and appropriate voice when writing</li> <li>➤ compose narrative, informative, and argumentative responses for varied purposes and audiences</li> <li>➤ introduce a claim and organize reasons and evidence in argumentative writing</li> </ul>	

# Connecting vertical progressions

Number & Operations (N)			
Fifth Grade (5)	Sixth Grade (6)	Seventh Grade (7)	Pre-Algebra (PA)
<p><b>5.N.1 Divide multi-digit numbers and solve real-world and mathematical problems using arithmetic.</b></p> <p><b>5.N.1.1</b> Estimate solutions to division problems in order to assess the reasonableness of results.</p> <p><b>5.N.1.2</b> Divide multi-digit numbers, by one- and two-digit divisors, using efficient and generalizable procedures, based on knowledge of place value, including standard algorithms.</p> <p><b>5.N.1.3</b> Recognize that quotients can be represented in a variety of ways, including a whole number with a remainder, a fraction or mixed number, or a decimal and consider the context in which a problem is situated to select and interpret the most useful form of the quotient for the solution.</p> <p><b>5.N.1.4</b> Solve real-world and</p>	<p><b>6.N.1 Read, write, and represent integers and rational numbers expressed as fractions, decimals, percents, and ratios; write positive integers as products of factors; use these representations in real-world and mathematical situations.</b></p> <p><b>6.N.1.1</b> Represent integers with counters and on a number line and rational numbers on a number line, recognizing the concepts of opposites, direction, and magnitude; use integers and rational numbers in real-world and mathematical situations, explaining the meaning of 0 in each situation.</p> <p><b>6.N.1.2</b> Compare and order positive rational numbers, represented in various forms, or integers using the symbols <math>&lt;</math>, <math>&gt;</math>, and <math>=</math>.</p> <p><b>6.N.1.3</b> Explain that a percent represents parts "out of 100" and ratios "to 100."</p>	<p><b>7.N.1 Read, write, represent, and compare rational numbers, expressed as integers, fractions, and decimals.</b></p> <p><b>7.N.1.1</b> Know that every rational number can be written as the ratio of two integers or as a terminating or repeating decimal.</p> <p><b>7.N.1.2</b> Compare and order rational numbers expressed in various forms using the symbols <math>&lt;</math>, <math>&gt;</math>, and <math>=</math>.</p> <p><b>7.N.1.3</b> Recognize and generate equivalent representations of rational numbers, including equivalent fractions.</p> <p><b>7.N.2 Calculate with integers and rational numbers, with and without positive integer exponents, to solve real-world and mathematical problems; explain the relationship between absolute value of a rational number and the distance of that number from zero.</b></p>	<p><b>PA.N.1 Read, write, compare, classify, and represent real numbers and use them to solve problems in various contexts.</b></p> <p><b>PA.N.1.1</b> Develop and apply the properties of integer exponents, including <math>a^0 = 1</math> (with <math>a \neq 0</math>), to generate equivalent numerical and algebraic expressions.</p> <p><b>PA.N.1.2</b> Express and compare approximations of very large and very small numbers using scientific notation.</p> <p><b>PA.N.1.3</b> Multiply and divide numbers expressed in scientific notation, express the answer in scientific notation.</p> <p><b>PA.N.1.4</b> Classify real numbers as rational or irrational. Explain why the rational number system is closed under addition and multiplication and why the irrational system is not. Explain why the sum of a rational number and an irrational number is irrational; and the product of a non-zero</p>

How do the knowledge and skills change?

Where might we need to scaffold?

Based on the data, where might we need to consider curricular changes?

