

# 4.11 Assessment Data Exploration Using Excel District Math and State Assessment Relationship

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Pat Cummings  
Tacoma School District  
Director of Research & Evaluation  
pcummin@tacoma.k12.wa.us

Andrew Schwebke  
Tacoma School District  
Director of Curriculum & Instruction  
aschweb@tacoma.k12.wa.us

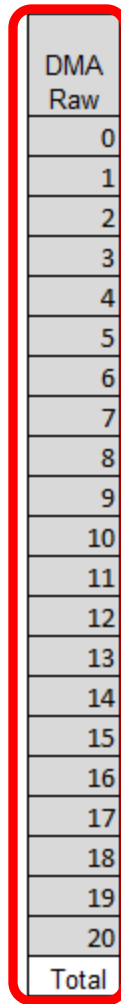
Dawn Wakeley  
Tahoma School District  
Associate Director Teaching & Learning  
dwakeley@tahomasd.us

## Purpose of this section:

- Demonstrate the relationship between district math results and state assessment results.

# A Guide to Understanding the Charts

The DMA consists of 20 questions and was administered in March 2011



DMA Raw
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
Total

# A Guide to Understanding the Charts

In TAD, student's results are reported as "percent correct". For example, a raw score of 5 out of 20 would be 25% correct

DMA Raw	DMA % Corr.
0	0%
1	5%
2	10%
3	15%
4	20%
5	25%
6	30%
7	35%
8	40%
9	45%
10	50%
11	55%
12	60%
13	65%
14	70%
15	75%
16	80%
17	85%
18	90%
19	95%
20	100%
Total	

# A Guide to Understanding the Charts

DMA Raw	DMA % Corr.	DMA Count
0	0%	5
1	5%	6
2	10%	27
3	15%	45
4	20%	106
5	25%	77
6	30%	107
7	35%	125
8	40%	106
9	45%	117
10	50%	107
11	55%	114
12	60%	126
13	65%	142
14	70%	128
15	75%	129
16	80%	116
17	85%	99
18	90%	111
19	95%	75
20	100%	50
Total		1918

DMA count is the frequency distribution of the scores

Of the total population taking the DMA, 77 received a raw score of 5 or 25% correct

A total of 1,918 students took the DMA

# A Guide to Understanding the Charts

DMA Raw	DMA % Corr.	DMA Count	Quar-tile
0	0%	5	Q1
1	5%	6	Q1
2	10%	27	Q1
3	15%	45	Q1
4	20%	106	Q1
5	25%	77	Q1
6	30%	107	Q2
7	35%	125	Q2
8	40%	106	Q2
9	45%	111	Q2
10	50%	107	Q2
11	55%	114	Q3
12	60%	126	Q3
13	65%	142	Q3
14	70%	128	Q3
15	75%	129	Q3
16	80%	116	Q4
17	85%	99	Q4
18	90%	111	Q4
19	95%	75	Q4
20	100%	50	Q4
Total		1918	

Quartile is the distribution of all scores in one of four groups (Q1, Q2, Q3 and Q4)

For example, a student with a raw score of "9" would be in Q2 (25<sup>th</sup> to 50<sup>th</sup> percentile range)

# A Guide to Understanding the Charts

DMA Raw	DMA % Corr.	DMA Count	Quar- tile	MSP Count
0	0%	5	Q1	4
1	5%	6	Q1	6
2	10%	27	Q1	23
3	15%	45	Q1	44
4	20%	106	Q1	104
5	25%	77	Q1	75
6	30%	107	Q2	104
7	35%	125	Q2	120
8	40%	106	Q2	102
9	45%	117	Q2	114
10	50%	107	Q2	104
11	55%	114	Q3	111
12	60%	126	Q3	125
13	65%	142	Q3	139
14	70%	128	Q3	124
15	75%	129	Q3	127
16	80%	116	Q4	115
17	85%	99	Q4	98
18	90%	111	Q4	110
19	95%	75	Q4	72
20	100%	50	Q4	50
Total		1918		1871

MSP count is the frequency distribution of the scores

Of the total population taking the DMA, 114 received a raw score of 11 or 55% correct and for this group, 111 also went on to take the MSP

Of the students that took the DMA, a total of 1,871 took the MSP a few months later in May 2011

