DU 101 Handbook: Using District Reports



A professional development course for NJ SMART, a New Jersey Department of Education Data Warehouse



Developed by PCG for the New Jersey Department of Education.

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The materials and activities in this handbook were developed by PCG and field tested by educational professionals throughout New Jersey during pilot trainings.

Please direct questions related to the NJ SMART system to the NJ SMART Help Desk at (800) 254-0295 or njsmart@pcgus.com.



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Introduction

Overview of NJ SMART

The New Jersey Department of Education has implemented the New Jersey Standards Measurement and Resource for Teaching (NJ SMART), a comprehensive data warehouse, student level data reporting, and unique statewide student identification (SID) system.

NJ SMART was initiated for three primary reasons:

- 1. New Jersey's public education system must become more evidence-based where progress toward instructional goals is measured and monitored.
- 2. Major regulatory changes, such as the federal *No Child Left Behind Act* (NCLB) and the *Every Student Succeeds Act* (ESSA), require states and districts to collect greater quantities of data to meet increasingly intensive reporting requirements.
- 3. The New Jersey DOE is committed to providing better information to local education agencies (LEAs) and other stakeholders, simplifying the burdensome data reporting requirements, and increasing administrative efficiency through the use of technology.

Major initiatives have been completed within NJ SMART to meet ever expanding demands and expectations within the education landscape:

- 1. NJ SMART's state assessment data warehouse has been populated with statewide test results that date back to 1999.
- 2. In December 2006, NJ SMART initiated its first statewide data submission. Data provided by districts through this data submission was used to create unique student identification (SID) numbers. These SID numbers were issued to districts on March 21, 2007 and continue to be issued for students who enter the NJ public school system today.
- 3. All districts have been offered training on District Reports as well as assessment-related student demographic information currently in the NJ SMART data warehouse. Assessment data includes state assessments (NJSLA, PARCC, NJ ASK), alternate assessments (ACCESS for ELLs, DLM), and other assessments (SAT, PSAT, AP).
- 4. As of 2009-2010, districts can create Local Data Marts and access district-level reports during their current school year to view the amalgamated results of their submitted data in real time.
- 5. Beginning 2011-2012, NJ SMART began the collection of staff level data. Since then, over 260,000 unique staff member identifiers (SMID) have been assigned to staff.
- 6. The implementation of the Course Roster Submission in 2011-2012 enhanced New Jersey's statewide data system so that it could provide electronic transcripts for each student: one of the required "data assurances" under the State Fiscal Stabilization Fund agreement with the NJDOE. New Jersey's Course Roster Submission links teachers and students together through a unique course identifier.

Each of these initiatives will result in important outcomes for local districts:

- 1. Integrated state assessment data means that districts have regular access to assessment reports that allow easy monitoring and comparison of critical performance measures.
- 2. With the implementation of SIDs, districts can track students and their performance more effectively over time, even if they transfer in and out of districts.

3. District Reports is a robust tool that works with Local Data Mart and Official Snapshots. The District Reports tool offers the opportunity for districts to bring together data currently stored in a variety of locations into one integrated data warehouse at their discretion. This allows staff to access linked student data, generate user-friendly reports to analyze student data outside of official reporting period timeframes, and make data informed decisions within their respective LEA.

These activities combine to provide the foundation for a more comprehensive system of data reporting and student performance management for New Jersey public schools.



Overview of NJ SMART Professional Development

A series of courses have been designed to introduce you to the tools of the NJ SMART data warehouse and allow you to access, analyze, and use data more effectively. Data Use 101: Using School/District Reports (DU 101) is the first course in this series. This course will introduce you to the history and function of the NJ SMART data warehouse, details an inquiry process that will help you better understand questions that drive data access, and will help you navigate District Reports to analyze data.

This handbook accompanies the DU 101 instructor-led course, but also serves as a standalone resource for later reference as you use the NJ SMART data warehouse.

The material in this handbook will provide you with the concepts and skills necessary to access and use NJ SMART District Reports. The screen shots in this handbook are based on fictitious data, but the structure and function of the reports are the same as your district's reports. We recommend using this handbook's instruction to help you access and analyze your own district's data.

As you go through the course, consider the following questions:

- 1. What are you learning and who else needs to know this material?
- 2. What key concepts will you want to share with others?
- 3. What technical information would be helpful for others in your school or district to know?

Where are we now?

Data Use Professional Development Series: Making decisions using NJ SMART data

Course Code	Course Name	Current Course
DU 101	Using District Reports	X
DU 102	Using Student Growth Percentiles	
DU 201	Using Data for District & School Improvement Planning	

DU 101: Using District Reports

Who is this course for?	Prerequisites	Course Topics
District-level administrators, curriculum directors, assessment directors, IT/data managers, principals, and district/school improvement team members	None	 Introduction to NJ SMART Introduction to the inquiry process Using school and District Reports for educational decisions

Course Objectives:

Upon completion of this course, you will be able to:

- Articulate NJ SMART's history and function
- Use an inquiry-driven approach to data analysis
- Access and navigate District Reports through inquiry
- Analyze and make valid inferences from data
- Read different types of Profile Reports
- Analyze your own data in District Reports using guided scenarios
- Articulate what you've learned and what to do next

NJ SMART's Function

NJ SMART is a comprehensive state data warehouse for educators' use throughout New Jersey. The warehouse stores data from a variety of sources and serves as a central data repository for pre-K to post-secondary educational data about students and educators. NJ SMART also provides easy-to-use reports for both state- and district-level use for federal compliance as well as local data-driven decision making school improvement efforts. Over the next few pages, we'll describe NJ SMART's functionality, including its data inputs and reports outputs that will help you better understand how you can effectively leverage data in NJ SMART.

NJ SMART Data Inputs

NJ SMART data comes from a variety of sources that are submitted by local districts through the NJ SMART portal, as well as through various data feeds received from external sources, such as National Student Clearinghouse and assessment vendors. Data from these disparate sources are combined in the NJ SMART data warehouse and packaged so they can be viewed in relation to each other. For example, student assessment performance data can now be crossed with attendance, post-secondary enrollment, and many other types of data for a more complete and richer picture of a student's educational experience. In addition to combining the data, NJ SMART has reduced duplicative reports that districts are required to complete for the state. By expanding data collected, multiple state systems have been eliminated and are fulfilled through only two main submissions to NJ SMART.



State Submissions

- Student Identification (SID)
- State
- Special Education
- Career/Technical Education (CTE)
- Course Roster
- Staff Member Identification (SMID)
- Staff

District Data Marts

- Program Enrollment
- Credits Earned

Data Feeds/Derived Information

- NJ state assessments (NJ ASK, HSPA, APA, AHSA, ACCESS for ELLs)
- National assessments (PSAT, AP, SAT)
- Graduation Rate
- Student Growth
- Post-Secondary
- Student Discipline Student Safety Data System (SSDS)

NJ SMART Outputs

NJ SMART currently provides the District Reports reporting tool. Educators can use this tool to learn more information about their students' enrollment, demographic information, assessment performance, special education characteristics, and much more.



District Reports

District Reports are a suite of pre-defined reports that combine and display data received through NJ SMART submissions, assessment files, National Student Clearinghouse data, optional district data submissions, and other statewide data submissions. These reports are structured in a report called a "profile," which presents data in a crosstab format. Each profile report is designed to give users access to aggregate information about students enrolled in their district, allowing analysis of patterns and trends across various categories of information. Each profile report presents a starting point for further data analysis and allows educators to:

- View the number and percent of students in your district across multiple years and submissions, and disaggregate across common student and program characteristics to identify factors associated with variations in student performance
- Click on subgroups to filter the aggregate profile to desired populations of students
- Drill down from aggregate counts to a detailed student list, which can be sorted and analyzed through Excel
- Drill down from student lists to a student's complete enrollment and performance history in the student record reports
- Export student lists to view a more detailed snapshot of each student (including data from SID Management, State Submission, Special Education Submission, and assessment performance for every grade level and assessment)
- Export all reports into Excel for further analysis, graphing, and printing

District Reports are the best tool to answer questions about your current or past population of students, especially when you need to gather assessment and demographic information about the students who have just entered your district. It is also the best tool to use when you want to view extensive enrollment, demographic, graduation, or special education information about your students.

