DU101 Handbook: Using School/District Reports
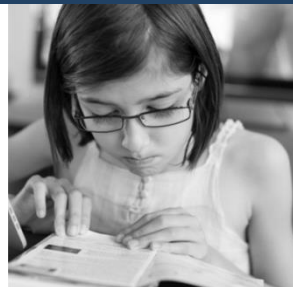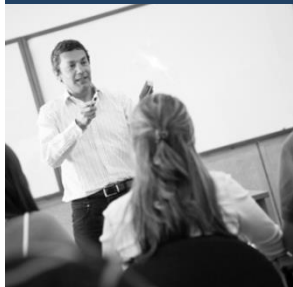
Professional development for the NJ SMART Portal, A New Jersey Department of Education Data Warehouse

NJ SMART
Education Data System

Table of Contents

How to Read this Document

Icons

The icons below are included in this handbook to provide visual cues throughout the course.

Activity	Discussion/Reflection	Resource/Reference	Hint/Reminder
Appears when course participants are prompted to take part in an activity or exercise	Indicates a prompt for team discussion or individual reflection	Directs users to additional resources or references to help improve understanding	Displayed to call out a helpful hint, word of caution, or reminder when navigating through an inquiry

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), 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.

Several important NJ SMART initiatives have been successfully implemented:

1. The state assessment data warehouse has been populated with statewide test results back to 1999.

2. The initial statewide NJ SMART data submission occurred in December 2006. Data provided by districts through this submission were used to create unique student identification (SID) numbers. SIDs were issued to districts on March 21, 2007, and continue to be issued for all students as they enter the New Jersey public school system.

3. All districts have been offered training on EDanalyzer™, a web-based tool that allows districts to view and analyze state assessment data, as well as assessment-related student demographic information currently in the NJ SMART data warehouse.

4. Districts have an opportunity to create local data marts and access District Reports, for which they can receive training through the NJ SMART online portal throughout the year.

Each of these initiatives resulted in important outcomes for local districts:

1. Integrated state assessment data means that districts will have access to assessment reports that will allow easy monitoring and comparison of critical performance measures.

2. With the implementation of SIDs, districts will be able to track students and their performance more effectively over time, even if they transfer in and out of New Jersey school districts.

3. EDanalyzer allows districts to access assessment data that are as current as the most recent data loaded into the NJ SMART data warehouse.

4. A local data mart offers the opportunity for districts to bring together data that are currently stored in a variety of locations, into one integrated data warehouse, allowing staff to access linked student data. Reports will further provide districts with a user-friendly way to view and analyze student data.

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 and will introduce you to the history and function of the NJ SMART data warehouse, 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.

- What are you learning and who else needs to know this material?

- What key concepts will you want to share with others?

- What technical information would be helpful for others in your school or district to know?

Where are we now?

DATA USE TRACK
Making Decisions Using NJ SMART Data

- ☒ DU101: Using School/District Reports
- ☐ DU102: Using EDanalyzer
- ☐ DU103: Using Student Growth Percentiles
- ☐ DU201: Using Data for District & School Improvement Planning

DATA QUALITY TRACK
Establishing High-Quality Data

- ☐ DQ301: Getting Started with NJ SMART
- ☐ DQ302: SID/SMID Management
- ☐ DQ303: NJ SMART Submissions
- ☐ DQ304: Data Quality

Audience

District-level administrators, curriculum directors, assessment directors, IT/data managers, principals, and district/school improvement team members

Prerequisites

None

Course Topics

- Introduction to NJ SMART
- Introduction to the inquiry process
- Using school and District Reports for educational decisions

Course Objectives

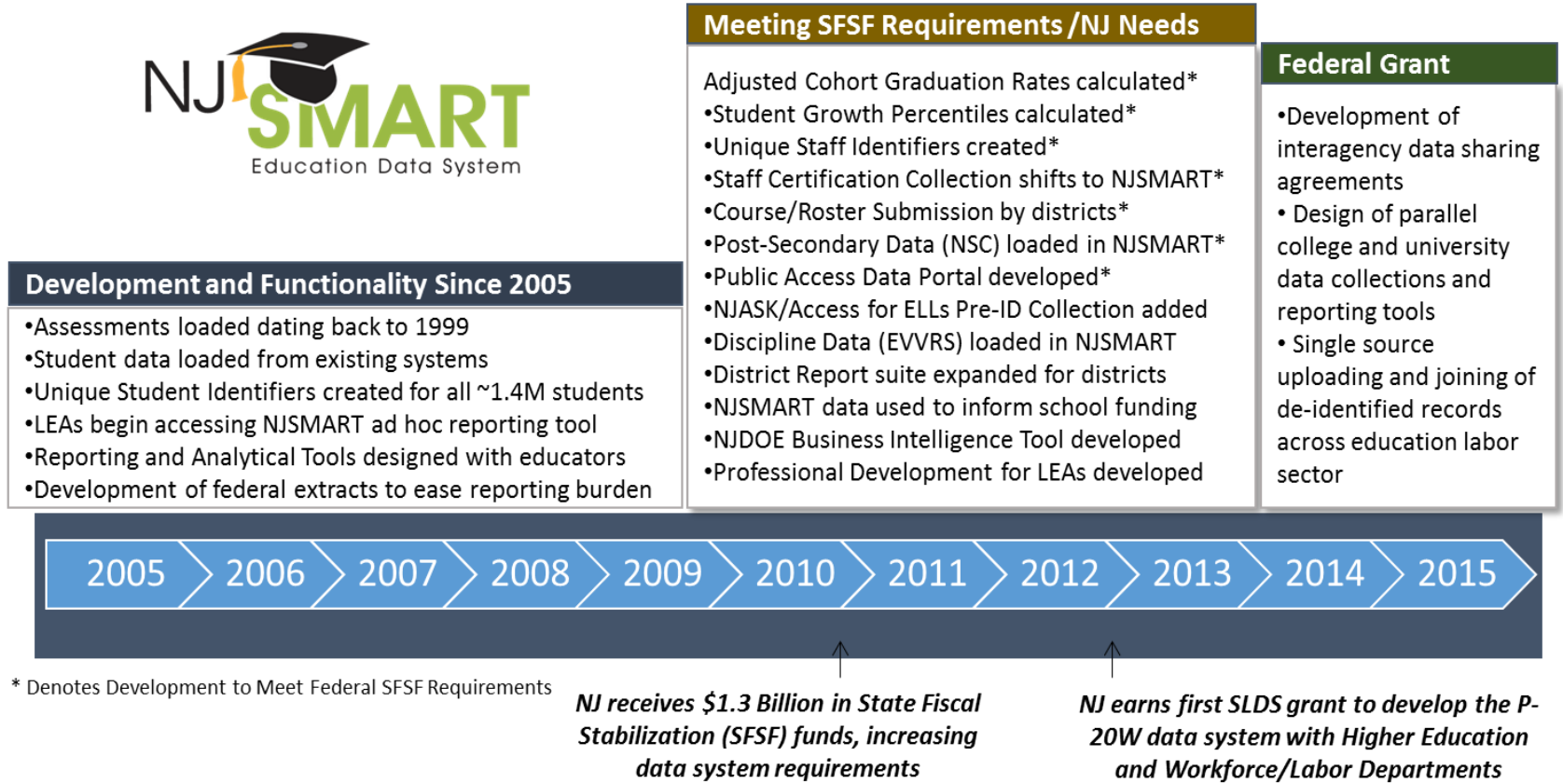Upon completion of this course, you will be able to:

- 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 History and 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 history and function, including its data inputs and reports outputs that will help you better understand how you can effectively leverage data in NJ SMART.