# A Guide to Understanding the Charts

DMA Raw	DMA % Corr.	DMA Count	Quar-tile	MSP Count	MSP % Std
0	0%	5	Q1	4	0%
1	5%	6	Q1	6	0%
2	10%	27	Q1	23	4%
3	15%	45	Q1	44	0%
4	20%	106	Q1	104	0%
5	25%	77	Q1	75	1%
6	30%	107	Q2	104	5%
7	35%	125	Q2	120	6%
8	40%	106	Q2	102	13%
9	45%	117	Q2	114	18%
10	50%	107	Q2	104	23%
11	55%	114	Q3	111	31%
12	60%	126	Q3	125	43%
13	65%	142	Q3	139	53%
14	70%	128	Q3	124	58%
15	75%	129	Q3	127	75%
16	80%	116	Q4	115	81%
17	85%	99	Q4	98	82%
18	90%	111	Q4	110	82%
19	95%	75	Q4	72	96%
20	100%	50	Q4	50	100%
Total		1918		1871	$r = .78$

MSP Std. is the percent of students meeting standard for each DMA raw score range.

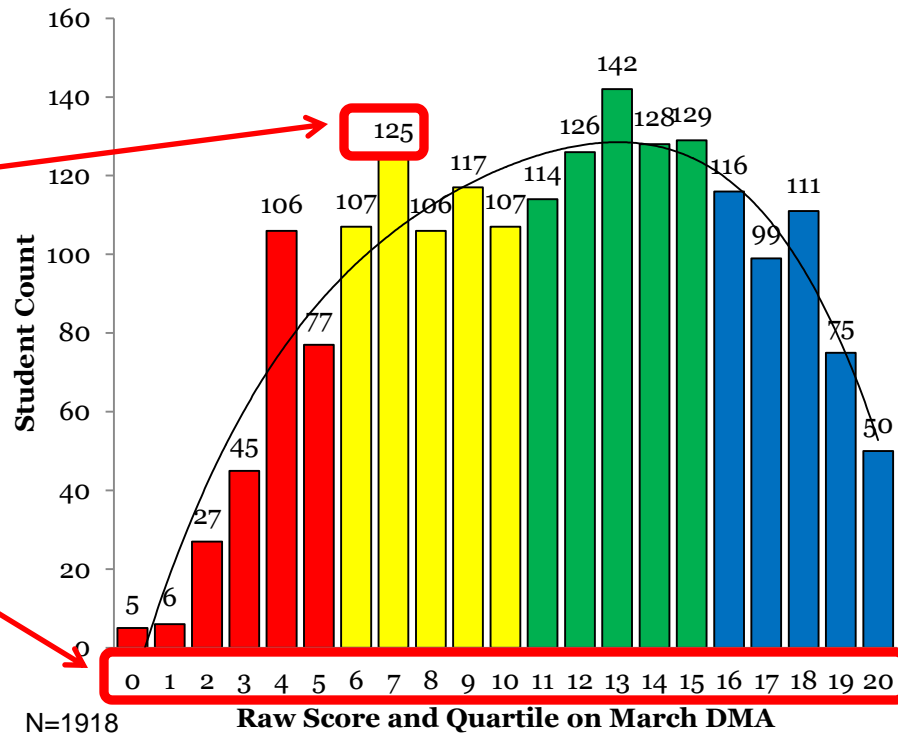
Of the students who received a raw score of 11 on the DMA, 31 percent met standard on the MSP

Correlation between the DMA and MSP Raw Scores is  $r = .78$

# A Guide to Understanding the Charts

DMA Raw	DMA % Corr.	DMA Count	Quar-tile	MSP Count	MSP % Std
0	0%	5	Q1	4	0%
1	5%	6	Q1	6	0%
2	10%	27	Q1	23	4%
3	15%	45	Q1	44	0%
4	20%	106	Q1	104	0%
5	25%	77	Q1	75	1%
6	30%	107	Q2	104	5%
7	35%	125	Q2	120	6%
8	40%	106	Q2	102	13%
9	45%	117	Q2	114	18%
10	50%	107	Q2	104	23%
11	55%	114	Q3	111	31%
12	60%	126	Q3	125	43%
13	65%	142	Q3	139	53%
14	70%	128	Q3	124	58%
15	75%	129	Q3	127	75%
16	80%	116	Q4	115	81%
17	85%	99	Q4	98	82%
18	90%	111	Q4	110	82%
19	95%	75	Q4	72	96%
20	100%	50	Q4	50	100%
Total		1918		1871	$r = .78$