Reminder:

A crosstab report displays data that is shared by two different dimensions: column variables and row variables. They provide a basic picture of the interrelation between two variables and can help find interactions between them.

Reflection: Your Current Data Usage

How do you currently use assessment data to make decisions in your role?

How do you currently access or receive the assessment data you use?

• What would you like to do with assessment data that you currently can't do?

Introduction to the NJ SMART Portal

Logging into the Portal

To log in to District Reports, follow the steps below:

- a. Open your browser and enter <u>www.njsmart.org</u> to access NJ SMART.
- b. Enter your assigned username and password. If you don't have login credentials or can't remember them, please contact your district's Homeroom Administrator. Your district's Homeroom Administrator can be found by clicking on the <u>NJ SMART Resources & Trainings</u> link found on the lower right side of the NJ SMART Log In page. Click on Documents for Download, then click on POC List in the Key Documents section to open the Excel spreadsheet.



NJ SMART Home Page

The NJ SMART home page contains:

- A. Quick Links: New User, Calendar, Announcements, Register for a Webinar, Key Documents, and FAQs
- B. Submission Schedule
- C. FAQ of the Month
- D. Videos On Demand
- E. SID and SMID Management Monitoring Dashboards
- F. Navigation bar to access the SID Management, SMID Management, Submissions, Reporting, Account, and Help pages

Hello, User 1	New User Calendar Announcements	Register For A Webinar Key Documents FAQs Obist	Iser 1 Iset 0010
NJ SMART Vision Statement: To provide the data, quality, and capacity needed to build and support a culture of systemic and sus academic success for all of our students. 	stained data use at the state, district, school, and classroom levels that will ultimately lead to	A Requires Attention May Require Attention G Good SID Management Monitoring 1,113 All Student Records	
Email: njsmart@pcgus.com Submission Schedule Currently Open: SilD/ SMID Management SilD/ SMID Management Practice State Assessment Registration Submission February 28th at SPM: Deadline: Bilteracy data in SID Management for LEAs participating in the NJDOE	FAQ of the Month Question [SID Management]: Question: We are a K-8 district. Are we required to report data for the Biliterate, World Language Assessment, and World Languages Assessed data elements? Answer: No, these fields are only required for students in grade 12. All students not in 12th grade can leave the fields blank.	959 Active Records 958 Ready for State Record Submission © Upload © Add	Complete
Seal of Billteracy program More Videos On Demand What is co When is th	RT Submission Overview lected in NJ SMART? e data collected?	Pending Sync Record Cleansing Errors	

Navigating to District Reports

1. To access District Reports, select the Reporting tab in the NJ SMART portal, then click on District Reports from the submenu.

NJ	
Education Data System	
District Reports	Graduation Appeals School Performance
<u> </u>	

2. The District Reports homepage will display all available reports. These reports are categorized into two sections: *Jump To* Reports (F) and *Starting Points* or Profile Reports (G). *Jump To* reports provide direct access to a student list report for a selected group of students, or a record for an individual student without having to first go through the Profile Reports. Profile Reports present aggregate information about students allowing you to analyze patterns and trends across various categories of information. Profile Reports should be used as a starting point to drill down to a student list and individual student records.

District Rep	orts		
Jump To: Contains Stude Starting Points: Contains used as a starting point to	nt List and Student Record reports that allow you to jump dire "Profile" reports that present aggregate information about yo o "drill down" to student lists and individual student records.	ctly to a customized list of students or a historical individual student record. ur students allowing you to analyze patterns and trends across various categories of informatio	on. Profile reports can be
Jump To	F	G Starting Points: Assessment Profiles	
Student List	Customized selection of students showing their characteristics, program enrollment, and assessment performance (exportable to Excel).	Cohort Characteristics of students who increased, stayed the same, or decreased in state assessment performance over 2 years.	♥ Tips and Tricks
Student Record	Characteristics and history of enrollment, program information, and assessment performance for an individual student.	Student Growth Percent Profile Characteristics and performance of students who have demonstrated low, typical, and high growth in relation to their peers, as measured by the NJ ASK and PARCC assessments.	During the Local Data Mart Period don't forget to refresh your
		Assessment Characteristics and performance of students who scored in each performance level on the NJ state assessments.	State and Special Education Submissions for a real time view of your districts data.

3. After selecting a Profile Report or a Jump To Report, use the dropdown menus on the Required Parameters page to select the desired parameters and click View Report.

Customize the Report	t	
Required Parameter(s) Please make your selections and click "Vi	iew Report" button to run report.	
State Snapshot or Local Data Mart	State Snapshot	Y
District	4015 Nocknbmgu	Y
School	0F160FQR9H2C0DEZ51	Y
School Year	2018-2019	Y
Snapshot Date	Jun 28, 2019	•
Note: Selections are limited based on av	ailability of data.	
	Viet	w Report
	Hide F	arameters 🔺

4. Once a Profile has been run, you can click on any hyperlinked number to drill down into the *Student List*. For example, in the Grade Level Profile, you can select the blue hyperlinked student number of 54 to drill down to the Student List. The Student List will display all of the students in Grade 1, a list of 54 students.

GRADE LEVEL PROFILE (SU)																			
State Snapshot Report: Jun 28, 2019 (Generated: 2/25/20	020)																		
Nocknbmgu netsoeogauzoonezstva																			
	Total St	udents	Kinderg	arten	Gr	ade 1	Grade	≥2	Grad	le 3	Grad	de 4	Grad	le 5					
Student Characteristics	# of Students	% of Total	# of Students	% of Total	# of Student	% of s Total	# of Students	% of Total	≢ of Students	% of Total	# of Students	% of Total	# of Students	% of Total					
Total Students	291	100.0%	48	16.5%		54 18.6%	44	15.1%	44	15.11	6 41	7 16.2%	54	18.6%					
School																			
0F160FQR9H2CODEZ51V2	291	100.0%	48	100.096		54 100.09	44	100.0%	44	100.09	6 41	7 100.0%	54	100.0%					
Gender		17																	
Female	148	5	14	2 5	_		DI	()	Ø	Back to	the parent	report	Eve	ort as Ever		most as CSV			
Male	143	4			tpt	3 /	FI	0		DOCK LO	ine parent	report	_ cxt	OUL AS EXCE		cport as CSV		Find Ne	ext
Race/Ethnicity		Ext	ort Expande	d Studen	t List to E	cel	Export Expa	nded Stu	dent List to	CSV									
Asnma	150	5 ST		ST : Gr	ade 1														
		Sta	rte Snapsho	ot Repor	t: Jun 28.	2019 (Ger	erated: 2/25	(2020)											
		No	cknbmgu																
		OF1	60FQR9H2C	ODEZ51	V2														
				:		:	First Name	: 4	st Name	:	DOB	School Name	: Gr	ade Level	Gender	Race/ Ethnicity	Lunch Status	Retained Last Year	Time In District
			56014		86150	45394	Affvfx	Aa	widi		10/09/2011	0F16OFQ CODEZ51	R9H2 V2	01	М	Aapme	N	N	3 or more years
			37918		57884	70480	Bunpa	Af	ncij	25	08/17/2012	OF16OFQ CODEZ51	R9H2 V2	01	F	Bknelaog	N	N	1-2 years
			679 <mark>1</mark> 8		86963	37637	Ibiowgod	Ai	e	10	08/03/2012	OF16OFQ CODEZ51	R9H2 V2	01	F	Aapme	N	N	1-2 years
			07918		90337	71622	Ufbjdz	Ak	bibbd		08/14/2012	OF16OFQ CODEZ51	R9H2 V2	01	М	Aapme	N	N	1-2 years
			77618		18073	07981	Reofdm	Al	gyacifn	1	09/16/2012	0F16OFQ CODEZ51	R9H2 V2	01	F	Aapme	N	N	1-2 years

For additional resources on District Reports, including documentation, webinars and eLearning videos, visit the Help tab to access the NJ SMART Resources & Trainings page. Here you will find resources under the **eLearning Videos & Webinars** and **Documents for Download** sections.