History

Meeting SFSF Requirements /NJ Needs

Adjusted Cohort Graduation Rates calculated*
• Student Growth Percentiles calculated*
• Unique Staff Identifiers created*
• Staff Certification Collection shifts to NJSMART*
• Course/Roster Submission by districts*
• Post-Secondary Data (NSC) loaded in NJSMART*
• Public Access Data Portal developed*
• NJASK/Access for ELLs Pre-ID Collection added
• Discipline Data (EVVRS) loaded in NJSMART
• District Report suite expanded for districts
• NJSMART data used to inform school funding
• NJDOE Business Intelligence Tool developed
• Professional Development for LEAs developed

Federal Grant

• Development of interagency data sharing agreements
• Design of parallel college and university data collections and reporting tools
• Single source uploading and joining of de-identified records across education labor sector

Development and Functionality Since 2005

• Assessments loaded dating back to 1999
• Student data loaded from existing systems
• Unique Student Identifiers created for all ~1.4M students
• LEAs begin accessing NJSMART ad hoc reporting tool
• Reporting and Analytical Tools designed with educators
• Development of federal extracts to ease reporting burden

2005 > 2006 > 2007 > 2008 > 2009 > 2010 > 2011 > 2012 > 2013 > 2014 > 2015

* Denotes Development to Meet Federal SFSF Requirements

NJ receives $1.3 Billion in State Fiscal Stabilization (SFSF) funds, increasing data system requirements

NJ earns first SLDS grant to develop the P-20W data system with Higher Education and Workforce/Labor Departments

NJ SMART Data Inputs

NJ SMART data come 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 to allow a more complete and rich picture of a student's educational experience. In addition to combining the data, NJ SMART has reduced duplicative reporting districts are required to do for the state. By expanding data collected, multiple state systems have been eliminated and are fulfilled through only two main submissions to NJ SMART.
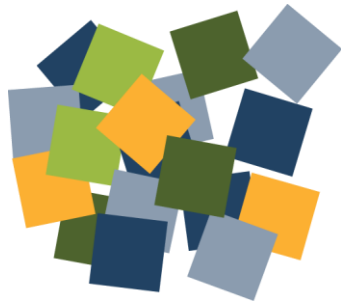
State Submissions

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

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 (EVVRS)

NJ SMART Outputs

NJ SMART currently provides two district-level reporting tools: EDanalyzer and District Reports. Educators can use these tools to learn more information about their students' enrollment, demographic information, assessment performance, special education characteristics, and much more. While each tool displays data about students enrolled in a district, the tools differ in the type of data in the reports and how the data is presented.

NJ SMART Submissions   **NJ SMART Data Warehouse**   **NJ SMART Outputs**

- District Reports
- EDanalyzer
- State/Federal Reports

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 particular type of 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 know assessment and demographic information about the students who just came to your district. It is also the best tool to use when you want to see extensive enrollment, demographic, graduation, or special education information about your students.

Crosstab:
A crosstab report displays data that are 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.

Optional Submissions

District Reports display data about all of your students included in each SID, State, and Special Education submission through the NJ SMART portal. Districts can also add local data elements to the District Reports by uploading a file submission on the *Optional Submissions* tab in the NJ SMART portal. Optional data uploads include cumulative credits earned and GPA and program participation.

When to Use District Reports or EDanalyzer

Both District Reports and EDanalyzer are powerful tools that allow users to easily analyze student data in aggregate tables, student lists, and individual student records. While the data in these tools are very similar, there are some major differences.

Features	District Reports	EDanalyzer
Population	Students with a SID and who are included in my district's state submission	All students who tested in my district (even those with no SID)
Format	Pre-formatted tables	Ad-hoc analysis
Data Delivery	User selects from available pre-built reports	User constructs data displays from a menu of data elements
Data Types	Assessments with comprehensive student characteristics	Assessments with limited student characteristics
Data Updated	Whenever district uploads new data*	Yearly
Graphing Capability	Data must be exported to Excel for graphing	Bar, pie, and scatter plot
Reporting	Aggregate student counts, student lists, individual student records	

* October 15 and June 30 submissions; local data mart submissions up to 1x daily

Discussion: 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?

  _____

  _____

  _____

The Inquiry Process

Cycle of Inquiry and Action

Before deciding what report you want to select, it is important to identify what question or issue you want to explore. The Cycle of Inquiry and Action, at right, provides a data-driven 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.

Identify an Issue
And formulate questions to help define it

1

Understand the Issue
By analyzing data and refining questions

2

Diagnose the Cause
Through deeper analysis, observation, and best practice research

3

Plan Action
By setting measurable goals and articulating strategies

4

Take Action
While monitoring data to make adjustments

5

Evaluate
And reassess the situation

6

The Cycle of Inquiry and Action

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Beginning Analysis with a Question

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

Different District Reports	Answer different questions, like…
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 who may be at risk of academic failure or dropping out of school as measured by prior year math or LAL Partially Proficient and over age for grade?
Special Education Classification and Placement Profiles	What are the characteristics and performance of special education students across each special education classification and 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?
NJ ASK Student Growth Profile	What are the characteristics and performance of students who have demonstrated low, typical, and high growth on the NJ ASK assessment over time?

