

2015 MAP-A Science Student Performance

The tables and figures in this packet provide information about student performance on the MAP-A. Four years of data are presented in Tables 1, MAP-A Student Performance 2012-2015. This tables reports achievement level distribution by grade span for science. This data is also graphically represented in Figure 1. It should be noted that the design of the MAP-A calls for teachers to select the APIs to be assessed and to create the assessment activities. Thus, there is no equating from one year to the next.

Table 2 reports overall 2015 achievement-level distribution by demographic category across all grades for science. Because the cell size for many of the disaggregated groups is small, the achievement levels have been collapsed into two categories, “Below Proficient” and “Proficient and Above.” Below Proficient includes Level Not Determined, Below Basic, and Basic. Proficient and Above includes Proficient and Advanced. Even when the achievement-level categories are collapsed, however, several cells are still too small to report. Under DESE-defined rules for cell size in reporting disaggregated MAP-A data, when the number of students in a cell is below 10, results for the subject area in that row are suppressed and an asterisk appears. Tables 3 reports the API usage for science. The comment code totals and percentages are presented in Table 8.

Table 1

MAP-A Student Performance 2012-2015 Science									
Grade Span	Achievement Level	2012		2013		2014		2015	
		#	%	#	%	#	%	#	%
Elementary School	Level Not Determined	10	1.03	14	1.51	19	2.01	14	1.56
	Below Basic	11	1.14	6	.65	33	3.49	38	4.24
	Basic	19	1.96	51	5.49	76	8.04	55	6.13
	Proficient	112	11.58	204	21.96	244	25.82	198	22.07
	Advanced	815	84.28	654	70.40	573	60.63	592	66
	Total	967	100	929	100	945	100	897	100
Middle School	Level Not Determined	20	2.25	14	1.53	19	2.07	11	1.24
	Below Basic	15	1.69	22	2.41	24	2.62	19	2.13
	Basic	49	5.52	82	8.98	90	9.81	81	9.1
	Proficient	147	16.57	199	21.80	240	26.17	241	27.08
	Advanced	656	73.96	596	65.28	544	59.32	538	60.45
	Total	887	100	913	100	917	100	890	100
High School	Level Not Determined	19	2.58	16	2.03	27	3.39	14	1.69
	Below Basic	12	1.63	13	1.65	10	1.25	14	1.69
	Basic	23	3.12	46	5.82	32	4.02	46	5.56
	Proficient	115	15.62	142	17.97	180	22.58	200	24.15
	Advanced	567	77.04	573	72.53	548	68.76	554	66.91
	Total	736	100	790	100	797	100	828	100