The Inquiry Process

Cycle of Inquiry and Action

Before deciding which report to select, it is important to identify the question or issue you want to explore. The Cycle of Inquiry and Action provides a datadriven approach to building a district and school environment that is focused on continuous improvement grounded in evidence. Using the inquiry process supports your use of District Reports by guiding you through report data to make educational decisions.

In this handbook, we will use the first three steps of this Cycle of Inquiry and Action to walk you through District Reports:

- 1. Identify an issue and formulate questions to help define it
- 2. Understand the issue by analyzing data and refining questions
- 3. Diagnose the cause through deeper analysis, observation, and best practice research



Beginning Analysis with a Question

There are several different reports available that help you answer different questions.

Jump to Reports

- Jump To Student List: What are the characteristics, program enrollment, and assessment performance of a group of students that I want to specifically select?
- Jump To Student Record: What are the characteristics, enrollment history, program information, and assessment performance of a specific student I want to see?

Starting Points: Enrollment Profiles

- School Profile: What are the characteristics and performance of students across schools?
- Grade Level Profile: What are the characteristics and performance of students across grade levels?
- At-Risk Profile: What are the characteristics and performance of students across grade levels?
- Special Education Classification Profile: What are the characteristics and performance of special education students across each special education classification?
- Special Education Placement Profile: What are the characteristics and performance of special education students across each special education placement?

Starting Points: Assessment Profiles

- **Cohort Performance Profile:** What are the characteristics of students who increased, stayed the same, or decreased in state assessment performance over two years?
- Student Growth Profile: What are the characteristics and performance of students who have demonstrated low, typical, and high growth on the state assessments over time?
- Assessment Performance Profile: What are the characteristics and performance of students who scores in each performance level on the NJ state assessments?

Starting Points: Graduation Profiles

- **High School Graduation Cohort Status Profile:** What are the characteristics and performance of high school students from a specified four-year graduation cohort?
- Graduation by Pathway Profile: What are the characteristics and graduation pathways by which students from a specified graduation cohort year earned their high school diploma?
- High School Feedback Profile: What are the characteristics and performance of high school students from a specified 4-year graduation cohort, including post-secondary enrollment information?

Additionally, you can drill down to a Student List by clicking on the number of students from a Profile Report, as described above. From the Student List, you can select an individual student to view additional enrollment information and assessment performance. Every District Report allows you to dig deeper into individual student enrollment and assessment records. In this way, District Reports support inquiry by enabling you to follow a logical and user-friendly path to better understand the students in your schools.

District Report Level	Answer different questions, like
Profile Reports	How many students in my district decreased in ELA performance from the from the 2018 Grade 7 PARCC assessment to the 2019 Grade 8 NJSLA assessment?
Jump To Student Record	Who are these students and what more information can I learn about them?
School Profile	What other enrollment/demographic information can I learn about an individual student?
Grade Level Profile	How has this student performed on other assessments she or he has taken?

Navigating District Reports through Inquiry

Choosing a Profile Report

To demonstrate the use of District Reports, we will follow a series of four questions to illustrate how particular reports answer specific lines of inquiry. We'll show how your questions might change as you navigate through the reports, and how you can answer different types of questions with the different report views in District Reports. Let's start with the first question from the previous page:

Question 1: How many students in my district decreased in ELA performance from the from the 2018 Grade 7 NJSLA to the 2019 Grade 8 NJSLA assessment?

Since we want to know how a cohort of students has performed over two years, we'll select the Cohort Performance Profile from the list of available Assessment Profiles.

istrict Rep	orts		
Jump To: Contains Stude Starting Points: Contains starting point to "drill dow	nt List and Student Record reports that allow you to jump directly "Profile" reports that present aggregate information about your rn" to student lists and individual student records.	y to a customized list of students or a historical individual student record. students allowing you to analyze patterns and trends across various categories of information. P	rofile reports can be used as a
Jump To		Starting Points: Assessment Profiles	•
Student List	Customized selection of students showing their characteristics, program enrollment, and assessment performance (exportable to Excel).	Cohort Performance Characteristics of students who increased, stayed the same, or decreased in state assessment performance over 2 years.	Tips and Tricks
Student Record	Characteristics and history of enrollment, program information, and assessment performance for an individual student.	Student Growth Percent Profile Characteristics and performance of students who have demonstrated low, typical, and high growth in relation to their peers, as measured by the NJ ASK and PARCC assessments.	During the Local Data Mart Period don't forget to refresh your State and
		Assessment Performance Profile Characteristics and performance of students who scored in each performance level on the NJ state assessments.	Special Education Submissions for a real time view of your districts data.

Once we have selected the report, the Required Parameters page prompts us to select various parameters to customize our report to our question:

- 1. State Snapshot or Local Data Mart Report: The State Snapshot Report will display data from one of the two official Fall and End of Year (EOY) Snapshot and official State submissions. If your district has uploaded data between those time periods (e.g., if new students have moved into the district), you can select Local Data Mart (LDM) to view this report with your most recently refreshed data since the last state submission. If you're not sure if your district has updated data, you can select Local Data Mart; if there is no LDM data, you will see a pop-up message that LDM data has not been uploaded in your district.
- 2. Select required parameters: The rest of the drop-down menus allow you to select the data you want to view in the report.

State Snapshot or Local Data Mart	State Snapshot	
District	4015 Nocknbmgu	•
School	<select a="" value=""></select>	•
Assessment		•
Test Year		×
Test Year Grade Level		•
Comparison Year		•
Subject		•
Selections are limited based on a	vailability of data.	

Based on our question (How many students in my district decreased in ELA performance from the 2018 Grade 7 PARCC assessment to the 2019 Grade 8 NJSLA assessment?), we have selected the following options on the Report Selection Criteria page:

- School: All
- Assessment: NJSLA
- Test Year: 2018-2019
- Test Year Grade Level: 08
- Comparison Year: 2017-2018
- Subject: ELA

Required Parameter(s) Please make your selections and click "N	<i>fiew Report</i> " button to run rep	ort.	
State Snapshot or Local Data Mart	State Snapshot	Ŧ	
District	4015 Nocknbmgu	Y	
School	All	Y	
Assessment	NJSLA	v	
Test Year	2018-2019	v	
Test Year Grade Level	08	¥	
Comparison Year	2017-2018	¥	
Subject	ELA	v	
Note: Selections are limited based on a	vailability of data.		
		View Report	
	н	de Parameters 🔺	

Click the View Report button to generate a data set based on these selections.

Based on our question, we want to know how many students decreased in performance from 7th grade to 8th grade. Look at the profile and find the column titled "Decreased 1 or More Levels." The total number of students in that column is 18.

The header of the profile tells you the:

- 1. Report name
- 2. Type of report you ran (State Snapshot or Local Data Mart) and the date you generated the report
- 3. Filters you selected from the Required Parameters page.

You can also modify the report selection to change any filters you selected by clicking "Show Parameters" above the Profile, selecting new parameters, and rerunning the report (4).

Show Parameters 👻 4													
⊲ < <u>1</u> of 1 >	⊳I Ö							Export a	s Excel				
State Snapshot Report: Jun 28, 2019 (Ger	erated: 3/2/2020)												
Nocknbmgu All Schools ELA	Test Year: Comparis	2018-201	19, Grade Lev 2017-2018, Gi	el: 08 ade Lev	el: 07 3								
	Total Stu	Total Students Stayed Advanced or Increa Stayed Proficient			Increased 1 Leve	or More Is	Decreased 1 or More Levels		Stayed Partially Proficient				
Student Characteristics	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total			
Total Students	72	100%	31	43.1%	9	12.5%	18	25.0%	14	19.4%			
School													
0F160FQR9H2C0DEZ51V2	72	100.0%	31	43.1%	9	12.5%	18	25.0%	14	19.4%			
Gender													
Male	47	65.3%	18	38.3%	5	10.6%	14	29.8%	10	21.3%			
Female	25	34.7%	13	52.0%	4	16.0%	4	16.0%	4	16.0%			
Race/Ethnicity													
Black	17	23.6%	3	17.6%	4	23.5%	5	29.4%	5	29.4%			
Hispanic	7	9.7%	3	42.9%			2	28.6%	2	28.6%			
White	46	63.9%	24	52.2%	4	8.7%	11	23.9%	7	15.2%			
Multi	2	2.8%	1	50.0%	1	50.0%							

Drilling to the Student List

After reviewing the data in our Cohort Performance Profile Report, we may be interested in a certain group of students. That might lead us to ask a question like:

Question 2: Who are these students and what more information can I learn about them?

