How to Read a Profile Report

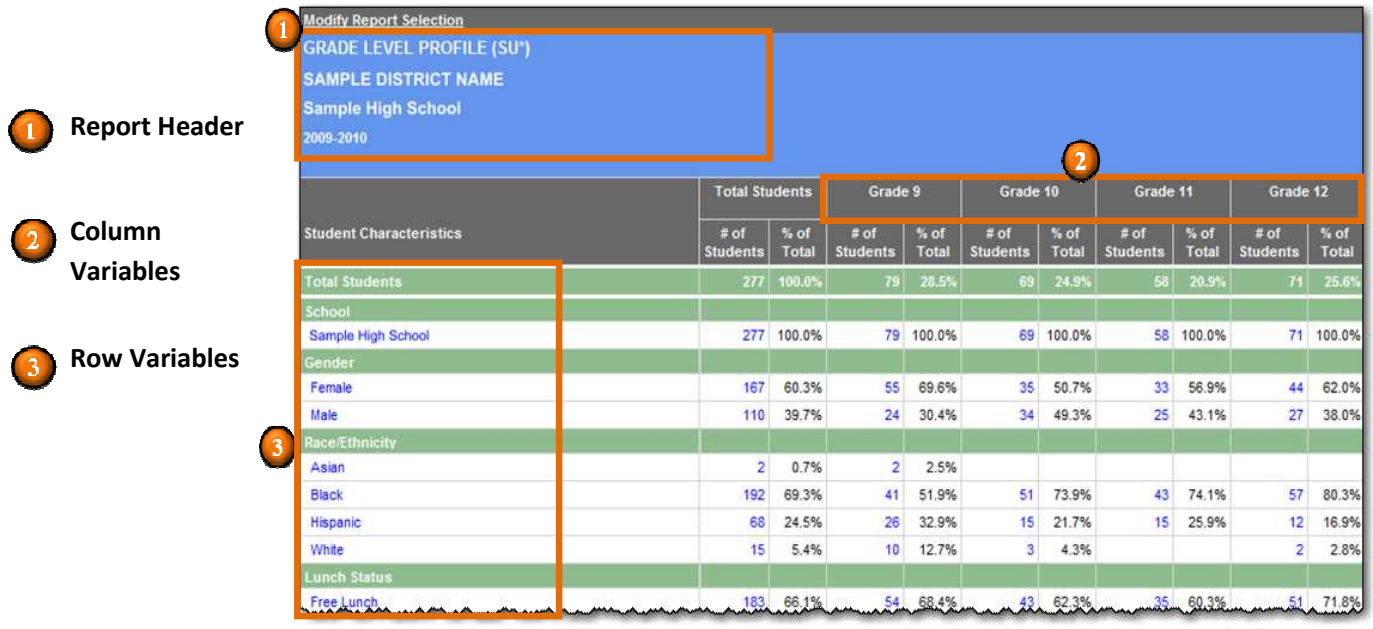
Introduction

Profile reports are designed to display a rich array of student information at a high level, making it easy to recognize patterns or anomalies 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 an individual student or a group of students. 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:

Figure 1: Sections of a Profile



Student Characteristics	Total Students		Grade 9		Grade 10		Grade 11		Grade 12	
	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total
Total Students	277	100.0%	79	28.5%	69	24.9%	58	20.9%	71	25.6%
School										
Sample High School	277	100.0%	79	100.0%	69	100.0%	58	100.0%	71	100.0%
Gender										
Female	167	60.3%	55	69.6%	35	50.7%	33	56.9%	44	62.0%
Male	110	39.7%	24	30.4%	34	49.3%	25	43.1%	27	38.0%
Race/Ethnicity										
Asian	2	0.7%	2	2.5%						
Black	192	69.3%	41	51.9%	51	73.9%	43	74.1%	57	80.3%
Hispanic	68	24.5%	26	32.9%	15	21.7%	15	25.9%	12	16.9%
White	15	5.4%	10	12.7%	3	4.3%			2	2.8%
Lunch Status										
Free Lunch	183	66.1%	54	68.4%	43	62.3%	35	60.3%	51	71.8%