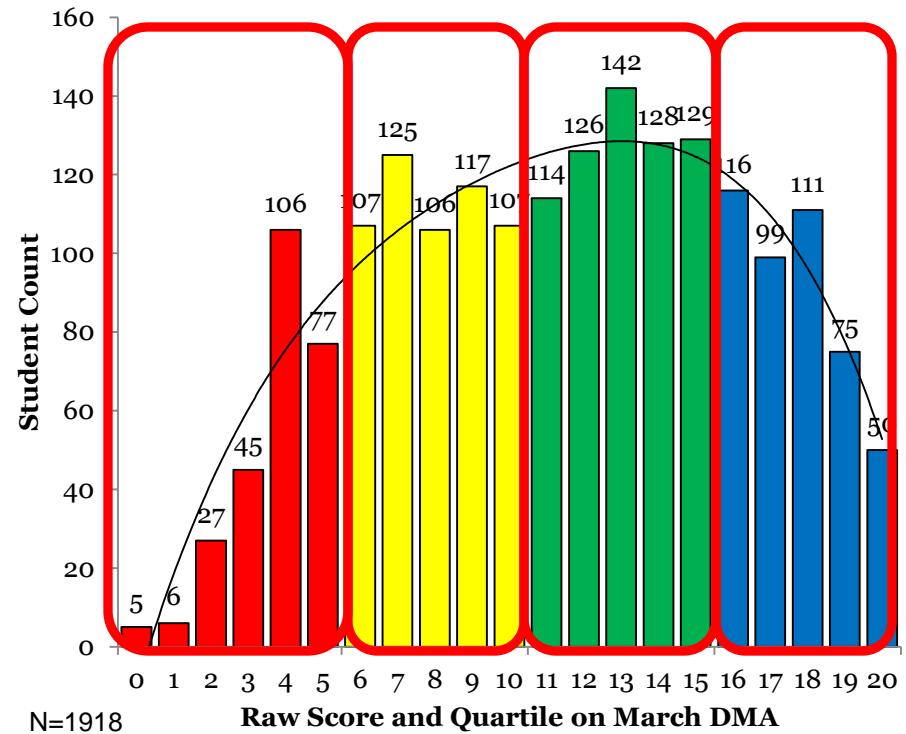
## Grade 6 DMA Raw Score and Quartile Distribution



# A Guide to Understanding the Charts

DMA Raw	DMA % Corr.	DMA Count	Quar- tile	MSP Count	MSP % Std
0	0%	5	Q1	4	0%
1	5%	6	Q1	6	0%
2	10%	27	Q1	23	4%
3	15%	45	Q1	44	0%
4	20%	106	Q1	104	0%
5	25%	77	Q1	75	1%
6	30%	107	Q2	104	5%
7	35%	125	Q2	120	6%
8	40%	106	Q2	102	13%
9	45%	117	Q2	114	18%
10	50%	107	Q2	104	23%
11	55%	114	Q3	111	31%
12	60%	126	Q3	125	43%
13	65%	142	Q3	139	53%
14	70%	128	Q3	124	58%
15	75%	129	Q3	127	75%
16	80%	116	Q4	115	81%
17	85%	99	Q4	98	82%
18	90%	111	Q4	110	82%
19	95%	75	Q4	72	96%
20	100%	50	Q4	50	100%
Total		1918		1871	r = .78