We can answer this question by clicking on the number 18 in the profile to see a Student List of those 18 students, as well as some enrollment, demographic, and assessment information about them.

NJSLA COHORT PERFORMANCE PF	ROFILE (SA)														
State Snapshot Report: Jun 28, 2019 (Gen	erated: 3/2/202	20)													
Nocknbmgu	Tes	t Year	2018-20	19, Grade Lev	vel: 08										
All Schools ELA	Cor	nparis	on Year:	2017-2018, G	rade Leve	l: 07									
	To	tal Stu	udents	Stayed Adv Stayed Pro	anced or oficient	Increased 1 Leve	or More Is	De N	crease lore Le	d 1 or vels	Stayed Pa Profici	rtially ent			
Student Characteristics	# Stud	of Jents	% of Total	# of Students	% of Total	# of Students	% of Total	# Stud	of Ients	% of Total	# of Students	% o Tota	f		
Total Students		72	100%	31	43.1%	9	12.5%		18	25.0%	14	19.	4%		
School															
0F160FQR9H2C0DEZ51V2		72	100.0%	31	43.1%	9	12.5%		18	25.0%	14	19.	496		
Gender	STUDEN	TLIS	ST : De	creased 1	l or Mo	re Levels			-		·				
Male	State Sna	neho	t Benor	t. Jun 28, 2	019 (Co	norated: 3	3/20/201								
Female	State Sha	psno	r repor	t. vun 20, 2	010 (00	nerateu. J	SIZUZU								
Race/Ethnicity	Nocknom	gu													
Black	LI	D	:	SID	:	First Nam	• ;	Last	Name	:	DOB	:	School Name	Grade Level ÷	Gender
	40	0110		439043	9313	Ealwciazn	00	Adbe	dj		04/10/200	0	5W6H9O4RU5 0RS1P1VRIJ97	08	М
	00	816		619351	2209	Apdoa		Alam	rsom		11/14/199	9	5W6H9O4RU5 0RS1P1VRIJ97	08	М
	90	214		514888	8582	Bvacusbm		Alydb	bd		06/03/200	0	81G6FIRPHZH O34CO1P2B3	08	F
	52	617		501968	7060	Uebffl		Bamo	a		11/01/199	9	81G6FIRPHZH	08	F

The header of the Student List displays the report name along with:

- 1. Any filters you selected
- 2. The report type (State Snapshot or Local Data Mart) and the date you generated the report
- 3. The district name
- 4. School name (or all schools).

You can also export the expanded Student List to Excel or CSV, navigate through the Student List, or return to the parent report from the navigation bar (5).

	of 1 > > > \bigcirc Back to the parent report 5 Export as Excel Export as CSV Find Next												
Export Expanded Student List to	Excel Export Expande	d Student List to CSV											
STUDENT LIST : Decreased 1 or More Levels 1													
State Snapshot Report: Jun 28, 2019 (Generated: 3/3/2020) 2													
Nocknbmgu 3													
All Schools 4													
LID ÷	SID 🌻	First Name 🍦	Last Name 🍦	DOB ţ	School 🍦 Name	Grade Level 🍦	Gender 🍦						
40110	4390439313	Ealwciaznoo	Adbedj	04/10/2000	5W6H9O4RU5 0RS1P1VRIJ97	08	М						
00816	6193512209	Apdoa	Alamrsom	11/14/1999	5W6H9O4RU5 0RS1P1VRIJ97	08	М						
90214	5148888582	Bvacusbm	Alydbbd	06/03/2000	81G6FIRPHZH O34CO1P2B3	08	F						
52617	5019687060	Uebffl	Bamqa	11/01/1999	81G6FIRPHZH	08	F						

Student List Extract

By clicking on the Export Expanded Student List to Excel link above, you can download an extended version of the Student List called the Student List Extract. The extract includes additional demographic, enrollment, and assessment information in an Excel spreadsheet. The header information is the same as the Student List, and you can further analyze these data by sorting, filtering or graphing in Excel.



Student Enrollment Record

When reviewing any list of students there will be individuals that stand out and need more attention. Analyzing our *Student List* might lead us to our next question:

Question 3: What other enrollment/demographic information can I learn about an individual student?

By clicking on a student's hyperlinked SID in the Student List Report (below left), you can view that student's enrollment record and display the student's demographics and current and historic information on school and program enrollment.

The header of the Student Enrollment Record tells you the report name (1), the student's name (2), and the type of report your ran (3). You can also return to the Student List or View the Assessment Record from the grey menu above the header.

STUDENT LI	ST : D	ecreased 1 or Mo	re Levels				<	1	of 1	>	\triangleright I	U		Back
State Snapsh	ot Repo	ort: Jun 30, 2014 (Ge	nerated: 3/3/20	20)		Back to St	udent List			Vie	wAssessme	ent Record	4	
Nocknbmgu						STUDEN	TENRO	LLMEN	TRECO)			
All Schools						Alydbbd,	Bvacusb	m 2		_				
All Schools						State Sna	pshot Re	eport: Ju	n 28, 20)19(3)				
						Student In	formation							
LID	120	cin .	First Name	1 anti anno 1		State ID:			5148888	582				
	÷	510 -	First Name			Local ID:			90214					
						Status:			Active					
						School Exit	t Date:							
40110		4390439313	Ealwciaznoo	Adbedj		School Exit	t/Withdraw	al Code:						
00816		6193512209	Aproa	Alamrsom		Student D	emograpi	hics	201	3-2019				
						Gender:			Fem	ale				
		Creation				Race/Ethn	nicity:		Whi	te				
90214		5148888582	Bvacusbm	Alyabba		Date of Bir	rth:		05/0	3/2005				
					-	Age:			14					
52617		5019687060	Uebffl	Bamqa		4 Year Gra	aduation C	ohort:						

Student Assessment Record

Once we know a little bit more about an individual student's enrollment and history, we may want to look at past academic performance. Our next question might be:

Question 4: How has this student performed on other assessments he/she has taken?

District Reports make getting this information easy. By clicking on the View Assessment Record link at the top of the Student Enrollment Record (upper right), you can view a record of all assessments that student has taken. The Student Assessment Record header provides the report name, student's name and SID number, and when the report was generated (1). From here, you can return to the Student List to select another student of interest or view the student's Enrollment Record again by clicking the links at the top of the page (2).

Back to Student List	View A	ssessment Record						
STUDENT ENROLLMEN	IT RECORD							
Alydbbd, Bvacusbm								
State Snapshot Report:		B	ack to Student List		View Enrollment Record	2		
Student Information		s s	TUDENT ASSESSMENT R	ECORD				
State ID:	5148888582	A	lydbbd, Bvacusbm					
Local ID:	90214	51	48888582	Ϋ́				
Status:	Active	(9	Generated: 3/5/2020)					
School Exit Date:		N	JASK					
School Exit/Withdrawal Code:							2	2013-2014
							(Grade 08
Student Demographics	2018-2019				SGP Level	SG	P	PL
Gender:	Female		A1	_	Low Crowth			Brotio
Race/Ethnicity:	White		4L		Low Growth			Profici
Date of Birth:	05/03/2005		Analyzing Text					
Age:	14		Explanatory Task					
4 Year Graduation Cohort:			Expository Task					
			Informational Text					
L			Informative/Explanatory or Narra	tive				

Within an individual student's assessment record, you can view five different measures:

- 1. Test Performance Level
- 2. Scaled Scores
- 3. Subclaim Performance Level
- 4. Student Growth Percentile (SGP) Level
- 5. SGP

Partnership for Assessment of Readiness for College and Career (PARCC)												
			2018-2019									
			Grade 08									
	1 Test PL	2 Score	3 Subclaim PL	4 SGP Level	5 SGP							
LAL Subjects & Subclaim categories				Low Growth	23							
ELL08	Did not yet meet expectations	689										
Reading Literary Text			Below Students									
Reading Informational Text			Below Students									
Reading Vocabulary			Below Students									
Writing Expression			Below Students									
Writing Knowledge/Language Conventions			Below Students									

How to Read a Profile Report

Profile reports are designed to display a rich array of student information at a high level, making it easy to recognize patterns that may require further analysis. These reports include multiple types of data that might otherwise exist in separate reports or data systems, allowing users to compare and analyze trends and relationships across various categories of information. Profile reports can be used as a starting point to drill down to student lists and individual student records to gain additional information about a group of students or an individual student. All profile reports are displayed in the same format, making it easier to become acclimated to the layout in order to better focus on the analysis of the data.