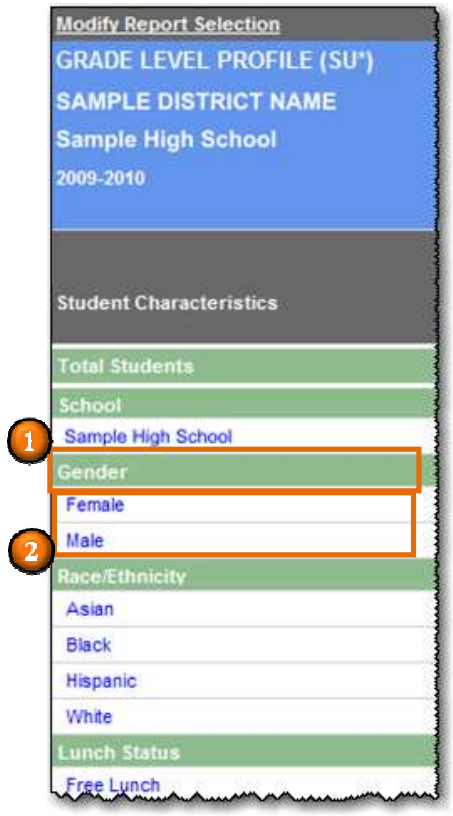
The **Report Header** displays the report name and the population (district name, school name, school year, etc) for the report, which is selected on the Report Selection Page. The Report Header also displays additional information about the population in the report when a user filters the report by clicking a row category. In the report shown in ***Figure 1*** above, the header indicates the user is looking at the *Grade Level Profile* report for students in *Sample High School* in *Sample District* in *2009-2010.*

How to Read a Profile Report

Column Variables are different in each Profile report and are the variables across which the report population is disaggregated. In the Profile shown in **Figure 1** above, the column variable is *Grade Level*, therefore the population characteristics can be compared across different grade levels.

Row Variables are additional categories (or characteristics) that allow the report population to be further disaggregated. Row variables found in the 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, and NJ ASK and HSPA performance. The row variables remain constant (with some exceptions) across each Profile, allowing you to quickly get accustomed to the types of data they 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 are displayed under each row variable.

Figure 2: Row Variables and Row Categories



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

2. **Row Category:** The data elements within a row variable. Row categories can also be clicked on 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.

How to Read a Profile Report

Structure of Profile Reports

There are two different types of Profile report types: Profiles where the percentages *sum up* **(SU)** to 100% and Profiles where the percentages *sum across* **(SA)** to 100%. The direction in which the **% of students** sum is important because it helps you figure out how the percentages are calculated (i.e. *is the # of students being divided by the # of Total Students in the top row, or by the # of Total Students in the far left column?)*

SU (Sum Up) Profile

The percentages within each Column Variable always sum up to 100%. ***Figure 3*** below is a Grade Level SU Profile, so the percentages in each variable category within the column will add to 100%: 2.5% + 51.9% + 32.9% +12.7% = 100%. Note that sometimes the categories won't add up to 100% exactly because percentages are rounded to the nearest tenth.

Figure 3: Grade Level Profile (SU)

Modify Report Selection

GRADE LEVEL PROFILE (SU*)

SAMPLE DISTRICT NAME

Sample High School

2009-2010

Student Characteristics	Total Students		Grade 9		Grade 10		Grade 11	
	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	# of Students	% of T
Total Students	277	100.0%	79	28.5%	69	24.9%	58	
School								
Sample High School	277	100.0%	79	100.0%	69	100.0%	58	10
Gender								
Female	167	60.3%	55	69.6%	35	50.7%	33	
Male	110	39.7%	24	30.4%	34	49.3%	25	
Race/Ethnicity								
Asian	2	0.7%	2	2.5%				
Black	192	69.3%	41	51.9%	51	73.9%	43	7
Hispanic	68	24.5%	26	32.9%	15	21.7%	15	2
White	15	5.4%	10	12.7%	3	4.3%		
Lunch Status								

= 100%

How to Read a Profile Report

SA (Sum Across) Profile

The percentages across the each row variable always sum across to total 100%. ***Figure 4*** below is a Cohort Performance SA Profile, so the percentages across a row will add to 100%: 20.0% + 11.4% + 8.6% +60.0% = 100%.