Source: Math Progressions: [Appendix B](#)

# Group-Summary PL: All Grades

Group Summary PL: All Grades: OSTP, Cyber District (991999), 2022, Final			Total N	Valid N	Mean OPI	Below Basic %	Basic %	Proficient %	Advanced %
Subject	Administration	Grade							
ELA	2022	Grade 03	5,329	5,207	262	66	22	10	2
ELA	2022	Grade 04	5,041	4,904	257	69	22	8	0
ELA	2022	Grade 05	4,993	4,678	264	60	28	9	3
ELA	2022	Grade 06	4,665	4,456	264	57	32	10	1
ELA	2022	Grade 07	4,720	4,434	258	67	23	8	3
ELA	2022	Grade 08	4,671	4,387	261	57	29	11	3
Mathematics	2022	Grade 03	5,342	5,206	265	62	25	9	4
Mathematics	2022	Grade 04	5,046	4,900	263	64	24	9	4
Mathematics	2022	Grade 05	4,965	4,654	254	66	26	6	2
Mathematics	2022	Grade 06	4,661	4,442	255	67	26	6	1
Mathematics	2022	Grade 07	4,721	4,422	261	76	17	7	1
Mathematics	2022	Grade 08	4,637	4,363	246	84	12	3	2

Where are students starting this year?

How does performance compare between grades?



# RC scores- all grades- Where might we need to consider curricular changes?

Group Summary PL: All Grades: OSTP, Cyber District (99I999), 2022, Final

						Below Standard	At/Near Standard	Above Standard
						%	%	%
Critical Reading/Writing	2022	Grade 03	5,207			68	23	10
Critical Reading/Writing	2022	Grade 04	4,904			77		
Critical Reading/Writing	2022	Grade 05	4,678			77		
Critical Reading/Writing	2022	Grade 06	4,456			68		
Critical Reading/Writing	2022	Grade 07	4,434			80		
Critical Reading/Writing	2022	Grade 08	4,387			68		
Algebraic Reasoning	2022	Grade 03	5,206			57		
Algebraic Reasoning	2022	Grade 04	4,900			72		
Algebraic Reasoning	2022	Grade 05	4,654			82	16	3
Algebraic Reasoning	2022	Grade 06	4,442			81	15	4
Algebraic Reasoning	2022	Grade 07	4,422			73	20	7
Algebraic Reasoning	2022	Grade 08	4,363			90	7	3

How are students progressing in different areas from year-to-year?

# Group Summary PL-All Grades by student group

The screenshot shows a user interface for filtering data. At the top, a toolbar contains icons for 'Options', 'Save', 'Download', 'Print', 'Table', 'Chart', and 'Transpose'. The 'Options' icon is highlighted with a red box. Below the toolbar, a filter menu is open, showing a 'Disaggregate' button highlighted with a red box. The filter menu includes a 'Subgroup' section with a 'Select All / Reset' link. Below this, there are several filter categories: 'Ethnicity' (checked), 'Gender', 'Economically Disadvantaged' (checked), 'ELL' (checked), 'IEP' (checked), and 'Migrant'. Other filters include 'ELL Proficient', 'Mode', 'Full Academic Year', 'Regular Education', '504', 'ELL Accommodations', 'IEP Accommodations', '504 Accommodations', 'Class', 'Foster', 'Military', and 'Gifted/Talented'. At the bottom of the filter menu, there is a 'Groups Per Page' dropdown set to '20', a 'Cancel' button, and an 'Update' button highlighted with a red box.

Click on the **Options** feature, choose **Disaggregate**, check the groups you wish to view, and then click Update.

Doing so allows you to compare enrollment and performance by student group.