Organization of the Profile Reports

GRADE LEVEL PROFILE (SU) State Snapshot Report: Oct 15, 2019 (Genera Test District Example School	nted: 3/5/2020)									
	Total Stu	Idents	Grade	9	Grade	10	Grade	11	Grade	12
Student Characteristics	# of Students	% of Total	# or Students	% or Total						
Total Students	1525	100.0%	383	25.1%	371	24.3%	381	25.0%	390	25.6%
School										
Example School	1525	100.0%	383	100.0%	371	100.0%	381	100.0%	390	100.0%
Gender										
Female	720	47.2%	176	46.0%	183	49.3%	188	49.3%	173	44.4%
Male	805	52.8%	207	54.0%	188	50.7%	193	50.7%	217	55.6%
Race/Ethnicity										
Aapme	946	62.0%	228	59.5%	242	65.2%	235	61.7%	241	61.8%
Abzdhofeljchdaeciqfajaydccarbvwaf	4	0.3%			2	0.5%			2	0.5%
Bknelaog	298	19.5%	78	20.4%	65	17.5%	80	21.0%	75	19.2%

There are three main sections to a Profile Report:

1. **Report Header:** The report header displays the report name and the population (district name, school name, school year, etc.) for the report, which is delivered according to the selections made on the Required Parameters page. The report header also dynamically refreshes to reflect additional information about the population in the report when a user filters the report by clicking the hyperlinked variables in a row category. In the report shown below, the header indicates the user is looking at the Grade Level Profile for students at Test District in Example School.

- 2. **Column Variables:** Column variables are different in each Profile Report and are the variables across which the report population is disaggregated. Column variables are denoted in the name of the profile. In the profile shown below, the column variable is Grade Level; therefore, the student characteristics can be compared across different grade levels.
- 3. **Row Variables:** Row variables are additional categories (or Student Characteristics) that further disaggregate the report population. Row variables found in any standard Profile Report include: school name, grade level, gender, race/ethnicity, lunch status, special education, ELL status, time in district, at-risk students, students retained last year, number of days not present, SAT performance, student growth percentile performance, and PARCC/ NJSLA performance. The row variables generally remain constant across each profile, allowing you to quickly get accustomed to the types of data you can compare across the columns. Row variables may change across profiles if one of the variables is used as a column variable, or if the row variable is irrelevant given the selected population. Row categories (e.g. Male and Female) are displayed under each row variable (e.g. Gender).
 - a. Row Variable (A): Student characteristics by which the row variable data are disaggregated. Row variables appear in the green bands
 - b. **Row Category (B):** The data elements within a row variable. Row categories are hyperlinked and can be selected to filter the report population to the row category selected. This new filter is added to the report header so the user will always know what population the report contains.

GRADE LEVEL PROFILE (SU)										
State Snapshot Report: Oct 15, 2019 (Generated: 3/5/20)	20)									
Test District										
Example School										
	Total Students		Grade 9		Grade 10		Grade 11		Grade	12
Student Characteristics	# of Students	% of Total								
Total Students	1525	100.0%	383	25.1%	371	24.3%	381	25.0%	390	25.6%
School										
Example School	1525	100.0%	383	100.0%	371	100.0%	381	100.0%	390	100.0%
Gender										
Female	720	47.2%	176	46.0%	183	49.3%	188	49.3%	173	44.4%
Male	805	52.8%	207	54.0%	188	50.7%	193	50.7%	217	55.6%
Race/Ethnicity										
Aapme	946	62.0%	228	59.5%	242	65.2%	235	61.7%	241	61.8%
Abzdhofeljchdaeciqfajaydccarbvwaf	4	0.3%			2	0.5%			2	0.5%
Bknelaog	298	19.5%	78	20.4%	65	17.5%	80	21.0%	75	19.2%

Notice, also, that profiles have a Total Students row and a Total Students column, so that you can see the total number of students for any row variable or column variable group.

Structure of Profile Reports

There are two different types of Profile Reports: Profiles where the percentage of students *sum up* to 100%, and profiles where the percentage *sum across* to 100%. The direction in which the percentage of students sum is important because it helps you figure out how the percentages are calculated (i.e., is the number of students in a given cell being divided by the number of total students in the top row, or by the number of total students in the far left column?)

Sum Up Profile

In a Sum Up (SU) profile, the percentages within each column variable (in the white space) always sum up to 100%. The image below is a Grade Level Profile, so the percentages for each row variable (e.g., Race/Ethnicity) within the column will add to 100%, give or take a tenth of a percent, as the percentages are rounded to the nearest tenth.

GRADE LEVEL PROFILE (SU)										
state Snapshot Report: Oct 15, 2019 (Generated: 3/5/2020)										
Test District										
Example School										
Total Students Grade 9										
Student Characteristics	# of Students	% of Total	# of Students	% of Total						
Total Students	1525	100.0%	383	25.1%						
School										
Example School	1525	100.0%	383	100.0%						
Gender			\top							
Female	720	47.2%	176	46.0%						
Male	805	52.8%	207	54.0%						
Race/Ethnicity	78/	383 =	20.4%							
American Indian or Alaskan Native	946	62.0%	228	59.5%						
Asian	4	0.3%								
Black	298	19.5%	78	20.4%						
Hispanic	9	0.6%	3	0.8%						
Native Hawaiian or Pacific Islander	44	2.9%	17	4.4%						
White	214	14.0%	50	13.1%						
Multi	10	0.7%	7	1.8%						

In addition to the having the percentages sum up, the percentages in an SU Profile are calculated by dividing the number of students in a cell by the number of total students, as indicated in the Total Student row at the top of each column.

So, 20.4% is 78 divided by 383, or, said another way, it is the percentage of students in Grade 09 who are Black.

Sum Across Profile

In a Sum Across (SA) profile, the percentages across each row category (e.g., Female) always add across to total 100%. The image below is a Cohort Performance Profile, so the percentages across a row will add to 100% (not including the Total Students column).

NJSLA COHORT PERFORMANCE PROFILE (SA)															
State Snapshot Report: Jun 28, 2019	tate Snapshot Report: Jun 28, 2019 (Generated: 3/2/2020)														
Test District	Test	Year: 2018-20	19, Grade Lev	el: 08											
Example School	Com	parison Year:	2017-2018, G	ade Lev	el: 07										
ELA															
	Tota	al Students	Stayed Adva Stayed Pro	nced or ficient	Increased 1 Leve	or More Is	Decrease More Le	d 1 or vels	Stayed Partially Proficient						
Student Characteristics	# of Stude	f % of ents Total	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total					
Total Students		21/72	= 43.1%	1%	9	12.5%	18	25.0%	14	19.4%					
School	L	,													
Example School		72 100.0%	31	43.1%	9	12.5%	18	25.0%	14	19.4%					
Gender		_													
Male		47 65.3%	18	38.3%	5	10.6%	14	29.8%	10	21.3%					
Female		25 34.7%	13	52.0%	4	16.0%	4	16.0%	4	16.0%					
Race/Ethnicity				Т		╻				T					
Black		17 23.6%	3	17.0%	4	23.59	= 100%	.5.470		29.4%					
Hispanic		7 9.7%	3	42.9%			2	28.6%	2	28.6%					
White		46 63.9%	24	52.2%	4	8.7%	11	23.9%	7	15.2%					
Multi		2 2.8%	1	50.0%	1	50.0%									

In addition to the having the percentages sum across, the percentage in a SA Profile is calculated by dividing the number of total students all the way across in the Total Students column. So, 43.1% is 31 divided by 72, or, said another way, it is the percentage of students in Example School who have "Stayed Advanced Proficient or Stayed Proficient."