Different District Reports	Answer different questions, like…
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 Assessment Profile	What are the characteristics and assessment pathway 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 a number of students from a Profile Report. From the Student List you can select an individual student to see additional enrollment information and assessment performance about a single student. Every District Report will let you dig deeper to 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.
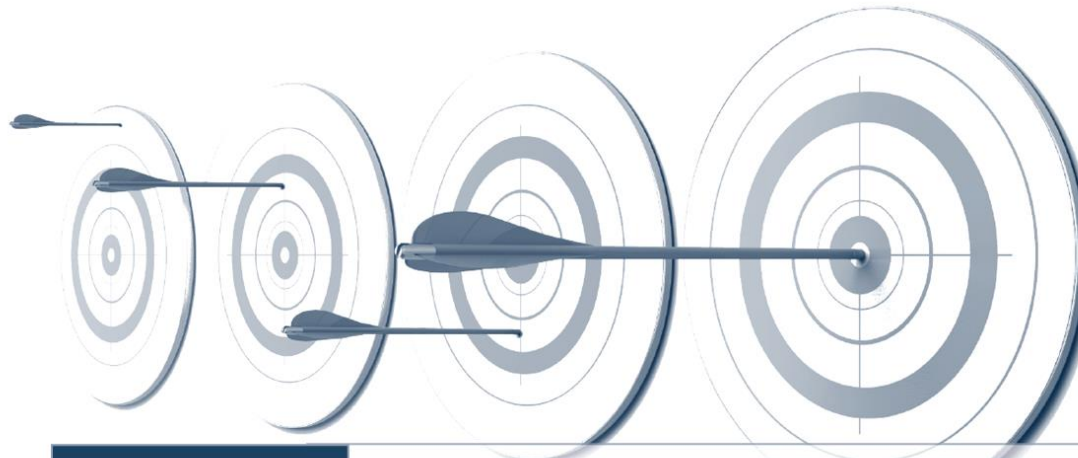
Profile Reports	How many students in my district decreased in LAL performance from the from the 2011 Grade 7 NJ ASK to the 2012 Grade 8 NJ ASK assessment?
Student List	Who are these students and what more information can I learn about them?
Student Enrollment Record	What other enrollment/demographic information can I learn about a particular student?
Student Assessment Record	How has this student performed on other assessments she or he has taken?

Logging in to District Reports

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

1. Open your browser and type www.njsmart.org to access NJ SMART.

2. Enter your assigned username and password. This will open the NJ SMART portal home page as seen on page 32. If you don't have login credentials or can't remember them, please contact your district's web user administrator.

NJ SMART Portal

The NJ SMART portal contains:

A. A compilation of frequently asked questions,

B. Information about upcoming events and trainings, as well as,

C. Announcements.

To access District Reports, hover over the Reporting tab in the NJ SMART portal (D), then select District Reports.
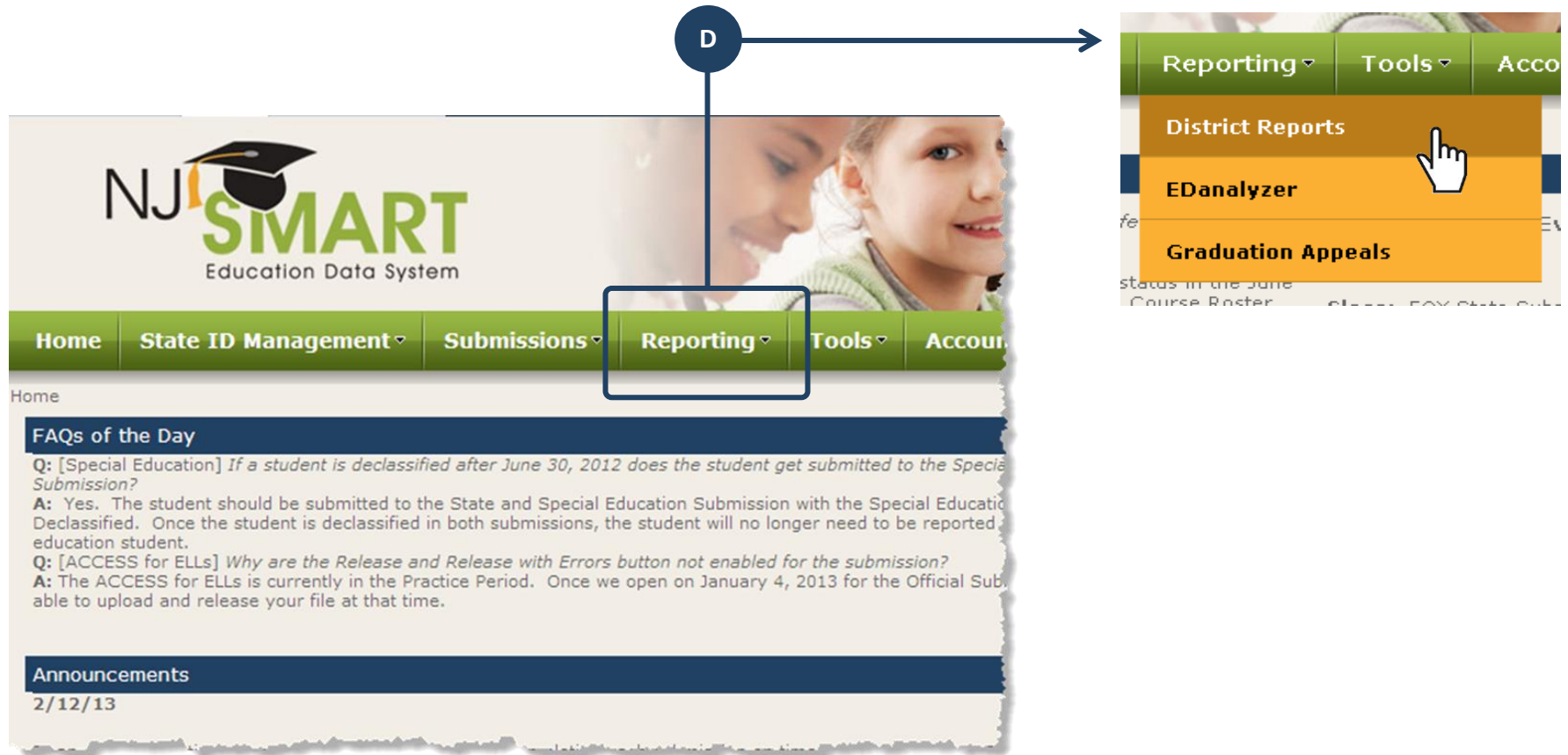
Clicking on the District Reports tab will reveal the welcome screen below, displaying all the reports currently available. These reports are categorized into two sections: *Starting Points* or Profile Reports (E) and *Jump To* Reports (F). Profile Reports present aggregate information about students 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. *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.

Once in District Reports, you are able to click on any hyperlinked number to drill down into the *Student List*.