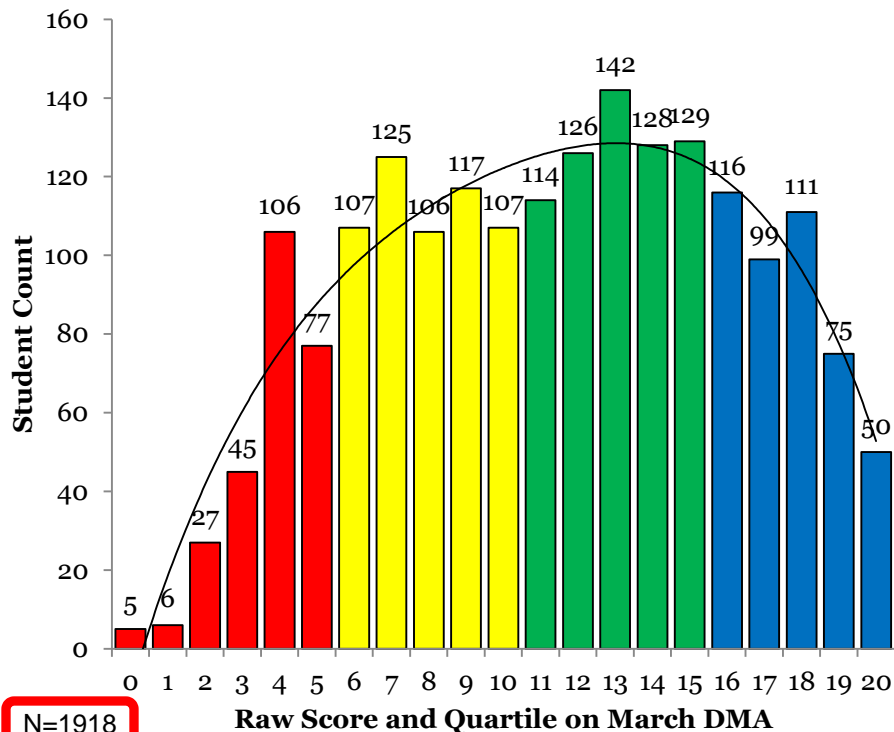
## Grade 6 DMA Raw Score and Quartile Distribution



# A Guide to Understanding the Charts

DMA Raw	DMA % Corr.	DMA Count	Quar-tile	MSP Count	MSP % Std
0	0%	5	Q1	4	0%
1	5%	6	Q1	6	0%
2	10%	27	Q1	23	4%
3	15%	45	Q1	44	0%
4	20%	106	Q1	104	0%
5	25%	77	Q1	75	1%
6	30%	107	Q2	104	5%
7	35%	125	Q2	120	6%
8	40%	106	Q2	102	13%
9	45%	117	Q2	114	18%
10	50%	107	Q2	104	23%
11	55%	114	Q3	111	31%
12	60%	126	Q3	125	43%
13	65%	142	Q3	139	53%
14	70%	128	Q3	124	58%
15	75%	129	Q3	127	75%
16	80%	116	Q4	115	81%
17	85%	99	Q4	98	82%
18	90%	111	Q4	110	82%
19	95%	75	Q4	72	96%
20	100%	50	Q4	50	100%
Total		1918		1871	r = .78