While the percentages in the Sum Up and Sum Across profiles differ in the direction that their percentages sum, the "Total Students" row always sums across and the "Total Students" column always sums up in both Sum Across and Sum Up profiles.

- 1. Total Students row: the top row in the profile. Percentages sum across to 100% in both sum across and sum up profiles.
- 2. Total Students column: the far-left column in the profile. Percentages sum up to 100% within each row variable section in both sum across and sum up profiles.

GRADE LEVEL PROFILE (SU)									
State Snapshot Report: Oct 15, 2019 (Generat	ed: 3/5/2020)								
Test District									
Example School	2								
	Total Stu	idents	Grade	9	Grade	10	Grade	11	
Student Characteristics	# of Students	% of Total	Sti						
Total Students	1525	100.0%	383	25.1%	371	24.3%	381	25.0%	T
School			◀					_	
Example School	1525	100.0%	383	100.0%	371	100 0%	381	100.0%	
Gender					24.3	%= 37	1/1525		
Female	720	47.2%	176	46.0%	183	49.3%	188	<mark>49.3%</mark>	
Male	805	52.8%	52.8	%= 80	5/1525	50.7%	193	50.7%	
Race/Ethnicity									
American Indian or Alaskan Native	946	62.0%	228	59.5%	242	65.2%	235	61.7%	
Acian	4	0.3%			2	0.5%			

This Cohort Status Profile shows that there are 1525 students in Example School. The Total Students row shows the distribution of students in each grade level. Because the total row percentages sum across to 100%, the percentages in the Total Students row for each grade level are calculated by dividing the students by the total students in the same row; e.g., Grade 10 students (371) divided by the total students (1525) equals 24.3%.

The percentages within each row variable (e.g. Gender) in the Total Students column sum up to 100%, so the percentages in the Total Students column are calculated by dividing the number of students in a row category by the number of total students in the same column; e.g., male students (805) divided by the total students (1525) equals 52.8%.

How Sum Up and Sum Across Profiles Answer Different Questions

Sum Up and Sum Across profile types differ in how they are structured to answer different questions.

- Sum Up profiles are structured to answer questions about the population described in the columns.
- Sum Across profiles are structured to answer questions about the population described in the rows.

The Grade Level Profile, below, is an example of a Sum Up (SU) profile. It is designed to answer questions about the population in the columns of the profile: grade level. This profile can answer questions about the demographic characteristics of students in each of the grade levels such as:

Question: What percentage of 9th grade students are in the free lunch program in my district or school?

Notice the question isn't about what percentage of students in the free lunch program are in the 9th grade. The question is about the 9th grade population (column variable) because we divided by the total 9th grade population in order to get our answer of 9.7%.

GRADE LEVEL PROFILE (SU)	GRADE LEVEL PROFILE (SU)						
State Snapshot Report: Oct 15, 2019 (Generated: 3/5/2020)							
Test District							
Example School							
		Total Stu	udents	Grade	9		
Student Characteristics		# of Students	% of Total	# of Students	% of Total		
Total Students		1525	100.0%	383	25.1%		
School							
Example School		1525	100.0%	383	100.0%		
Gender							
Female		720	47.2%	176	46.0%		
Male		805	52.8%	207	54.0%		
Race/Ethnicity							
American Indian or Alaskan Native		946	62.0%	228	59.5%		
Asian		4	0.3%				
Black		298	19.5%	78	20.4%		
Hispanic		9	0.6%	3	0.8%		
Native Hawaiian or Pacific Islander		44	2.9%	17	4.4%		
White		214	14.0%	50	13.1%		
Multi		10	0.7%	7	1.8%		
Lunch Status		ĺ					
Free Lunch	9.7%=	37/383	.0%	37	9.7%		
Reduced Rate Lunch		43	2.8%	16	4.2%		

In contrast, the Cohort Performance Profile, below, is an example of a Sum Across (SA) profile. It is structured to answer questions about the variables in the rows of the profile: school, gender, race/ethnicity, etc. This profile can answer questions about performance trends for the different groups in the rows such as:

Question: What percentage of students at Example Middle School stayed Advanced Proficient or Proficient compared to the percentage that increased one or more levels, decreased one or more levels, or stayed Partially Proficient?

Notice, in this profile, the question is about the population of Example Middle School (row variable). Here, we divided by the total number of students in Example Middle School to determine that 43.1% of students stayed Advanced Proficient or Proficient.

NJSLA COHORT PERFORMANCE PROFILE (SA)										
State Snapshot Report: Jun 28, 2019 (Gen	erated: 3/2/2020)									
Test District	Test District Test Year: 2018-2019, Grade Level: 08									
Example Middle School	Comparis	on Year:	2017-2018, G	rade Leve	el: 07					
ELA										
	Total Stu	idents	Stayed Adva Stayed Pro	anced or oficient	Increased 1 Level	or More Is	Decrease More Le	d 1 or vels	Stayed Pa Profici	rtially ent
Student Characteristics	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total
Total Students	72	100%	31	43.1%	9	12.5%	18	25.0%	14	19.4%
School										
Example Middle School	72	100.0%	31	43.1%	9	12.5%	18	25.0%	14	19.4%
Gender										
Male	47	65.3%			5	10.6%	14	29.8%	10	21.3%
Female	25	34.7%	43.	1%= 3	1/72 4	16.0%	4	16.0%	4	16.0%
Race/Ethnicity										
Black	17	23.6%	3	17.6%	4	23.5%	5	29.4%	5	29.4%
Hispanic	7	9.7%	3	42.9%			2	28.6%	2	28.6%

Understanding What the "%" Means

While you can choose to compare numbers of students across the rows or the columns in a sum up or a sum across profile, the distinction between the two types becomes crucial when comparing percentages. For example, look at the intersection of female students and Stayed Partially Proficient (PP) in the Sum Across Cohort Performance Profile on the previous page. Notice that 4 and 16.0% appear in the cells at this intersection. It is important to know how the percentage was calculated to know what question it answers: Is it that 16.0% of all female students stayed PP, or is it that 16.0% of all students who stayed PP were female?

To better understand this concept, look at the number of female students who Stayed PP (4) as well as the total number of Female students from the Total Students column (25) and the total number of students who Stayed PP in the Total Students row (14). If you wanted to know what percent of Female students who Stayed PP, you would divide 4 by 25 to get 16.0%. But if you wanted to know what percent of students who Stayed PP were female, then you would divide 4 by 14 to get 28.6%.

These are both valid questions, but they are different and yield different answers. The Cohort Performance Profile, which is a Sum Across profile, answers the first question: 16.0% of female students stayed PP.

Another way to remember this is to word your question beginning with the population the report was intended to answer. For a Sum Up profile, the question would be worded: *Of the students in the column variable, what is the % of students in the row category?* Refer to the Grade Level Profile (SU) on page 37. The correct wording to explain the percentages would be: *Of the students in 9th grade, 9.7% are in the Free Lunch program*. Notice that the question is asking about the population of the column variable, or the 9th grade population. It would be a different question to ask about the row variable population, or the Free Lunch *program* population (e.g., of the students receiving free lunch, what % is in 9th grade?). This is the defining difference between a Sum Up profile, which describes the column population, and a Sum Across profile which describes the row variable population.

Any time you view a report with both numbers and percentages, it is essential to know how the percentage is being calculated (and which question it answers) or you can easily come to the wrong conclusions about your data.

Again, a Sum Across Profile is designed to answer questions about the population in the rows—its row percentages sum across—so the number of students will always be divided by the number of students in the Total Students Column in its same row.

A Sum Up profile is designed to answer questions about the population in the columns—its column percentages sum up—so the number of students will always be divided by the number of students in the Total Students row in its same column at the top of the profile.