Modify Report Selection

GRADE LEVEL PROFILE (SU*)

State Snapshot Report: Jun 30, 2012 (Generated: 11/28/2012)

Training District 1

All Schools

Student Characteristics	Total Students		Pre-K		Kindergarten		Grade 1		Grade 2	
	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	# of Students	% Total
Total Students	4500	100.0%	88	2.0%	300	6.7%	359	8.0%	369	
School										
Bristol Middle School	577	12.8%								
Cypress Middle School	557	12.4%								
Juniper Elementary School	527	11.7%			64	21.3%	79	22.0%	96	26.0
Locust Daycare	88	2.0%	88	100.0%						
Moon Valley Elementary School										

Export to Excel   **Back to Previous Report**

STUDENT LIST : Kindergarten

State Snapshot Report: Jun 30, 2012 (Generated: 11/28/2012)

Training District 1

Juniper Elementary School

LID ↕	SID ↕	First Name ↕	Last Name ↕	DOB	School Name ↕	Grade Level ↕	Gender ↕	Race/ Ethnic ity ↕
999803236	4432732438	JIN	ALLGOOD	05/01/2006	Juniper Elementary School	KH	Female	Black
999806187	7539004066	ELLYN	ARCENEAUX	02/20/2006	Juniper Elementary School	KH	Female	Hispanic
999804753	6008782638	SANJUANITA	AYOTTE	04/06/2006	Juniper Elementary School	KH	Female	Asian
999800876	1961346075	IMA	BANTON	06/22/2006	Juniper Elementary School	KH	Female	White

Student List

As you can see from the header of the *Student List*, at right, this student list was generated by clicking on the blue number "64" listed under the column "Kindergarten" and the row "Juniper Elementary School" from the above *Grade Level Profile*.

For additional resources and information on using school/District Reports, visit the *Help and Support* tab (G) and select District Reports from the topic list (H).

Navigating District Reports through Inquiry

Choosing a Profile Report

In order to demonstrate how to use 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 Language Arts Literacy (LAL) performance from the 2011 Grade 7 NJ ASK to the 2012 Grade 8 NJ ASK 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.*

Once we have selected the report, the *Report Selection Criteria* page prompts us to select various parameters to customize our report to our question:

1. *Step 1: Choose State Snapshot or Local Data Mart Report*: The State Snapshot Report will display data from one of the two official October and June 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 to view this report with updated data since the last state submission. If you're not sure if your district has updated data, you can select Local Data Mart (LDM); if there is no LDM data, you will see a pop-up message that LDM data has not been uploaded in your district.

2. *Step 2: Select report parameters*: Allows you to select the data you want to view in the report

3. *Step 3: Choose whether or not to include Optional data*: Allows you to view any optional data that your district might have uploaded. Optional data includes cumulative credits earned and GPA and program participation. If your district has not uploaded any optional data, this checkbox will be grayed out and you will not be able to select it.

HOME > Reporting > District Reports > Report Selection Criteria

Report Selection Criteria
Cohort Performance Profile

Step 1:
Choose State Snapshot or Local Data Mart Report
⦿ State Snapshot Report ◯ Local Data Mart Report

Step 2:
Select report parameters
District: - Select District -
School:
Assessment:
Test Year:
Test Year Grade Level:
Comparison Year:
Subject:

Step 3:
Choose whether or not to include Optional data
☐ Include Optional Submissions data in Report

Run Report

Based on our first question (How many students in my district decreased in LAL performance from 2011 Grade 7 NJ ASK to the 2012 Grade 8 NJ ASK assessment?), we have selected the following options on the Report Selection Criteria page:

A. District

B. School

C. Assessment and Test Year

D. Test Year Grade Level

E. Comparison Year

F. Subject

Report Selection Criteria

Cohort Performance Profile

Step 1:
Choose State Snapshot or Local Data Mart Report

◉ State Snapshot Report ○ Local Data Mart Report

Step 2:
Select report parameters

District: 5715 Training District 1

School: All Schools

Assessment: NJ ASK

Test Year: 2011-2012

Test Year Grade Level: 08

Comparison Year: 2010-2011

Subject: LAL

A - F

Step 3:
Choose whether or not to include Optional data

☐ Include Optional Submissions data in Report

Click "Run Report" to generate a data set based on these selections.

Run Report

Based on our question, we want to know how many students decreased in performance from 7th grade to 8th grade. Look at the profile we ran and find the column that says "Decreased One or More Levels." The total number of students in that column is 22.

The header of the profile tells you the:

G. Report name,

H. Type of report you ran (State Snapshot or Local Data Mart) and the date you generated the report, and

I. Filters you selected from the Report Selection Criteria page.

You can also modify the report selection to change any filters you selected on the Report Selection Criteria page (J).

J **Modify Report Selection**

NJ ASK COHORT PERFORMANCE PROFILE (SA*) **G**

H

State Snapshot Report: Jun 30, 2012 (Generated: 11/28/2012)

Training District 1   Test Year: 2011-2012, Grade Level: 08

All Schools   Comparison Year: 2010-2011, Grade Level: 07   **I**

LAL

Student Characteristics	Total Students		Stayed AP or Stayed P		Increased 1 or More Levels		Decreased 1 or More Levels		Stayed PP	
	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total
Total Students	334	100%	207	62.0%	74	22.2%	22	6.6%	31	9.3%
School										
Bristol Middle School	162	48.5%	102	63.0%	34	21.0%	9	5.6%	17	10.5%
Cypress Middle School	172	51.5%	105	61.0%	40	23.3%	13	7.6%	14	8.1%
Gender										
Female	157	47.0%	101	64.3%	35	22.3%	10	6.4%	11	7.0%
Male	177	53.0%	106	59.9%	39	22.0%	12	6.8%	20	11.3%

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 22 in the profile to see a Student List of those 22 students, as well as some enrollment, demographic, and assessment information about them.

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

- K. Any filters you selected,
- L. The report type (State Snapshot or Local Data Mart) and the date you generated the report,
- M. The district name, and
- N. School name (or all schools).

You can also export the list to Excel, or go back to the previous report profile you viewed before drilling through to the Student List by clicking on either of the links at the top of the report in the gray bar (O).

LID	SID	First Name	Last Name	DOB	School Name	Grade Level	Gender	Race/ Ethnicity
999804431	5692497411	YI	AGUILA	04/26/1998	Cypress Middle School	08	Female	White
999806026	7386138453	RAPHAEL	BENCE	01/27/1998	Cypress Middle School	08	Male	White
999803619	4855389064	LARA	BORLAND	06/17/1998	Bristol Middle School	08	Female	White
999800406	1468152837	WALTER	BORREGO	08/03/1998	Cypress Middle School	08	Male	Hispanic
999800084	032090433	RORY	BRANAM	01/25/1998	Bristol Middle School	08	Male	Asian

Export to Excel   Back to Previous Report

STUDENT LIST : Decreased 1 or More Levels

State Snapshot Report: Jun 30, 2012 (Generated: 11/28/2012)

Training District 1

All Schools

Student List Extract

By clicking on the *Export to Excel* link at the top of the report, 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 a particular student?