Figure 4: Cohort Performance Profile (SU)

Modify Report Selection

NJ ASK COHORT PERFORMANCE PROFILE (SA*)

SAMPLE DISTRICT — Test Year: 2008-2009

All Schools — Test Year Grade Level: 06

LAL — Comparison Year: 2007-2008

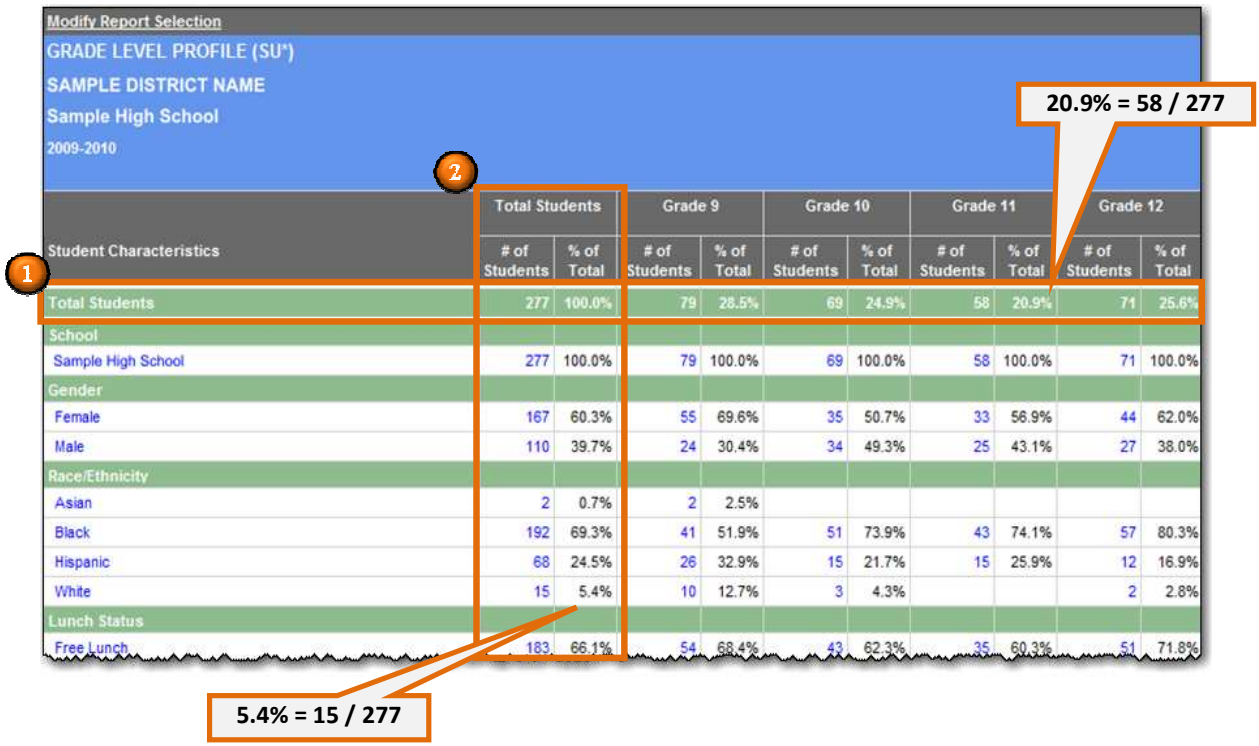
Student Characteristics	Total Students		Stayed AP or Stayed P		Increased 1 or More Levels		Decreased 1 or More Levels		Stayed PP	
	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total
Total Students	290	100%	91	31.4%	42	14.5%	11	3.8%	146	50.3%
School										
School 1	62	21.4%	29	46.8%	11	17.7%	2	3.2%	20	32.3%
School 2	35	12.1%	7	20.0%	4	11.4%	3	8.6%	21	60.0%
School 3	45	15.5%	7	15.6%	4	8.9%	1	2.2%	33	73.3%
School 4	49	16.9%	15	30.6%	7	14.3%	1	2.0%	26	53.1%
School 5	38	13.1%	10	26.3%	6	15.8%	1	2.6%	21	55.3%
School 6	61	21.0%	23	37.7%	10	16.4%	3	4.9%	25	41.0%
Gender										
Female	151	52.1%	59	39.1%	17	11.3%	7	4.6%	70	46.4%
Male	139	47.9%	32	23.0%	25	18.0%	6	4.3%	76	54.7%
Race/Ethnicity										
Asian	42	14.5%	20	47.6%	6	14.3%	1	2.4%	15	35.7%

= 100%

While the percentages in the SU and SA 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 types of Profiles*.