# Group Summary PL- All Grades by student group

Group Summary PL: All Grades: OSTP, Cyber District (991999), 2022, Final

Group	Administration	Grade	Who tested?			% in Each Performance Level			
			Total N	Valid N	Mean OPI	Below Basic	Basic	Proficient	Advanced
						%	%	%	%
<b>Cyber District (991999)</b>	2022	Grade 03	5,329	5,207	262	66	22	10	2
American Indian/Alaskan Native	2022	Grade 03	148	148	266	59	28	11	1
Black/African American	2022	Grade 03	1,046	1,020	255	75	18	5	1
Asian	2022	Grade 03	82	79	263	58	30	10	1
Hispanic/Latino	2022	Grade 03	2,576	2,543	260	70	20	8	1
White	2022	Grade 03	884	867	276	49	26	18	7
Native Hawaiian/Other Pacific Islander	2022	Grade 03	46	45	254	73	22	4	0
Two or more Races	2022	Grade 03	509	496	267	60	24	12	3
No Ethnicity Info. Provided	2022	Grade 03	38	9	272	56	11	11	22
Economically Disadvantaged	2022	Grade 03	4,514	4,414	259	71	20	8	1
Not Economically Disadvantaged	2022	Grade 03	815	793	282	41	29	20	9
ELL	2022	Grade 03	2,234	2,194	258	73	20	6	1
Not ELL	2022	Grade 03	3,095	3,013	266	61	23	12	4
IEP	2022	Grade 03	678	605	246	86	9	4	1

Who tested?  
 (divide the Valid N and Total N to find the participation rate for each group)

How did students in different student groups perform?

# Available reports

Report	Data Available
<b>Group Summary: Performance Levels</b>	<ul style="list-style-type: none"> <li>● <b>Single grade</b>-performance level data including OPI, percent scoring at each performance level and reporting category.</li> <li>● Data can be disaggregated by student group for comparison purposes using the disaggregate</li> </ul>
<b>Group Summary PL: All Grades</b>	<ul style="list-style-type: none"> <li>● <b>Multiple grades</b>- performance level data including OPI, percent scoring at each performance level and reporting category by subject.</li> <li>● Data can be disaggregated by student group for comparison purposes</li> </ul>
Group Summary PL: All Selections	<ul style="list-style-type: none"> <li>● <b>Single Grade</b>- performance level data for <b>all student groups</b> including OPI, percent scoring at each performance level and reporting category by subject.</li> </ul>
Summary Counts	<ul style="list-style-type: none"> <li>● Provides summary counts for online, not other placement, total tested, and total did not attempt</li> </ul>
Longitudinal Roster	<ul style="list-style-type: none"> <li>● Provides student level performance across grades for students enrolled at a site multiple years (For example, grade 3 in 2018, grade 4 in 2019 and grade 6 in 2021)</li> </ul>
<b>Data Tools</b>	<ul style="list-style-type: none"> <li>● Provides data options to dig deeper into performance index scores: OPI distribution, cross-tab comparisons, and scatter plots to compare performance between subjects.</li> </ul>

# How can Performance Levels, OPIs, and Reporting Category Subscores be Used to Monitor Recovery Efforts?

OSTP Data Portal

# Performance

How does student performance from spring 2022 compare with spring 2021?

## Improvements

- How did the interventions contribute to improvement?
- How did schools climate contribute?
- What local assessment evidence corroborates improvement?

## Stable

- How did the interventions support students in maintaining performance?
- How were different student groups impacted?
- What does local assessment evidence indicate?

## Decline

- Why didn't the interventions support impact performance?
- How were interventions selected, implemented, monitored, and adjusted based on data?
- What does local assessment evidence indicate?

## Enrollment and Participation

- Are your **enrollment demographics** for your SY 2021– 2022 school year comparable to SY 2020– 2021 (By grade level? By student group?)
- Did you acquire transfer students or reclaim students that may have had **different access to grade-level learning** during SY 2020– 2021?
- Were the students that **tested** in SY 2021– 2022 **representative of the students** who tested in SY 2020– 2021 (By grade level? By student group?)