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

The header of the *Student Enrollment Record* tells you the report name (P), the student's name (Q), the type of report you ran (State Snapshot or Local Data Mart) and the date you generated the report (R). You can also return to the Student List, or view the student's Assessment Record (S).

Export to Excel   **Back to Previous Report**

STUDENT LIST : Decreased 1 or More Levels

State Snapshot Report: Jun 30, 2012 (Generated: 11/28/2012)

Training District 1

All Schools

LID ⇕	SID ⇕	First Name ⇕	Last Name ⇕	
999804431	5692497411	YI	AGUILA	0
999806026	7386138453	RAPHAEL	BENCE	01
999803619	4855389064	LARA	BORLAND	06/
999800406	1468152837	WALTER	BORREGO	08/0

Back to Student List   **View Assessment Record**   S

STUDENT ENROLLMENT RECORD

BENCE, RAPHAEL   Q

State Snapshot Report (Generated: 11/28/2012)   R

Student Information	
State ID:	7386138453
Local ID:	999806026
Status:	Active
School Exit Date:	
School Exit/Withdrawal Code:	

Student Demographics	
Gender:	Male
Race/Ethnicity:	White
Date of Birth:	01/27/1998
Age:	14
4 Year Graduation Cohort:	
Country of Birth:	

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 question might be:

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

District Reports makes 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 tells you the report name, student's name and SID number, and when the report was generated (T). 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 (U).

Back to Student List		View Assessment Record
STUDENT ENROLLMENT RECORD		
BENCE, RAPHAEL		
State Snapshot Report (Generated: 11/28/2012)		
Student Information		
State ID:	7386138453	
Local ID:	999806026	
Status:	Active	
School Exit Date:		
School Exit/Withdrawal Code:		

Back to Student List	View Enrollment Record			
STUDENT ASSESSMENT RECORD				
BENCE, RAPHAEL				
7386138453				
(Generated: 11/28/2012)				
NJ ASK				
				2011-2012 Grade 08
		SGP Level	SGP	PL
LAL		**Low Growth**	**1**	**Partially Profic**
Analyzing Text				
Explanatory Task				
Expository Task				
Persuasive Task				
Reading				
Speculative Task				
Working with Text				

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

1. Student Growth Percentile (SGP) Level

2. Student Growth Percentile

3. Performance Level

4. Scaled Scores

5. Cluster Scores

Back to Student List	View Enrollment Record			
STUDENT ASSESSMENT RECORD				
BENCE, RAPHAEL				
7386138453				
(Generated: 3/8/2013)				

NJ ASK

	SGP Level	SGP	PL	Score
	1	**2**	**3**	**4**
LAL	**Low Growth**	**1**	**Partially Proficient**	**185**
Analyzing Text				10
Explanatory Task				3
Expository Task				
Persuasive Task				6
Reading				20
Speculative Task				
Working with Text				10
Writing				9
Math	**Low Growth**	**1**	**Partially Proficient**	**135**

5 (bracket spanning the LAL cluster task scores)

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

There are three main sections to a Profile Report:

A. *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 Report Selection Criteria page (see page 29). The report header also dynamically refreshes to reflect additional information about the population in the report when a user filters the report by clicking 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 in "Training District 1" in "Moon Valley Elementary School."

B. *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.

C. *Row Variables*: Row variables are additional categories (or 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, LEP status, time in district, at-risk students, students retained last year, number of days not present, SAT performance, student growth percentile performance, and NJ ASK and

Modify Report Selection

GRADE LEVEL PROFILE (SU*)

State Snapshot Report: Jun 30, 2012 (Generated: 11/28/2012)

Training District 1

Moon Valley Elementary School

Student Characteristics	Total Students		Kindergarten		Grade 1	
	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total
Total Students	548	100.0%	79	14.4%	91	16.6%
School						
Moon Valley Elementary School	548	100.0%	79	100.0%	91	100.0%
Gender						
Female	248	45.3%	34	43.0%	39	42.9%
Male	300	54.7%	45	57.0%	52	57.1%
Race/Ethnicity						

HSPA 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).

C1. *Row Variable:* Student characteristics by which the row variable data are disaggregated. Row variables appear in the green bands

C2. *Row Category:* 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.

Notice, also, that profiles have a total students row (D1) and a total students column (D2), so that you can see the total number of students for any row variable or column variable group.

Modify Report Selection					
GRADE LEVEL PROFILE (SU*)					
State Snapshot Report: Jun 30, 2012 (Generated: 11/28/2012)					
Training District 1					
Moon Valley Elementary School					
		Total Students		**Kindergarten**		G.
Student Characteristics		# of Students	% of Total	# of Students	% of Total	# of Stude:
Total Students		548	100.0%	79	14.4%	
School						
Moon Valley Elementary School		548	100.0%	79	100.0%	
Gender						
Female		248	45.3%	34	43.0%	
Male		300	54.7%	45	57.0%	
Race/Ethnicity						
American Indian or Alaskan Native		2	0.4%			
Asian		96	17.5%	11	13.9%	
Black		22	4.0%	2	2.5%	
Hispanic		142	25.9%	28	35.4%	
Native Hawaiian or Pacific Islander		2	0.4%			
White		283	51.6%	38	48.1%	
Multi		1	0.2%			

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 profile, the percentages within each column variable (in the white space) always sum up to 100%. The image at right 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.

Modify Report Selection

GRADE LEVEL PROFILE (SU*)

State Snapshot Report: Jun 30, 2012 (Generated: 11/28/2012)

Training District 1

Moon Valley Elementary School

| Student Characteristics | Total Students | | Kindergarten | | G. |
	# of Students	% of Total	# of Students	% of Total	# of Stude:
Total Students	548	100.0%	79	14.4%	
School					
Moon Valley Elementary School	548	100.0%	79	100.0%	
Gender					
Female	248	45.3%	34	43.0%	
Male			5	57.0%	5
Race/Ethnicity					
American Indian or Alaskan Native	2	0.4%			
Asian	96	17.5%	11	13.9%	
Black	22	4.0%	2	2.5%	
Hispanic	142	25.9%	28	35.4%	
Native Hawaiian or Pacific Islander	2	0.4%			
White	283	51.6%	38	48.1%	
Multi	1	0.2%			

11/79= 13.9%   **=100%**   **=100%**

In addition to the having the percentages sum up, the percentage in an SU Profile is calculated by divided by the number of total students all the way up in the Total Students column.

So 13.9% is 11 divided by 79, or, said another way, it is the percentage of students in Kindergarten who are Asian.

Sum Across Profile

In a sum across 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).