1. **Total Students Row:** the top row in the Profile. Percentages sum across to 100% in both SA and SU Profiles.
2. **Total Students Column:** the far left column in the Profile. Percentages sum up to 100% within each Row Variable section in both SA and SU Profiles.

Figure 5: Total Students Row and Column



Student Characteristics	Total Students		Grade 9		Grade 10		Grade 11		Grade 12	
	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total
Total Students	277	100.0%	79	28.5%	69	24.9%	58	20.9%	71	25.6%
School										
Sample High School	277	100.0%	79	100.0%	69	100.0%	58	100.0%	71	100.0%
Gender										
Female	167	60.3%	55	69.6%	35	50.7%	33	56.9%	44	62.0%
Male	110	39.7%	24	30.4%	34	49.3%	25	43.1%	27	38.0%
Race/Ethnicity										
Asian	2	0.7%	2	2.5%						
Black	192	69.3%	41	51.9%	51	73.9%	43	74.1%	57	80.3%
Hispanic	68	24.5%	26	32.9%	15	21.7%	15	25.9%	12	16.9%
White	15	5.4%	10	12.7%	3	4.3%			2	2.8%
Lunch Status										
Free Lunch	183	66.1%	54	68.4%	43	62.3%	35	60.3%	51	71.8%

The Grade Level Profile displayed in ***Figure 5*** above shows that there are **277 students** in Sample High School in 2009-2010. 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 in each grade level by the total students in the same row (e.g. Grade 11 students divided by the Total Students: 58 divided by 277= 20.9%). 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 (e.g. White Students) by the number of total students in the same column (e.g. White students divided by the Total Students: 15 divided by 277 = 5.4%).

How the SA and SU Profiles Answer Different Questions

SU and SA Profile types differ in how they are structured to answer different questions.

- **SU Profiles** are structured to answer questions about the population described in the columns**.**
- **SA Profiles** are structured to answer questions about the population described in the rows.

The Grade Level Profile displayed in **Figure 6** below is an example of an 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 9th grade students are in the Free Lunch program in my district or school?*

Figure 6: Example of an SU Profile

Modify Report Selection

GRADE LEVEL PROFILE (SU*)