# Comparing OSTP between years to monitor COVID recovery efforts

Program: OSTP

Report: Group Summary: Performance Levels

Admin:  2022  2021  2019  2018  2017

Grade:  Grade 03  Grade 04  Grade 05  Grade 06

Release:  Final

Program: OSTP

Report: Group Summary PL: All Grades

Admin/Grade (Show More)

	Grade 03	Grade 04	Grade 05	Grade 06	Grade 07	Grade 08	Grade 10
2022	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-
2021	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-

The **Group Summary Performance Levels** allows you to compare performance data between SY 2021 and SY 2022 for a single Grade-level.

The **Group Summary PL: All Grades** allows you to compare performance data between SY 2021 and SY 2022 for more than one grade-level.

**Note:** You will need to be a district user to compare grade-levels beyond your site.

# How did testing populations change between SY 2021 and SY 2022?

Administration	Grade	Total N	Valid N	Mean OPI	Below Basic	Basic	Proficient	Advanced
					%	%	%	%
2021	Grade 03	4,931	4,777	255	73	19	7	1
2021	Grade 04	5,003	4,831	255	74	19	7	0
2021	Grade 05	4,822	4,543	261	61	28	9	2
2021	Grade 06	4,532	4,247	264	56	31	10	2
2021	Grade 07	4,389	3,917	258	68	22	8	2
2021	Grade 08	4,436	3,973	258	56	32	9	3
2022	Grade 03	5,329	5,207	252	66	22	10	2
2022	Grade 04	5,041	4,904	257	69	22	8	0
2022	Grade 05	4,993	4,678	264	60	28	9	3
2022	Grade 06	4,665	4,456	264	57	32	10	1
2022	Grade 07	4,720	4,434	258	67	23	8	3
2022	Grade 08	4,671	4,387	251	57	29	11	3

Compare enrollment between SY 2021 and SY 2022 using values in the Valid N column

- In this example we see enrollment shifts of about 400 students in both grade 3 and 8 between SY 2021 and SY 2022
- In this scenario, consider the demographics of the testing populations before comparing performance.



# How well did the interventions, strategies, and resources we implemented in SY 2021– 2022 work?

Administration	Grade	Total N	Valid N	Mean OPI	Below Basic	Basic	Proficient	Advanced
					%	%	%	%
2021	Grade 03	4,931	4,777	258	73	19	7	1
2021	Grade 04	5,003	4,831	255	74	19	7	0
2021	Grade 05	4,822	4,543	261	81	28	9	2
2021	Grade 06	4,532	4,247	264	56	31	10	2
2021	Grade 07	4,389	3,917	258	68	22	8	2
2021	Grade 08	4,436	3,973	262	56	32	9	3
2022	Grade 03	5,329	5,207	262	66	22	10	2
2022	Grade 04	5,041	4,904	257	67	22	8	0
2022	Grade 05	4,993	4,678	264	60	28	9	3
2022	Grade 06	4,665	4,456	264	57	32	10	1
2022	Grade 07	4,720	4,434	258	67	23	8	3
2022	Grade 08	4,671	4,387	261	57	29	11	3

Compare **grade-level Mean OPIs** between SY 2021 and SY 2022 to gauge **progress**

- In this example, we see small gains in grades 4, and 5

Compare **Mean OPIs** for **cohorts of students** across years to connect local data and determine the **impact** of interventions, strategies, and resources.

- In this example- we see a 9 index score gain in performance for students that were in 4th grade in SY 2021 and 5th grade in SY 2022

# How well did the interventions, strategies, and resources we implemented in SY 2021– 2022 work? (By grade levels)

Administration	Grade	Total N	Valid N						Below Standard	At/Near Standard	Above Standard
									%	%	%
Critical Reading/Writing	2021	Grade 03	4,777						80	16	4
Critical Reading/Writing	2021	Grade 04	4,831						80	18	3
Critical Reading/Writing	2021	Grade 05	4,543						81	13	6
Critical Reading/Writing	2021	Grade 06	4,247						79		3
Critical Reading/Writing	2021	Grade 07	3,917						78	16	6
Critical Reading/Writing	2021	Grade 08	3,973						68	25	6
Critical Reading/Writing	2022	Grade 03	5,207						68	23	10
Critical Reading/Writing	2022	Grade 04	4,904						77	20	3
Critical Reading/Writing	2022	Grade 05	4,678						77	16	6
Critical Reading/Writing	2022	Grade 06	4,456						68	25	7
Critical Reading/Writing	2022	Grade 07	4,434						80	14	6
Critical Reading/Writing	2022	Grade 08	4,387						68	23	9