In addition to the having the percentages sum across, the percentage in an SA Profile is calculated by divided by the number of total students all the way across in the Total Students column. So 48.6% is 35 divided by 72, or, said another way, it is the percentage of students in Moon Valley Elementary School who have "Stayed AP or P."

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 sun 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.

This *Grade Level Profile* shows that there are 548 students in Moon Valley Elementary 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., Kindergarten students (79) divided by the total students (548) equals 14.4%.

The percentages within each row variable (e.g. *Race/Ethnicity*) 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 (300) divided by the total students (548) equals 54.7%.

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: *What percentage of 1st 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 1st grade. The question is about the 1st grade population (column variable) because we divided by the total 1st grade population in order to get our answer of 14.3%.

GRADE LEVEL PROFILE (SU*)

State Snapshot Report: Jun 30, 2012 (Generated: 11/28/2012)

Training District 1

Moon Valley Elementary School

Student Characteristics	Total Students		Kindergarten		Grade 1		
	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	# of Students
Total Students	548	100.0%	79	14.4%	91	16.6%	
School							
Moon Valley Elementary School	548	100.0%	79	100.0%	91	100.0%	
Gender							
Female	248	45.3%	34	43.0%	39	42.9%	
Male	300	54.7%	45	57.0%	52	57.1%	
Race/Ethnicity							
American Indian or Alaskan Native	2	0.4%			1	1.1%	
Asian	96	17.5%	11	13.9%	19	20.9%	
Black	22	4.0%	2	2.5%	2	2.2%	
Hispanic	142	25.9%	28	35.4%	25	27.5%	
Native Hawaiian or Pacific Islander	2	0.4%			2	2.2%	
White	283	51.6%	38	48.1%	42	46.2%	
Multi	1	0.2%					
Lunch Status							
Free Lunch	72	13.1%		**14.3% = 13 / 91**	13	14.3%	
Reduced Rate Lunch	41	7.5%	7	8.9%	12	13.2%	

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: *What percentage of students at Moon Valley Elementary 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 Moon Valley Elementary School (row variable). Here, we divided by the total number of students in Moon Valley Elementary to determine that 48.6% of students stayed Advanced Proficient or Proficient.

Modify Report Selection

NJ ASK COHORT PERFORMANCE PROFILE (SA*)

State Snapshot Report: Jun 30, 2012 (Generated: 11/28/2012)

Training District 1   Test Year: 2011-2012, Grade Level: 04
Moon Valley Elementary School   Comparison Year: 2010-2011, Grade Level: 03
LAL

Student Characteristics	Total Students		Stayed AP or Stayed P		Increased 1 or More Levels		Decreased 1 or More Levels		Stayed PP	
	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total
Total Students	72	100%	35	48.6%	7	9.7%	16	22.2%	14	19.4%
School										
Moon Valley Elementary School	72	100.0%	35	48.6%	7	9.7%	16	22.2%	14	19.4%
Gender										
Female	28	38.9%	10	35.7%	4	14.3%	8	28.6%	6	21.4%
Male	44	61.1%	25	56.8%			8	18.2%	8	18.2%
Race/Ethnicity										
Asian	11	15.3%	9	81.8%					2	18.2%
Black	5	6.9%					1	20.0%		

48.6% = 35 / 72

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 AP or Stayed P* in the sum across *Cohort Performance Profile* on the previous page. Notice that 10 and 35.7% 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 35.7% of all female students stayed AP or P, or is it that 35.7% of all students who stayed AP or P were female?

To better understand this concept, look at the number of female students who Stayed AP or Stayed P (10) as well as the total number of Female students from the Total Students column (28) and the total number of students who Stayed AP or Stayed P in the Total Students row (35). If you wanted to know what percent of Female students who Stayed AP or Stayed P, you would divide 10 by 28 to get 35.7%. But if you wanted to know what percent of students who Stayed AP or Stayed P were female, then you would divide 10 by 35 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: 35.7% of female students stayed AP or P.

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 back to the Grade Level Profile (sum up) on page 47. The correct wording to explain the percentages would be: Of the students in 1st grade, 14.3% are in the Free Lunch program. Notice that the question is asking about the population of the column variable, or the 1st 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 1st 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.

The bottom of each profile includes a footer note which indicates whether it is a sum up or a sum across profile, a reminder of how the percentage of students is calculated, and an interpretation example:

> Sum Up: The percentages in the "Total Students" row sum across to 100%. All percentages 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 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 given cell by the number of total students up in the top row of the profile: (11 divided by 79 = 13.9%)

GRADE LEVEL PROFILE (SU*)

State Snapshot Report: Jun 30, 2012 (Generated: 11/28/2012)

Training District 1

Moon Valley Elementary School

Student Characteristics	Total Students		Kindergarten		Grade 1		# of Stud
	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	
Total Students	548	100.0%	79	14.4%	91	16.6%	
School							
Moon Valley Elementary School	548	100.0%	79	100.0%	91	100.0%	
Gender							
Female	248	45.3%	34	43.0%	39	42.9%	
Male	300	54.7%	45	57.0%	52	57.1%	
Race/Ethnicity							
American Indian or Alaskan Native	2	0.4%			1	1.1%	
Asian	96	17.5%	11	13.9%	19	20.9%	
Black	22	4.0%	2	2.5%	2	2.2%	
Hispanic	142	25.9%			25	27.5%	
Native Hawaiian or Pacific Islander	2	0.4%			2	2.2%	
White	283	51.6%	38	48.1%	42	46.2%	
Multi	1	0.2%					
Lunch Status							
Free Lunch	72	13.1%	11	13.9%	13	14.3%	
Reduced Rate Lunch	41	7.5%	7	8.9%	12	13.2%	

11 / 79 = 13.9%

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 given cell by the number of total students across the far left column of the profile (25 divided by 44 = 56.8%)

<u>Modify Report Selection</u>

NJ ASK COHORT PERFORMANCE PROFILE (SA*)

State Snapshot Report: Jun 30, 2012 (Generated: 11/28/2012)

Training District 1	**Test Year: 2011-2012, Grade Level: 04**
Moon Valley Elementary School	**Comparison Year: 2010-2011, Grade Level: 03**
LAL	

Student Characteristics	Total Students		Stayed AP or Stayed P		Increased 1 or More Levels		Decreased 1 or More Levels		Stayed PP	
	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total
Total Students	72	100%	35	48.6%	7	9.7%	16	22.2%	14	19.4%
School										
Moon Valley Elementary School	72	100.0%	35	48.6%	7	9.7%	16	22.2%	14	19.4%
Gender										
Female	28	38.9%	10	35.7%	4	14.3%	8	28.6%	6	21.4%
Male	44	61.1%	25	56.8%	3	6.8%	8	18.2%	8	18.2%
Race/Ethnicity										
Asian	11	15.3%	9	81.8%					2	18.2%
Black	5	6.9%					1	20.0%		

25 / 44 = 56.8%

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 548 students in the profile at right, but only 264 students took the NJ ASK assessment in 2011-2012 and received a performance level for LAL. This new "subpopulation" appears in the green band of the row variable (LAL: NJ ASK 2011-2012). 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., "Proficient") by the subpopulation (264), not the number of students in the entire population (548).