SAMPLE DISTRICT NAME

Sample High School

2009-2010

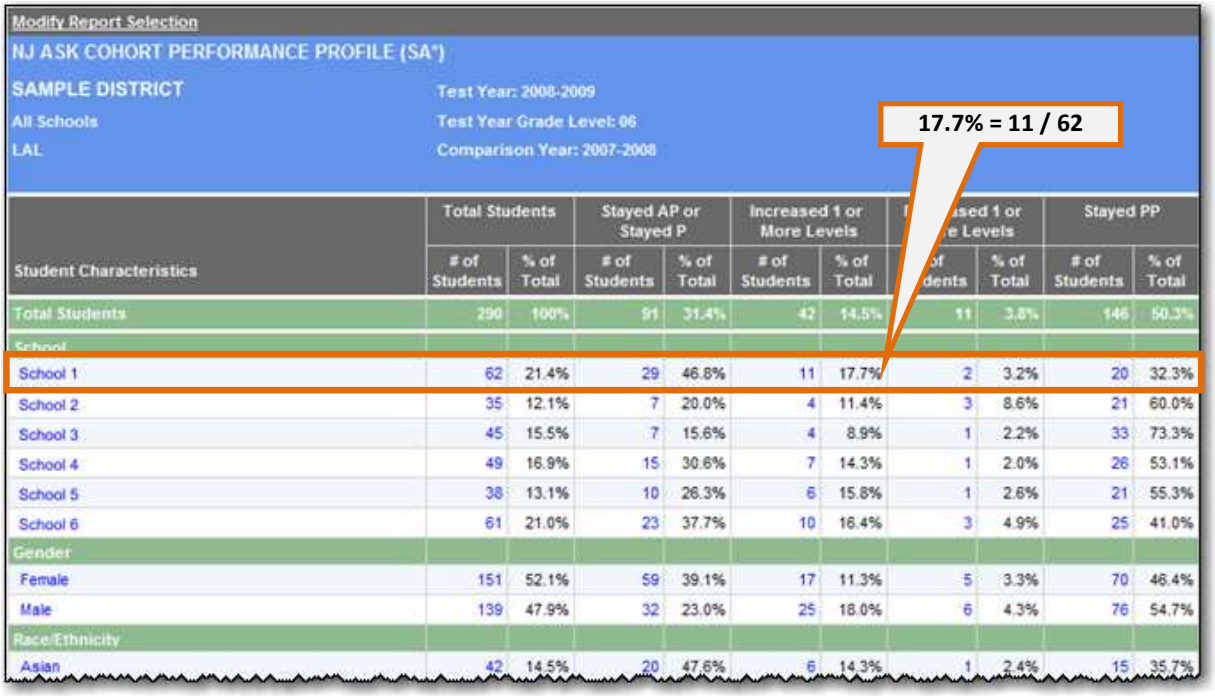
Student Characteristics	Total Students		Grade 9		Grade 10		Grade 11		Grade 12	
	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total
Total Students	277	100.0%	79	28.5%	69	24.9%	58	20.9%	71	25.6%
School										
Sample High School	277	100.0%	79	100.0%	69	100.0%	58	100.0%	71	100.0%
Gender										
Female	167	60.3%	55	69.6%	35	50.7%	33	56.9%	44	62.0%
Male	110	39.7%	24	30.4%	34	49.3%	25	43.1%	27	38.0%
Race/Ethnicity										
Asian	2	0.7%	2	2.5%						
Black	192	69.3%	41	51.9%	51	73.9%	43	74.1%	57	80.3%
Hispanic	68	24.5%	26	32.9%	15	21.7%	15	25.9%	12	16.9%
White	15	5.4%	10	12.7%	3	4.3%			2	2.8%
Lunch Status										
Free Lunch	183	66.1%	54	68.4%	43	62.3%	35	60.3%	51	71.8%

68.4% = 54 / 79

The Cohort Performance Profile in **Figure 7** below is an example of an 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 Sample High School stayed **Advanced Proficient or Proficient** compared to the percentage that **Increased 1 or More Levels, Decreased 1 or More Levels**, or **Stayed Partially Proficient**?*

How to Read a Profile Report

Figure 7: Example of an SA Profile



Modify Report Selection

NJ ASK COHORT PERFORMANCE PROFILE (SA*)

SAMPLE DISTRICT
All Schools
LAL

Test Year: 2008-2009
Test Year Grade Level: 06
Comparison Year: 2007-2008

17.7% = 11 / 62

Student Characteristics	Total Students		Stayed AP or Stayed P		Increased 1 or More Levels		ased 1 or e Levels		Stayed PP	
	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	dents	% of Total	# of Students	% of Total
Total Students	290	100%	91	31.4%	42	14.5%	11	3.8%	146	50.3%
School										
School 1	62	21.4%	29	46.8%	11	17.7%	2	3.2%	20	32.3%
School 2	35	12.1%	7	20.0%	4	11.4%	3	8.6%	21	60.0%
School 3	45	15.5%	7	15.6%	4	8.9%	1	2.2%	33	73.3%
School 4	49	16.9%	15	30.6%	7	14.3%	1	2.0%	26	53.1%
School 5	38	13.1%	10	26.3%	6	15.8%	1	2.6%	21	55.3%
School 6	61	21.0%	23	37.7%	10	16.4%	3	4.9%	25	41.0%
Gender										
Female	151	52.1%	59	39.1%	17	11.3%	5	3.3%	70	46.4%
Male	139	47.9%	32	23.0%	25	18.0%	6	4.3%	76	54.7%
Race/Ethnicity										
Asian	42	14.5%	20	47.6%	6	14.3%	1	2.4%	15	35.7%

Understanding What the % Means

While you can choose to compare *numbers* of students across the rows or the columns in either an SU or an SA 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 SA Cohort Performance Profile in **Figure 7** above. Notice that 59 and 39.1% 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 39.1% of all female students stayed AP or P, or is it that 39.1% of all students who stayed AP or P were female? *There actually is a difference!*