## Grade 6 DMA Raw Score and Quartile Distribution

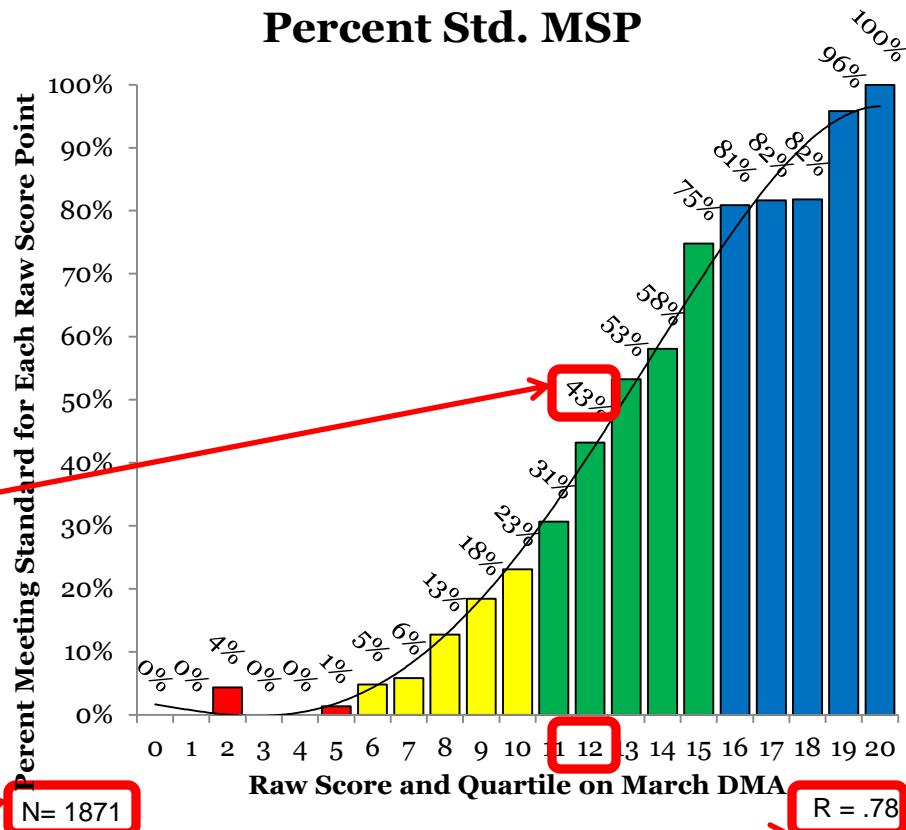


N=1918

# A Guide to Understanding the Charts

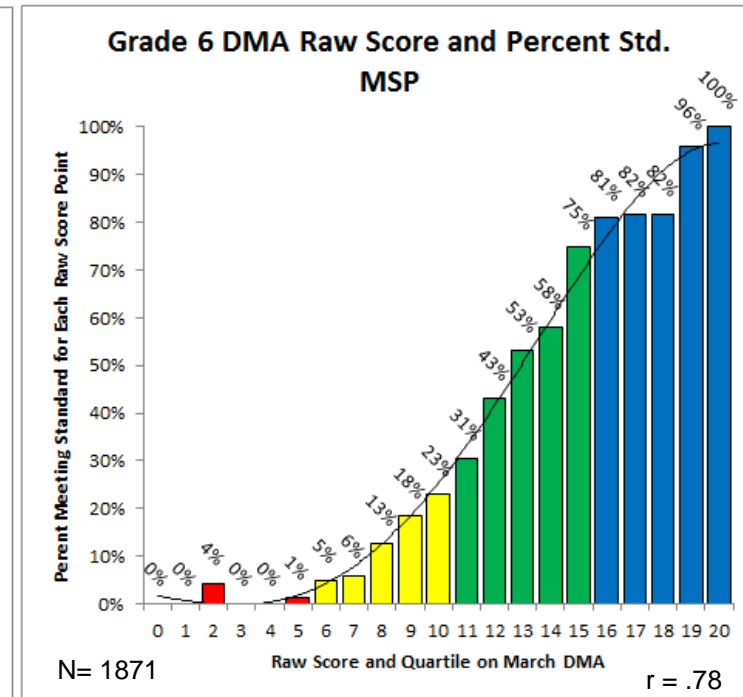
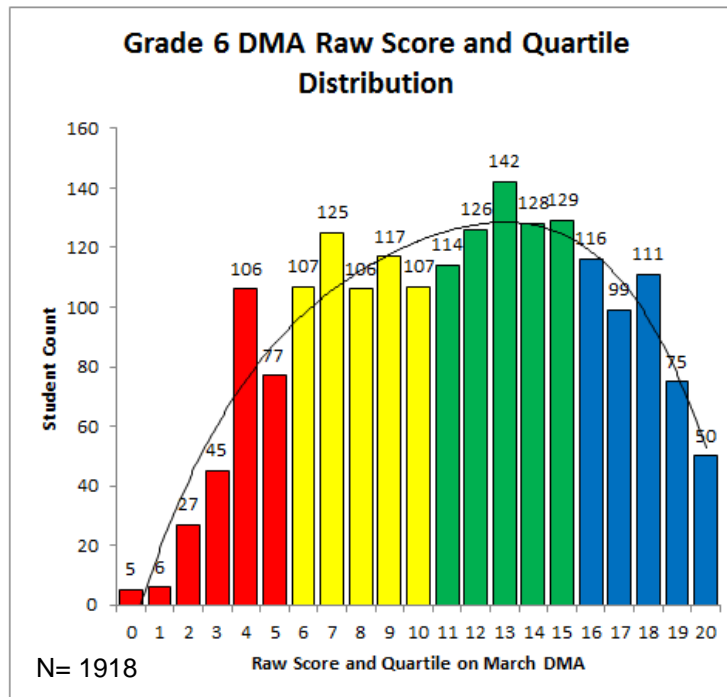
DMA Raw	DMA % Corr.	DMA Count	Quar-tile	MSP Count	MSP % Std
0	0%	5	Q1	4	0%
1	5%	6	Q1	6	0%
2	10%	27	Q1	23	4%
3	15%	45	Q1	44	0%
4	20%	106	Q1	104	0%
5	25%	77	Q1	75	1%
6	30%	107	Q2	104	5%
7	35%	125	Q2	120	6%
8	40%	106	Q2	102	13%
9	45%	117	Q2	114	18%
10	50%	107	Q2	104	23%
11	55%	114	Q3	111	31%
12	60%	126	Q3	125	43%
13	65%	142	Q3	139	53%
14	70%	128	Q3	124	58%
15	75%	129	Q3	127	75%
16	80%	116	Q4	115	81%
17	85%	99	Q4	98	82%
18	90%	111	Q4	110	82%
19	95%	75	Q4	72	96%
20	100%	50	Q4	50	100%
Total		1918		1871	= .78