Compare **Below Standard** subscores by grade between SY 2021 and SY 2022 to determine in which area(s) interventions, strategies, and resources had an impact.

- In the example, we see that 79% of students in **Grade 06** were **Below Standard** in Critical Reading/Writing in SY 2021 and this decreased to 68% in SY 2022 indicating more students were likely meeting grade-level expectations in this area.

# How well did the interventions, strategies, and resources we implemented in SY 2021– 2022 work? (By comparing cohorts)

Critical Reading/Writing	2021	Grade 03	4,777					80	16	4
Critical Reading/Writing	2021	Grade 04	4,831					80	18	3
Critical Reading/Writing	2021	Grade 05	4,543					81	13	6
Critical Reading/Writing	2021	Grade 06	4,247					79	18	3
Critical Reading/Writing	2021	Grade 07	3,917					78	16	6
Critical Reading/Writing	2021	Grade 08	3,973					68	25	6
Critical Reading/Writing	2022	Grade 03	5,207					68	23	10
Critical Reading/Writing	2022	Grade 04	4,904					77	20	3
Critical Reading/Writing	2022	Grade 05	4,678					77	16	6
Critical Reading/Writing	2022	Grade 06	4,456					68	25	7
Critical Reading/Writing	2022	Grade 07	4,434					80	14	6
Critical Reading/Writing	2022	Grade 08	4,387					68	23	9

Compare **Below Standard** subscores by cohort to determine in which area(s) interventions, strategies, and resources had an impact.

- In this example, we see that 81% of students in **Grade 05** were **Below Standard** in Critical Reading/Writing in SY 2021 and this decreased to 68% in for students in **Grade 06** indicating that more students likely met grade-level expectations in SY 2022 in this area.