2012 – 2015 Science Performance

Figure 1

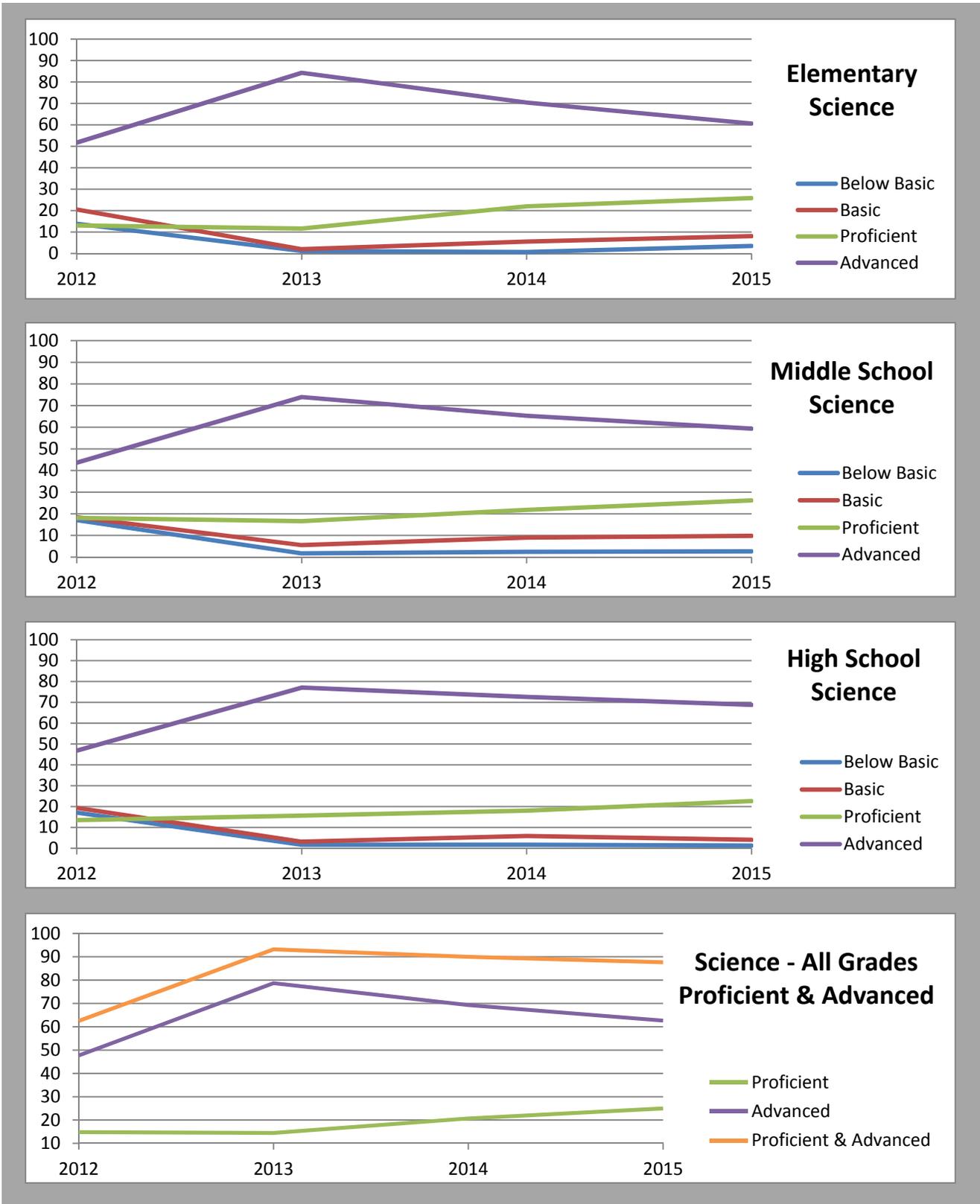


Table 2

2015 MAP-A Student Performance by Demographic Category All Grades		Science			
		Below Proficient		Proficient and Above	
Achievement Level		#	%	#	%
Gender	Male	192	11.5	1477	88.5
	Female	100	10.6	846	89.4
Ethnicity	Native American	*	*	*	*
	Asian	*	*	*	*
	Black (not Hispanic)	78	13.2	513	86.8
	Hispanic	21	19.3	88	80.7
	White (not Hispanic)	185	10.1	1652	89.9
	Pacific Islander	*	*	*	*
	Other	*	*	*	*
Primary Disability	Specific Learning Disability	15	21.4	55	78.5
	Speech Impairment	*	*	*	*
	Mental Retardation	132	10.4	1133	89.6
	Emotional Disturbance	*	*	*	*
	Other Health Impairment	26	10.3	226	89.7
	Hearing Impairment	*	*	*	*
	Language Impairment	*	*	*	*
	Visual Impairment	*	*	*	*
	Orthopedic Impairment	*	*	*	*
	Autism	67	11.5	515	88.5
	Traumatic Brain Injury	*	*	*	*
	Deaf/Blindness	*	*	*	*
	Multiple Disabilities	37	12.4	262	87.6

Table 2 (cont.)

2015 MAP-A Student Performance by Demographic Category All Grades		Science			
Achievement Level		Below Proficient		Proficient and Above	
		#	%	#	%
Student Status	Gifted	*	*	*	*
	H.S. Career Education	*	*	*	*
	IAP	*	*	*	*
	IEP	292	11.2	2316	88.8
	In building less than a year	18	15.0	102	85.0
	In district less than a year	10	14.1	61	85.9
	Migrant	*	*	*	*
	SES	35	12.0	256	88.0
	Title 1	31	18.0	141	82.0
	Voluntary Transfer Student	*	*	*	*
ELL Status	Rcvg Services	*	*	*	*
	Monitoring	*	*	*	*
	Title III	*	*	*	*
Classroom Instruction	Less than 21% of school day	18	14.2	109	85.8
	From 21% to 60% of school day	67	8.8	696	91.2
	More than 60% of school day	146	11.4	1134	88.6
	Separate school	61	13.7	384	86.3
ProFile Use	Yes	288	11.1	2305	88.9
	No	*	*	*	*