## Grade 6 DMA Raw Score and Percent Std. MSP



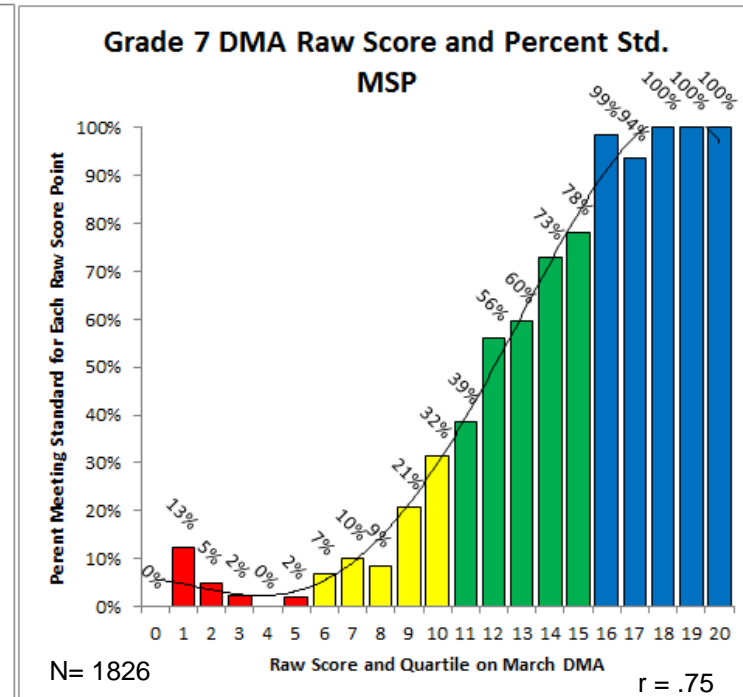
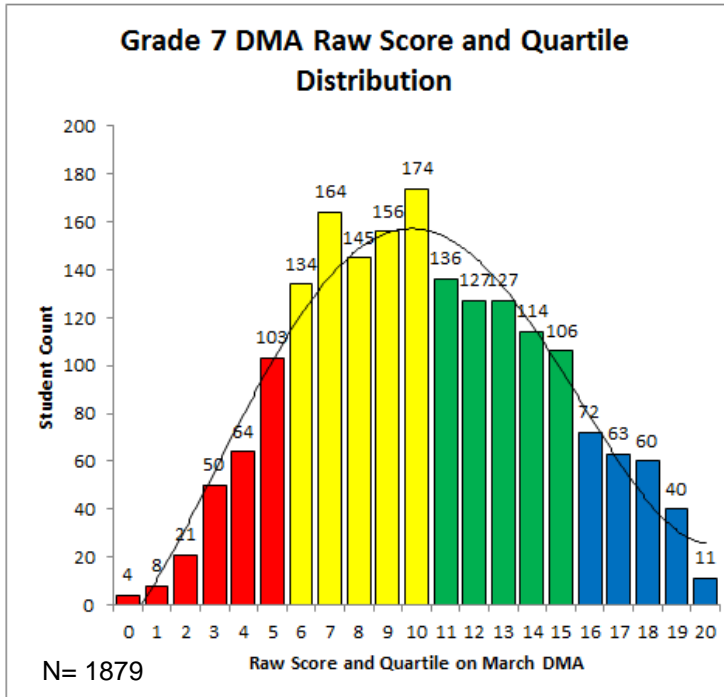
# Grade 6 DMA and the Grade 6 MSP

DMA Raw	DMA % Corr.	DMA Count	Quar-tile	MSP Count	MSP % Std
0	0%	5	Q1	4	0%
1	5%	6	Q1	6	0%
2	10%	27	Q1	23	4%
3	15%	45	Q1	44	0%
4	20%	106	Q1	104	0%
5	25%	77	Q1	75	1%
6	30%	107	Q2	104	5%
7	35%	125	Q2	120	6%
8	40%	106	Q2	102	13%
9	45%	117	Q2	114	18%
10	50%	107	Q2	104	23%
11	55%	114	Q3	111	31%
12	60%	126	Q3	125	43%
13	65%	142	Q3	139	53%
14	70%	128	Q3	124	58%
15	75%	129	Q3	127	75%
16	80%	116	Q4	115	81%
17	85%	99	Q4	98	82%
18	90%	111	Q4	110	82%
19	95%	75	Q4	72	96%
20	100%	50	Q4	50	100%
Total		1918		1871	$r = .78$