# Frequently Asked Questions about OSTP Data

# Why scale scores?

## Which student showed more mastery?

$$(1). 1 + 1 =$$

$$(2). 9 + 5 =$$

$$(3). 8.2 + 3.3 =$$

$$(4). \frac{1}{2} + \frac{1}{3} =$$

$$(5). 6 \frac{2}{3} + 7 \frac{3}{4} =$$

$$(6). \sum_{n=1}^{100} (n - (n - 1))^n$$



**Student A: 4/6 correct**

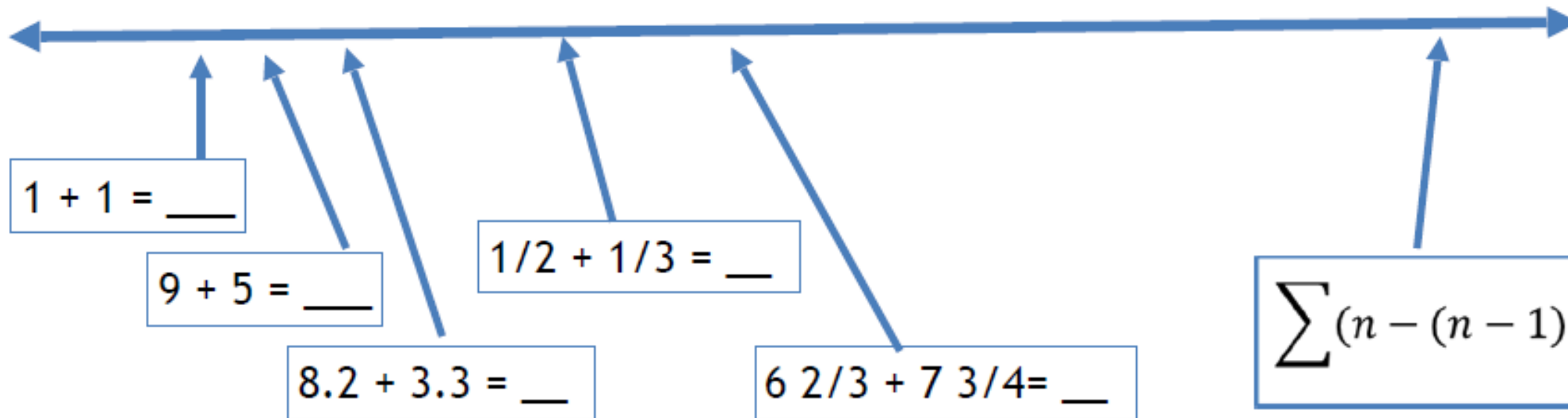


**Student B: 4/6 correct**

# It's not about the number correct

Easier

Harder



# It's about the difficulty and complexity of what the student is being asked to do.

- **Difficulty** refers to the likelihood that the student will respond correctly.
  - How much effort is needed?(easy or hard)
  - How many people can answer the question correctly?
- **Cognitive complexity** refers to the mental processes required to meet the task.
  - What kind of thinking, action, or knowledge must be demonstrated? (simple or complex)
  - How many different ways can a question be answered, a problem addressed, or a task accomplished?

# How are performance levels determined?

**Performance Levels** indicate **students' readiness** for the next course, grade, or level, relative to the grade-level expectations outlined in the Oklahoma Academic Standards.

- The Performance Level indicates overall performance and is determined by the student's performance index score. The performance index score is a linear transformation of the raw score that accounts for the cognitive difficulty of assessment questions on different forms so that scores can be compared.

(please see [70 O.S. § 1210.541](#) for additional details)



# Performance levels, OPIs, and Reporting Categories

	English Language Arts						
	OPI	Performance Level	Reading/Writing Process	Critical Reading/Writing	Vocabulary	Language	Research
John031	294	Basic	At/Near Standard	At/Near Standard	At/Near Standard	At/Near Standard	At/Near Standard

- In this example we see that John 031 had an **OPI of 294**, scored **At/Near Standard** in all reporting categories and was placed in the **Basic** performance level.
- In this scenario,
  - John **likely demonstrated grade-level expectations** in all reporting categories as evidenced by his At/Near Standard performance, but his OPI is six scale score points from the **Proficient cut of 300**. This means that **overall**, John 031 did answer enough items correctly to be scored Proficient.