Table 7

2015 MAP-A API Usage Science								
Grade 5			Grade 8			Grade 11		
APIs Most Often Assessed	# of Times Assessed	% of Total Entries	APIs Most Often Assessed	# of Times Assessed	% of Total Entries	APIs Most Often Assessed	# of Times Assessed	% of Total Entries
ES7.1	308	8.58	ME2.2	159	4.47	EC2.3	184	5.56
UN1.2	289	8.05	FM1.2	152	4.27	EC1.5	158	4.77
IN5.1	194	5.41	ME1.3	138	3.88	EC1.4	127	3.38
UN1.1	175	4.88	ES7.1	134	3.76	ME1.3	122	3.68
LO1.3	145	4.04	ME1.7	114	3.2	LO1.3	106	3.2
UN4.2	127	3.54	ME1.1	94	2.64	ME2.2	101	3.05
EC1.5	121	3.37	FM3.14	88	2.47	LO1.4	83	2.51
ES8.3	108	3.01	FM3.1	76	2.13	LO1.5	77	2.32
ST1.3	96	2.68	IN2.4	74	2.08	ME1.7	74	2.23
EC1.4	95	2.65	ES7.2	72	2.02	IN2.4	74	2.23

Table 8 n=60,552

2014 MAP-A Comment Code Distribution							
Code	Data Irregularity	Scoring Rule	# of Appearances in Scored Entries 2015	% of Total Scored Entries 2015	% of Total Scored Entries 2014	% of Total Scored Entries 2013	% of Total Scored Entries 2012
01	No dates given on Entry/Data Summary Sheet and on Student Work Records.	Entry is assigned a "No Score" for each dimension of the rubric.	1	0.01	0.05	0.03	0.06
02	Missing Entry/Data Summary Sheet.	Entry is assigned a "No Score" for each dimension of the rubric.	7	0.07	0.06	0.08	0.05
03	A collection period does not have a minimum of three data points.	Entry is assigned a "No Score" for each dimension of the rubric.	138	1.32	1.13	0.45	0.62
04	An entry does not include at least one Student Work Record per Collection Period.	Entry is assigned a "No Score" for each dimension of the rubric.	37	0.35	0.36	0.24	0.26
05	A submitted Student Work Record for an entry does not connect to the API/s.	Entry is assigned a "No Score" for each dimension of the rubric.	920	8.8	8.64	8.06	5.29
06	One out of two collection periods is incomplete.	Entry is assigned a "No Score" for each dimension on the rubric.	0	0.00	0.01	0.00	0.13
07	No API/s identified on a Student Work Record or Entry Data/Summary Sheet.	The collection period is considered incomplete. Entry is assigned a "No Score" for each dimension on the rubric.	0	0.00	0.00	0.00	0.00
08	The API/s is/are not grade span appropriate.	The collection period is considered incomplete. Entry is assigned a "No Score" for each dimension on the rubric.	0	0.00	0.00	0.03	0.00
09	A single API is used in more than one entry.	The first instance is scored. In the second instance, the entry is assigned "0 Data Points" in both collection periods and "No Score" for each dimension of the rubric.	0	0.00	0.00	0.02	<0.01

Table 8(cont.)

2014 MAP-A Comment Code Distribution (cont.)							
Code	Data Irregularity	Scoring Rule	# of Appearances in Scored Entries 2015	% of Total Scored Entries 2015	% of Total Scored Entries 2014	% of Total Scored Entries 2013	% of Total Scored Entries 2012
11	Missing entry.	Entry is assigned "0 Data Points" in both collection periods and "No Score" for each dimension on the rubric.	153	1.46	1.73	1.34	1.69
12	API/s is/are not consistent across the 2 collection periods.	Entry is assigned a "No Score" for each dimension of the rubric.	0	0.00	0.00	0.00	0.00
13	Dates on the Entry/Data Summary Sheet and Student Work Records are not within the timeframes of the collection periods.	Any data from dates outside of the timeframes is not used for scoring.	0	0.00	0.00	0.00	0.00
14	One or more Student Work Records shows acquisition rather than application of the API/s.	The activity in these collection periods cannot be considered application.	1870	17.88	14.00	13.75	14.30
15	Student work sample or piece of tangible student work submitted without a Student Work Record attached.	The activity in this collection period cannot be considered application.	0	0.00	0.00	0.00	0.00
16	Student Work Record missing task/activity description.	The activity in this collection period cannot be considered application.	1	<0.01	<0.01	0.01	0.01
17	Submitted percentages are miscalculated.	Scorer corrects percentages.	183	1.75	1.83	2.08	2.35
18	Percentage calculations for Accuracy or Independence cannot be verified for a Student Work Record.	Percentage for Accuracy or Independence for the Student Work Record is replaced with zero and entry average is recalculated to determine rubric score.	509	4.87	4.07	3.35	3.63