To better understand this concept, look at the number of **Female** students who **Stayed AP or Stayed P** (59) as well as the total number of **Female** students from the **Total Students** column (151) and the total number of students who **Stayed AP or Stayed P** in the **Total Students** row (91). If you wanted to know what percent of **Female** students who **Stayed AP or Stayed P**, you would divide 59 by 151 to get 39.1% But if you wanted to know what percent of students who **Stayed AP or Stayed P** were **Female**, then you would divide 59 by 91 to get 64.8%.

These are both valid questions, but they are different and yield different answers. The Cohort Performance Profile, which is a SA Profile, answers the first question: *26.7% 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 an SU 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 (SU) Profile in **Figure 6** above. The correct wording to explain the percentages would be: *Of the students in 9th grade, 68.4% 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 an SU Profile, which describes the column population, and an SA 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, an SA Profile is designed to answer questions about the population in the rows—its row percentages *sum across*—so the # of students will always be divided by the # of students in the **Total Students Column** in its same row. An SU Profile is designed to answer questions about the population in the columns—its column percentages *sum up*—so the # of students will always be divided by the # 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 an SU or an SA Profile, a reminder of how the % of students is calculated, and an interpretation example:

> **SU (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?***

SU Profile Summary

- %s sum up to 100%
- Answers questions about the population of students in the columns
- % are calculated by dividing the # of students by the # of students in the Total Students row in the top row of the Profile: (10 divided by 79 = 12.7%)

Modify Report Selection

GRADE LEVEL PROFILE (SU*)
SAMPLE DISTRICT NAME
Sample High School
2009-2010

Student Characteristics	Total Students		Grade 9	
	# of Students	% of Total	# of Students	% of Total
Total Students	277	100.0%	79	28.5%
School				
Sample High School	277	100.0%	79	100.0%
Gender				
Female	167	60.3%	55	69.6%
Male	110	39.7%	24	30.4%
Race/Ethnicity				
Asian	2	0.7%	2	2.5%
Black	192	69.3%	41	51.9%
Hispanic	68	24.5%	26	32.9%
White	15	5.4%	10	12.7%
Lunch Status				
Free Lunch	183	66.1%	54	68.4%

How to Read a Profile Report

SA Profile Summary

- %s sum across to 100%
- Answers questions about the population of students in the rows
- % are calculated by dividing the # of students by the # of students in the Total Students column on the left of the Profile (7 divided by 35 = 20.0%)

NJ ASK COHORT PERFORMANCE PROFILE (SA*)

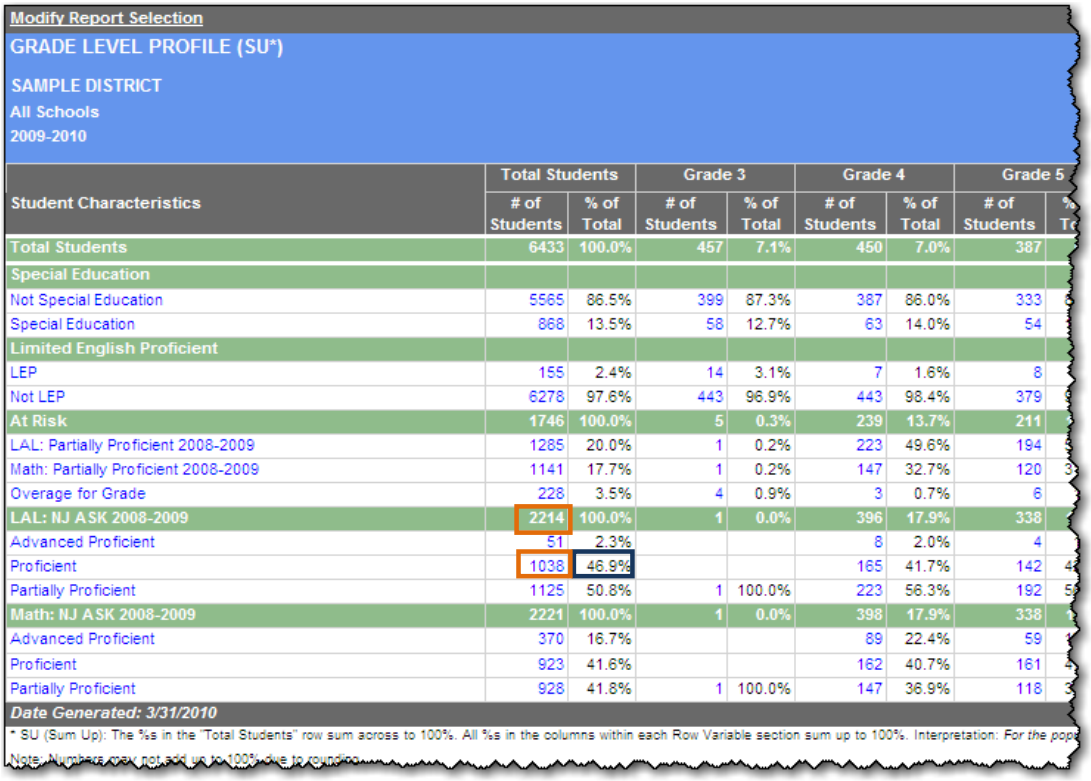
SAMPLE DISTRICT — Test Year: 2008-2009
All Schools — Test Year Grade Level: 06
LAL — Comparison Year: 2007-2008