Sum Up Profile Summary

- Except for the "Total Students" row, percentages sum up to 100%
- Answers questions about the population of students in the columns
- Percentages are calculated by dividing the number of students in a cell by the number of total students up in the top row of the profile: (78 divided by 383 = 20.4%)

GRADE LEVEL PROFILE (SU)								
State Snapshot Report: Oct 15, 2019 (Generated: 3/5/2020)								
Test District								
Example School								
	Total Stu	Idents		Grade	9			
Student Characteristics	# of Students	% of Total	# o Stude	f ents	% of Total			
Total Students	1525	100.0%		383	25.1%			
School								
Example School	1525	100.0%		383	100.0%			
Gender								
Female	720	47.2%		176	46.0%			
Male	805	52.8%		207	54.0%			
Race/Ethnicity		78/	383 :	= 20	.4%			
American Indian or Alaskan Native	946	62.0%		228	59.5%			
Asian	4	0.3%						
Black	298	19.5%		78	20.4%			
Hispanic	9	0.6%		3	0.8%			
Native Hawaiian or Pacific Islander	44	2.9%		17	4.4%			
White	214	14.0%		50	13.1%			
Multi	10	0.7%		7	1.8%			

Sum Across Profile Summary

- Percentages sum across to 100% (except for the Total Students column)
- Answers questions about the population of students in the rows
- Percentages are calculated by dividing the number of students in a cell by the number of total students across the far-left column of the profile (13 divided by 25 = 52.0%)

NJSLA COHORT PERFORMANCE PROFILE (NJSLA COHORT PERFORMANCE PROFILE (SA)									
State Snapshot Report: Jun 28, 2019 (Generated: 3/2/2020)										
Test District	Test Year: 2018-2019, Grade Level: 08									
Example Middle School	Comparis	on Year:	2017-2018, Gi	ade Leve	el: 07					
ELA										
	Total Stu	Idents	Stayed Adva Stayed Pro	nced or ficient	Increased 1 Level	or More Is	Decrease More Le	d 1 or vels	Stayed Pa Profici	rtially ent
Student Characteristics	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total
Total Students	72	100%	31	43.1%	9	12.5%	18	25.0%	14	19.4%
School										
Example School	72	100.0%	31	43.1%	9	12.5%	18	25.0%	14	19.4%
Gender										
Male	47	65.3%	18	38.3%	5	10.6%	14	29.8%	10	21.3%
Female	25	34.7%	13	52.0%	4	16.0%	4	16.0%	4	16.0%
Race/Ethnicity										
Black	4	13/25	= 52.0%	17.6%	4	23.5%	5	29.4%	5	29.4%
Hispanic	7	9.7%	3	42.9%			2	28.6%	2	28.6%

Subpopulations in Profiles

Sometimes the number of students in a subpopulation is smaller than the number of students in the total populations. For example, there are 1525 students in the profile below, but only 741 students took the 2018-2019 PSAT and only 20 students received a score of 5210-719. This new "subpopulation" appears in the green band of the row variable (PSAT Total Score Range: 2018-2019). The percentages of students who are displayed in rows with subpopulations are calculated by dividing the number of students in a row category (e.g., "520-719") by the subpopulation (741), not the number of students in the entire population (1525).

GRADE LEVEL PROFILE (SU)						
State Snapshot Report: Oct 15, 2019 (Generated: 3/5/202	0)					
Test District						
Example School						
	Tota	l Stu	dents	Grade	9	
Student Characteristics	# of		% of	# of	% of	
	Stude	nts	Total	Students	Total	
Total Students	1	525	100.0%	383	25.1%	
PSAT Total Score Range: 2018-2019	1	741	48.6%			
1320 - 1520		51	6.9%			
1120 - 1319		182	24.6%			
920 - 1119 20/741= 2.79	%	286	38.6%			
720 - 919		199	26.9%			
520 - 719		20	2.7%			
320 - 519		3	0.4%			

Analyze and Make Valid Inferences

The Data Analysis Process

Data analysis can happen during several of the steps in the Cycle of Inquiry and Action, but analysis usually begins in the second step: *Understand the Issue*. In this step, you will be looking at data in various reports to help you better understand what the issue you identified is really about.



The Data Analysis Model on the following page is a great way to illustrate how data analysis happens. Analyzing data is mostly about carefully observing and noting what you see in the data, and then drawing inferences and conclusions from it. It is important, however, to make sure that you've collected enough facts before you draw conclusions. Each step in the model is outlined below to help you better understand the process.

Data Analysis Model



- 1. **Prepare to analyze:** You've identified the issue you want to focus on: minimizing the number of students who decreased in assessment performance from one year to the next. The first step in the Data Analysis Model is to prepare to analyze by finding the correct report that contains data about students who decreased in performance.
- 2. Make factual observations: Once you have the data you need, the first step to analyzing it is to make factual observations about what you notice in the data. Does one column have a much larger number of total students than any other column? Are there are more students in special education in one school than in other schools? Write these observations down.
- 3. Make inferences: After you are satisfied with the data and have enough notes about your observations, make some inferences to try to explain what you are seeing in the data (e.g., most students who decreased in performance also had low attendance, so it may be likely that gaps of school instruction affected their performance).
- 4. Ask new questions or draw conclusions:
 - a. **Ask new questions:** Given the inference(s) you've made, is there more data you should look at before making a conclusion? (e.g., it seems that attendance is the main factor in determining if a student decreases in performance from one year to the next, but I've only looked at the Cohort Performance Profile for the 7th grade to 8th grade cohort. I should check other cohorts and see if students who decreased a performance level from other grades also had low attendance).
 - b. **Draw conclusions:** You should only make conclusions once you think you've seen enough data to support your inferences. Once you've drawn your conclusion(s), you're ready to move on to action (e.g., after analyzing four additional cohorts and noticing that those who have decreased in performance also have low attendance, I feel it's safe to conclude that poor attendance is a problem for the students who decrease in performance from one year to the next.)

Making Factual Observations

It is important to remember not to jump to conclusions when analyzing data. Making assumptions that are not grounded in fact quickly lead to speculation and impulsive actions that will seldom lead to the corrective actions you were seeking by looking at data in the first place. Specifically, it is important not to make large inferences from only a few data points, such as performance on only one test, subject, or cluster. Be wary of drawing conclusions about a student's proficiency, strengths, or weaknesses in a subject area based on his/her performance on only one assessment.

To get to thoughtful action, you must always start with fact. What does the data say? If you don't have enough information, you need to collect more data. Do not make inferences or conclusions without facts to back them up.



Learning how to make factual observations in District Reports can be difficult until you've become accustomed to viewing data in this crosstab format. The exercises on the following pages will help you learn exactly what to look at once you have your chosen report in front of you. Let's look at the same Cohort Performance Profile (SA) that we looked at earlier to answer our question: *How many students in my district decreased in ELA performance from the from the 2018 Grade 7 PARCC to the 2018 Grade 8 NJSLA?*

Activity: Cohort Performance Profile

- 1. Look at the percentages of students across the Total Students row. This tells you about the distribution of students across your column variables (in this profile, the distribution of students based on their performance over two years).
 - a. How are the students distributed across the columns? Do they vary greatly or are they similar?
 - b. What columns have the highest and lowest percentage of the district's students?
 - c. Do the differences in percentages across this row suggest anything worth noting?

NJSLA COHORT PERFORMANCE PROFILE (SA)

State Snapshot Report: Jun 28, 2019 (Generated: 3/2/2020)

Nocknbmgu

Test Year: 2018-2019, Grade Level: 08

Comparison Year: 2017-2018, Grade Level: 07

All Schools

ELA

	Total Students S		Total Students Stayed Advanced or Stayed Proficient		Increased 1 or More Levels		Decreased 1 or More Levels		Stayed Partially Proficient	
Student Characteristics	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total
Total Students	72	100%	31	43.1%	9	12.5%	18	25.0%	14	19.4%
School										
0F16OFQR9H2CODEZ51V2	72	100.0%	31	43.1%	9	12.5%	18	25.0%	14	19.4%

- 2. Look at the percentages of students down the Total Students Column. This tells you about the distribution of students across your row variables (in this profile, the distribution of students across gender, race/ethnicity, lunch status, etc.).
 - a. How are the students distributed down the rows? Do they vary greatly or are they similar?
 - b. What rows have the highest and lowest percentage of the district's students?
 - c. Do the differences in percentages down this column suggest anything worth noting?