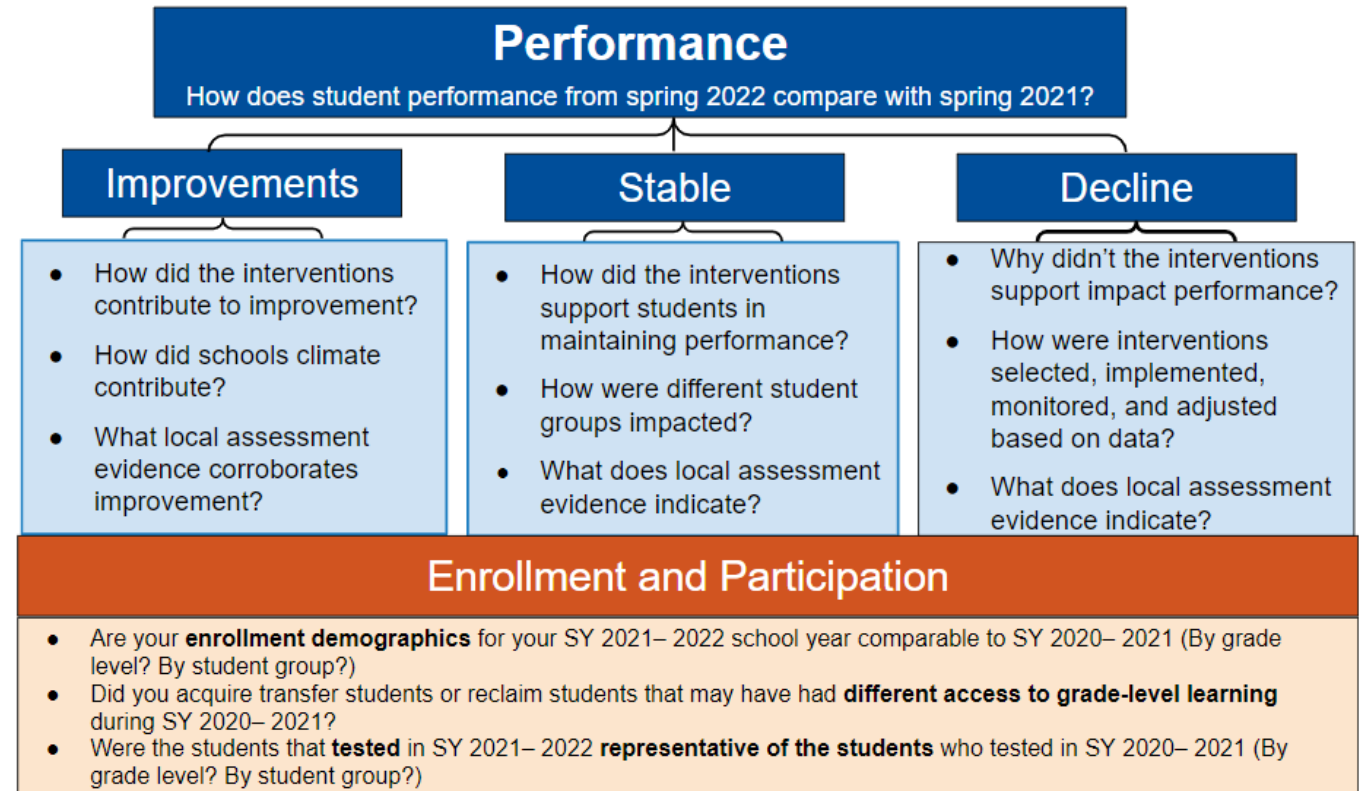
English Language Arts							
	OPI ↓	Performance Level	Reading/Writing Process	Critical Reading/Writing	Vocabulary	Language	Research
John094	329	Proficient	Above Standard	Above Standard	Above Standard	Above Standard	Above Standard

- In this example we see that John 094 had an **OPI of 329**, scored **Above Standard** in all reporting categories and was placed in the **Proficient** performance level.
- In this scenario
  - John 094 **demonstrated grade-level expectations** in all reporting categories as evidenced by his Above Standard performance, but his OPI is one scale score point from the **Advanced cut of 330**. This means that overall, John 094 did not answer enough items correctly to be scored as Advanced.

# What Supporting Tools and Resources are Available to Support the Work?

# Toolkits on the Assessment Guidance page

- Overview Guide
- Administrators Toolkit
- Educators Toolkit
- **Families Toolkit**



# Connecting resources

- Ready Together Brief- [How can students be supported through accelerated learning in mathematics?](#)
- Ready Together Brief- [How can students be supported through accelerated learning in English language arts?](#)
- [Curriculum Frameworks](#)- the frameworks are sets of curricular resources developed by Oklahoma teachers to help educators translate the [Oklahoma Academic Standards](#) into classroom practice. They illustrate what is expected of students at each grade level by examining the intent of each standard and providing instructional options to support student learning.
- [Test and Item Specifications by Grade Level and Subject](#)- defines the content and format of the assessment and the assessment items for item writers/reviewers and indicates the alignment of items with the Oklahoma Academic Standards.

# Questions?

# Contact information



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