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 some sort of 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.

Identify an Issue
And formulate questions
to help define it

1

Evaluate
And reassess
the situation

6

2 **Understand the Issue**
By analyzing data and
refining questions

**The Cycle of Inquiry
and Action**

Take Action
While monitoring
data to make
adjustments

5

3 **Diagnose the Cause**
Through deeper
analysis, observation,
and best practice
research

4

Plan Action
By setting measurable goals
and articulating strategies

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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 right report that contains data about students who decreased in performance.

Data Analysis Model

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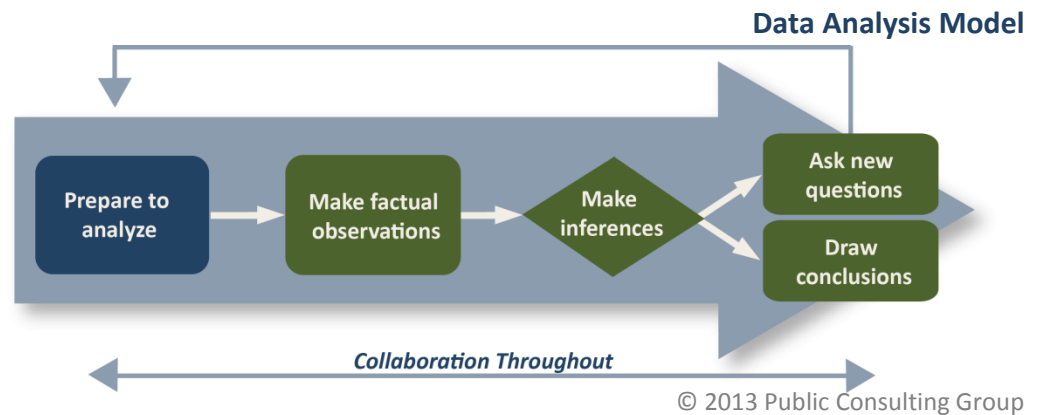
Make factual observations

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.

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).

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).
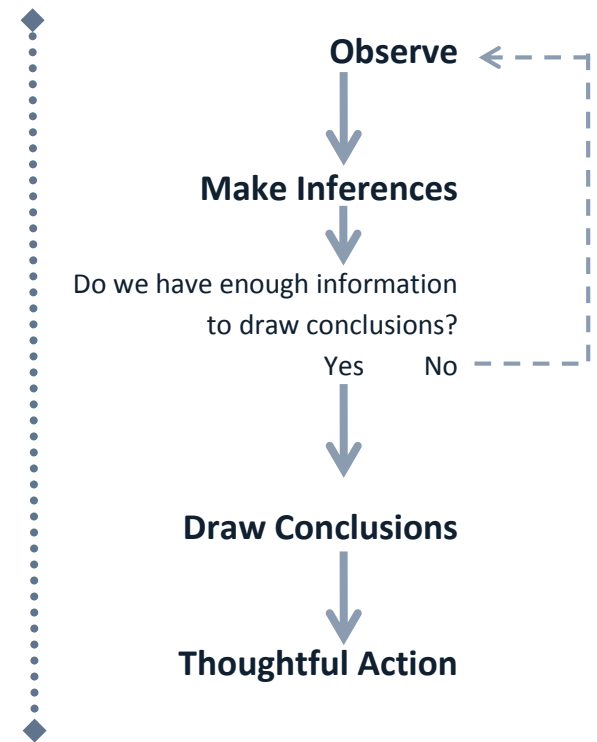
Draw Conclusions

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 action that will seldom lead to the corrective actions you are 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 do the data say? If you don't have enough information, you need to collect more data. Don't start making inferences and conclusions without facts to back you 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 LAL performance from the from the 2011 Grade 7 NJ ASK to the 2012 Grade 8 NJ ASK assessment?*

Observe

↓

Make Inferences

↓

Do we have enough information to draw conclusions?

Yes   No

↓

Draw Conclusions

↓

Thoughtful Action

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? _____

    _____

    Do the differences in percentages across this row suggest anything worth noting? _____

    _____

Modify Report Selection

NJ ASK COHORT PERFORMANCE PROFILE (SA*)

State Snapshot Report: Jun 30, 2012 (Generated: 11/28/2012)

Training District 1 — Test Year: 2011-2012, Grade Level: 08
All Schools — Comparison Year: 2010-2011, Grade Level: 07
LAL

Student Characteristics	Total Students		Stayed AP or Stayed P		Increased 1 or More Levels		Decreased 1 or More Levels		Stayed PP	
	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total
Total Students	334	100%	207	62.0%	74	22.2%	22	6.6%	31	9.3%
School										
Bristol Middle School	162	48.5%	102	63.0%	34	21.0%	9	5.6%	17	10.5%
Cypress Middle School	172	51.5%	105	61.0%	40	23.3%	13	7.6%	14	8.1%
Gender										
Female	157	47.0%	101	64.3%	35	22.3%	10	6.4%	11	7.0%
Male	177	53.0%	106	59.9%	39	22.0%	12	6.8%	20	11.3%

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? _____

_____

NJ ASK COHORT PERFORMANCE PROFILE (SA*)

State Snapshot Report: Jun 30, 2012 (Generated: 11/29/2012)

Training District 1   Test Year: 2011-2012, Gra
All Schools   Comparison Year: 2010-
LAL

Student Characteristics	Total Students # of Students	Total Students % of Total	Sta # o Stud
Total Students	334	100%	
School			
Bristol Middle School	162	48.5%	
Cypress Middle School	172	51.5%	
Gender			
Female	157	47.0%	
Male	177	53.0%	
Race/Ethnicity			
Asian	50	15.0%	
Black	28	8.4%	
Hispanic	55	16.5%	
White	200	59.9%	
Multi	1	0.3%	
Lunch Status			
Free Lunch	52	15.6%	

2. 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?