NJSLA COHORT PERFORMANCE	PROFILE (SA)						
State Snapshot Report: Jun 28, 2019 (Generated: 3/2/2020)						
Nocknbmgu Test Year: 2018-2019							
All Schools	Compari	son Year:	2017-2				
ELA							
	Total St	udents	Staye Stay				
Student Characteristics	# of Students	% of Total	# c Stud				
Total Students	72	100%					
School							
0F160FQR9H2C0DEZ51V2	72	100.0%					
Gender							
Male	47	65.3%					
Female	25	34.7%					
Race/Ethnicity							
Black	17	23.6%					
Hispanic	7	9.7%					
White	46	63.9%					
Multi	2	2.8%					
Lunch Status							
Free Lunch	23	31.9%					
Reduced Rate Lunch	4	5.6%					
Not Eligible	45	62.5%					
Special Education							

- 3. Pick a row (e.g. Gender: Male) and look at the percentages across it.
 - a. Are there noticeable differences in the percentage of students across the row you selected as compared to the percentages above in the Total Students row?
 - b. Are there noticeable differences in the percentages of students within the row you selected as compared to any other row?

NJSLA COHORT PERFORMANCE	EPROFILE (SA)									
State Snapshot Report: Jun 28, 2019 (Generated: 3/2/2020)									
Nocknbmgu	Test Year: 2018-2019, Grade Level: 08									
All Schools ELA	Comparis	Comparison Year: 2017-2018, Grade Level: 07								
	Total Stu	idents	Stayed Adva Stayed Pro	inced or dicient	Increased 1 Lovel	or More s	Decrease More Le	d 1 or vels	Stayed Pa Profici	rtially ent
Student Characteristics	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	≢ of Students	% of Total	# of Students	% of Total
Total Students	72	100%	31	43.1%	9	12.5%	18	25.0%	14	19.4%
School										_
0F160FQR9H2C0DEZ51V2	72	100.0%	31	43.1%	9	12.5%	18	25.0%	14	19.4%
Gender										
Male	47	65.3%	18	38.3%	5	10.6%	14	29.8%	10	21.3%
Female	25	34.7%	13	52.0%	- 4	16.0%	- 4	16.0%	4	16.0%
Race/Ethnicity										
Black	17	23.6%	3	17.6%	4	23.5%	5	29.4%	5	29.4%
Hispanic	7	9.7%	3	42.9%			2	28.6%	2	28.6%
White	46	63.9%	24	52.2%	4	8.7%	11	23.9%	7	15.2%

Reflection: Using Data in a Data Warehouse

Use your notes from the questions about the Cohort Performance Profile starting on page 466 to answer the questions below:

What inferences can you make that are based solely on factual observations?

What data support your inferences?

Do you need additional data to support your inferences? What District Report could provide this additional information?

Guided Scenarios for Using Your Data

Data Analysis Protocol

District Reports help district staff answer important questions about their students to inform instructional programming, make decisions about resource allocation, and target areas for improvement. The purpose of this protocol is to provide a tool that educators can use to examine their NJ SMART data in a variety of ways, to be used with your District Reports to help guide your data analysis. It is meant to be written on, discussed with colleagues, and analyzed to support collaborative data-driven decision making.

This protocol is divided into three phases and consists of guiding questions that will help you understand and analyze your District Reports by noting key observations in the data. Below are some high-level concepts that should be kept in mind when examining reports.

General Guidelines

- Make objective observations based on the data: Be careful not to make inferences or draw conclusions too quickly; that will come after your objective analysis of the data.
- Not all data in the report will be significant: Inspect the data and highlight the cells in the report that seem to represent something of interest; the significance of the highlighted data will be determined later in the process.
- Look for outliers to find data elements of interest: Data that appear to be outside the expected range may require deeper analysis.
- Look for patterns and trends: Look at the percentage of students within a column or across the rows for relationships or anomalies (e.g., decreasing numbers of LEP students from elementary to secondary school).
- Examine the distribution of subpopulations: Look at the percentage of students in a subpopulation (male students) in the context of their representation in the total population (e.g., 80% of Special Education students are male, but males only represent 48% of the total population, so this is something that should be noted as disproportionate and may require further analysis).

Phase 1

In Phase 1, you will spend time orienting yourself to the type of report you are examining and some of the key aspects of the report.

Area of Focus	Question(s)	Notes
Identify an Issue	What are the questions you're hoping to answer by analyzing your district data?	
Profile Population	Who are the students included in this report (district, school, year, etc.)?	
Column Variables	How is the data disaggregated (by school, grade level, at-risk, etc.)?	
Profile Type	 What kind of District Report Profile are you examining? (check one) Point to any percentage in your profile. Based on the type of profile you're looking at, how would you read what the percentage means? (fill in the blanks to the right) e.g., 10% of the male students are in 5th grade vs. 10% of the 5th grade students are male (there is a difference!) Based on your statement in #2, what division equation would you write to calculate the percentage of students you picked? 	 Sum Up: The %s in the "Total Students" row sum across to 100%. All %s in the columns within each row variable section sum up to 100%. Interpretation: For the population of students within a given column, what is the distribution across rows? Sum Across: The %s in all rows sum across to 100%. The %s in the "Total Students" column sum up to 100%. Interpretation: For the population of students within a given row, what is the distribution across columns? % of thestudents are%
Profile Selection	Will the data in the profile answer your questions from above? If not, what data would be more appropriate?	

Phase 2

In Phase 2, you will dig deeper into the data and highlight key elements that should be examined in greater detail.

Area of Focus	Questions	Notes
Look at the percentages of students across the "Total Students" row	 This tells you about the distribution of students across your column variables (e.g., for the School Profile, your distribution of students across schools). 1. How are the students distributed across the columns? Do they vary greatly or are they similar? 2. What columns have the highest and lowest percentage of the district's students? 3. Do the differences in percentages across this row suggest anything worth noting? 	
Look at the percentages of students down the "Total Students" column	 This tells you about the distribution of students across your row variables (e.g., your distribution of students across gender, race/ethnicity, lunch status, performance, etc.). 1. How are the students distributed down the rows? Do they vary greatly or are they similar? 2. What rows have the highest and lowest percentage of the district's students? 3. Do the differences in percentages down this column suggest anything worth noting? 	
Analyzing a Sum Up Profile: Comparing columns to other columns	 If your Profile is a sum up profile, pick a column (e.g. Grade 4) and look at the percentages down it. (Skip this if your profile is a sum across.) Are there noticeable differences in the percentage of students down the column you selected as compared to the "Total Students" column to the left? Are there noticeable differences in the percentages of students down the column you selected as compared to any other columns in the profile?(e.g., are the percentages down the Grade 4 column noticeably different from the percentages down the Grade 5 column?) 	
Analyzing a Sum Across Profile: Comparing rows to other rows	 If your profile is a sum across profile, pick a row (e.g., Gender: Male) and look at the percentages across it (Skip this if your profile is a sum up). Are there noticeable differences in the percentage of students across the row you selected as compared to the percentages above in the "Total Students" row? Are there noticeable differences in the percentages of students within the row you selected as compared to any other row? (e.g., are the percentages across the row with students who were never absent noticeably different than the percentages across the row where students were absent more than 15 days?) 	

Phase 3

In Phase 3, you will analyze your findings and take action based on your observations.

Step	Question(s)	Notes
1	Look first on the observations you highlighted. What inferences can be made from the data?	
2	What questions are raised by the data and the inferences you have made? If no questions were raised go to step 5.	
3	What additional information do you need to answer these questions?	
4	Is this information available in District Reports? If not, what other reports/data sources can be used?	
5	Based on the inferences you made, can you draw any conclusions?	
6	What action are you going to take based on observations and analysis?	

- 1. What are one or two of the most important things you learned today?
- 2. How will you apply this learning in your work?
- 3. Who else in your district needs to know this information?

Resources, Trainings, and Support

The NJ SMART portal has several resources to help you navigate District Reports, including this handbook, accompanying presentations, and an on-demand eLearning Video of this course.

For additional resources and information on using District Reports, visit the Help tab and select either the **eLearning Videos & Webinars** section for course information and eLearning videos, or the **Documents for Downloads** section for handbooks and other District Report resources.



If you have any additional questions about navigating District Reports or the NJ SMART, please contact the NJ SMART Help Desk at (800) 254-0295 or njsmart@pcgus.com.