Student Characteristics	Total Students		Stayed AP or Stayed P	
	# of Students	% of Total	# of Students	% of Total
Total Students	290	100%	91	31.4%
School				
School 1	62	21.4%	29	46.8%
School 2	35	12.1%	7	20.0%
School 3	45	15.5%	7	15.6%
School 4	49	16.9%	15	30.6%
School 5	38	13.1%	10	26.3%
School 6	61	21.0%	23	37.7%

Subpopulations in Profiles

Sometimes the number of students in a subpopulation is smaller than the number of students in the total populations. For example, in **Figure 8** below: there are 6433 students in the report, but only 2214 students took the NJ ASK assessment in 2008-2009 and received a Proficiency level for LAL. This new "subpopulation" appears in the green band of the row variable (LAL: NJ ASK 2008-09). The percentage of students who are displayed in rows with subpopulations are calculated by dividing the number of students in a row category (e.g. Partially Proficient) by the subpopulation (2214), not the number of students in the entire population.

Figure 8: Subpopulation Calculations



Modify Report Selection

GRADE LEVEL PROFILE (SU*)

SAMPLE DISTRICT
All Schools
2009-2010

Student Characteristics	Total Students		Grade 3		Grade 4		Grade 5	
	# of Students	% of Total	# of Students	% of Total	# of Students	% of Total	# of Students	% To
Total Students	6433	100.0%	457	7.1%	450	7.0%	387	
Special Education								
Not Special Education	5565	86.5%	399	87.3%	387	86.0%	333	
Special Education	868	13.5%	58	12.7%	63	14.0%	54	
Limited English Proficient								
LEP	155	2.4%	14	3.1%	7	1.6%	8	
Not LEP	6278	97.6%	443	96.9%	443	98.4%	379	
At Risk	1746	100.0%	5	0.3%	239	13.7%	211	
LAL: Partially Proficient 2008-2009	1285	20.0%	1	0.2%	223	49.6%	194	
Math: Partially Proficient 2008-2009	1141	17.7%	1	0.2%	147	32.7%	120	
Overage for Grade	228	3.5%	4	0.9%	3	0.7%	6	
LAL: NJ ASK 2008-2009	2214	100.0%	1	0.0%	396	17.9%	338	
Advanced Proficient	51	2.3%			8	2.0%	4	
Proficient	1038	46.9%			165	41.7%	142	
Partially Proficient	1125	50.8%	1	100.0%	223	56.3%	192	
Math: NJ ASK 2008-2009	2221	100.0%	1	0.0%	398	17.9%	338	
Advanced Proficient	370	16.7%			89	22.4%	59	
Proficient	923	41.6%			162	40.7%	161	
Partially Proficient	928	41.8%	1	100.0%	147	36.9%	118	

Date Generated: 3/31/2010

* SU (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 popu*

Note: Numbers may not add up to 100% due to rounding.