NJ ASK COHORT PERFORMANCE PROFILE (SA*)

State Snapshot Report: Jun 30, 2012 (Generated: 11/29/2012)

Training District 1   Test Year: 2011-2012, Grade Level: 08
All Schools   Comparison Year: 2010-2011, Grade Level: 07
LAL

Student Characteristics	Total Students		Stayed AP or Stayed P		Increased 1 or More Levels		Decreased 1 or More Levels		St
	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	St
Total Students	334	100%	207	62.0%	74	22.2%	22	6.6%	
School									
Bristol Middle School	162	48.5%	102	63.0%	34	21.0%	9	5.6%	
Cypress Middle School	172	51.5%	105	61.0%	40	23.3%	13	7.6%	
Gender									
Female	157	47.0%	101	64.3%	35	22.3%	10	6.4%	
Male	177	53.0%	106	59.9%	39	22.0%	12	6.8%	
Race/Ethnicity									
Asian	50	15.0%	28	56.0%	11	22.0%	8	16.0%	
Black	28	8.4%	22	78.6%	5	17.9%			
Hispanic	55	16.5%	27	49.1%	13	23.6%	1	1.8%	
White	200	59.9%	129	64.5%	45	22.5%	13	6.5%	
Multi	1	0.3%	1	100.0%					
Lunch Status									
Free Lunch	52	15.6%	28	53.8%	18	34.6%			

Reflection: Using Data in a Data Warehouse

Use your notes from the questions about the Cohort Performance Profile starting on page 58 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 educators can use to examine their NJ SMART data in a variety of ways, and it should 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 broken up 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 about what the data say—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).

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.

Phase 1: Orientation	
Questions	**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 1. What kind of District Report Profile are you examining? (check one) 2. 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!) 3. Based on your statement in #2, what division equation would you write to calculate the percentage of students you picked?	1. ☐ 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? 2. ___ % of the _____ students are _____. 3. _____ divided by _____ = _____ %
Profile Selection Will the data in the profile answer your questions from above? If not, what data would be more appropriate?	

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

Phase 2: Analysis	
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?	

Phase 2: Analysis (continued)	
Questions	**Notes**
Analyzing a Sum Up Profile: Comparing columns to other columns 1. 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? 2. 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?)	1. 2.
Analyzing a Sum Across Profile: Comparing rows to other rows: 1. 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? 2. 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?)	1. 2.

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

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

Reflection: Organize What You've Learned

- What are one or two of the most important things you learned today?
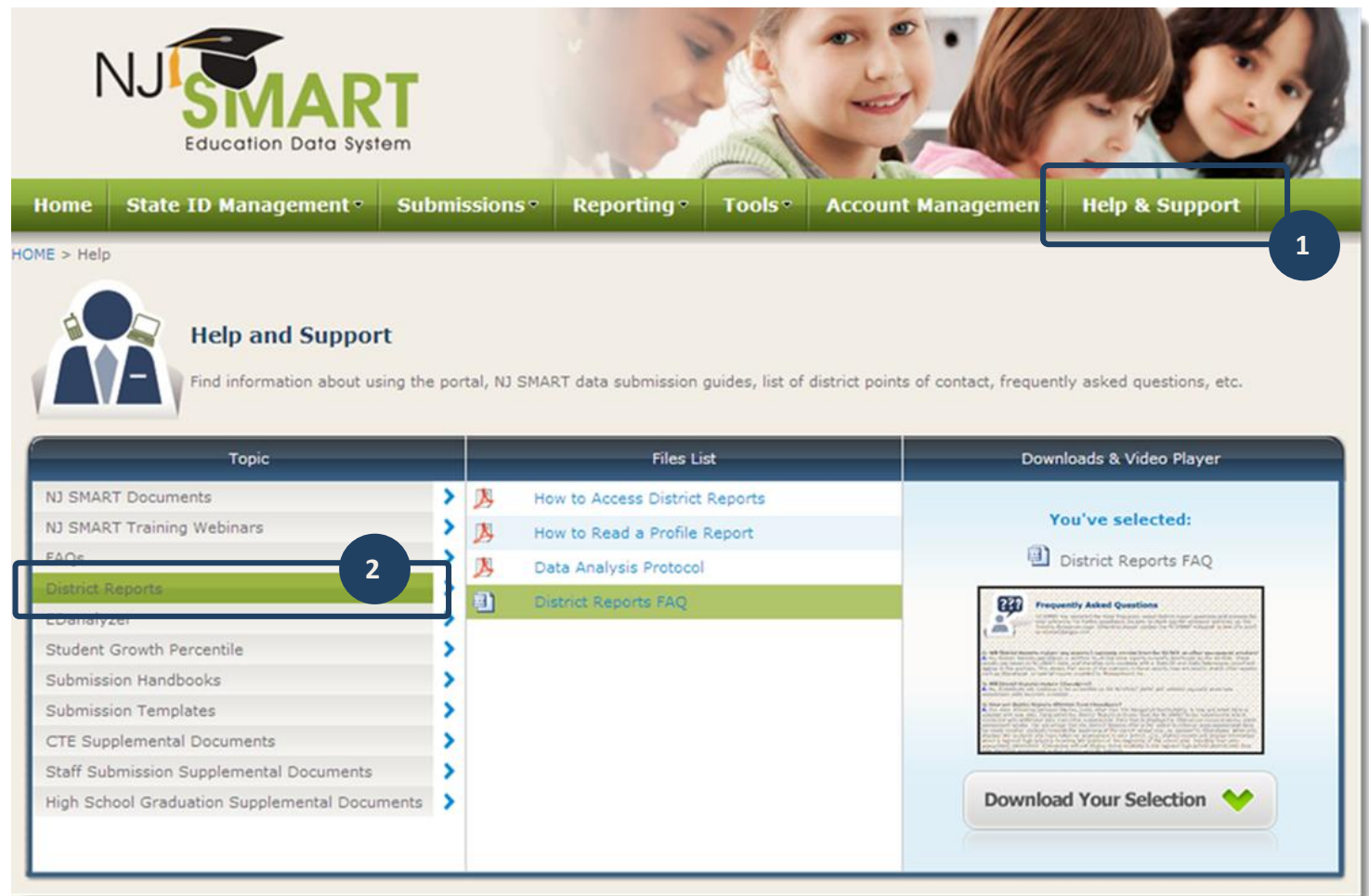
  _____

  _____

  _____

- How will you apply this learning in your work?

  _____

  _____

  _____

- Who else in your district needs to know this information?

  _____

  _____

  _____

Tools and Resources

The NJ SMART data warehouse has a number of resources to help you navigate District Reports, including this handbook and accompanying presentation, as well as a District Reports e-learning module.

For additional resources and information on using school/District Reports, visit the *Help & Support* tab (1) and select District Reports from the topic list (2).

If you have any additional questions about navigating District Reports or the NJ SMART data warehouse, you can always reach out to the NJ SMART Help Desk at (800)254-0295 or njsmart@pcgus.com.