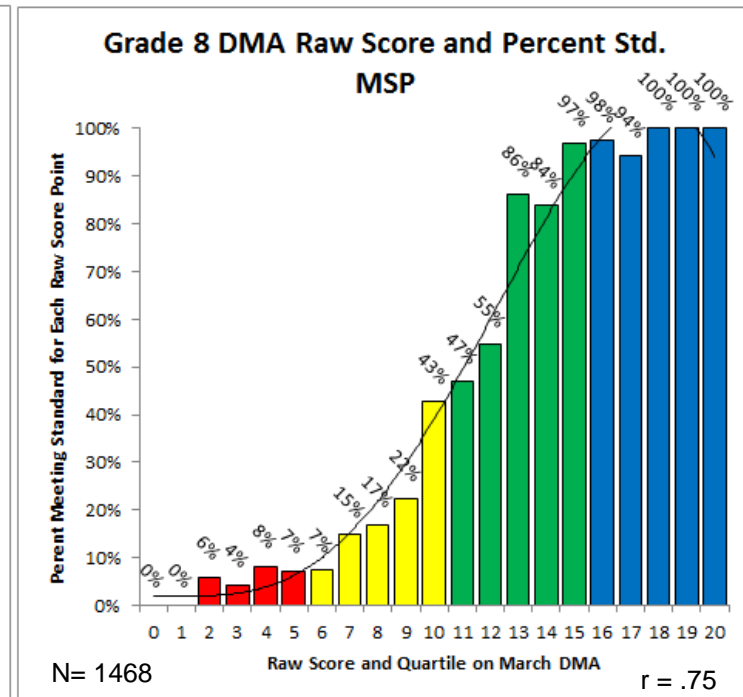
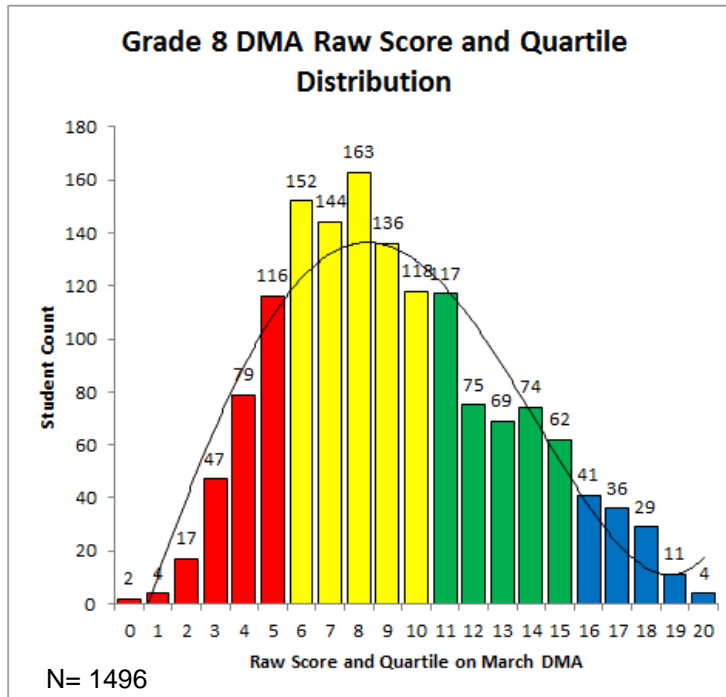
# Grade 7 DMA and the Grade 7 MSP

DMA Raw	DMA % Corr.	DMA Count	Quartile	MSP Count	MSP % Std
0	0%	4	Q1	3	0%
1	5%	8	Q1	8	13%
2	10%	21	Q1	20	5%
3	15%	50	Q1	45	2%
4	20%	64	Q1	61	0%
5	25%	103	Q1	101	2%
6	30%	134	Q2	129	7%
7	35%	164	Q2	157	10%
8	40%	145	Q2	140	9%
9	45%	156	Q2	154	21%
10	50%	174	Q2	168	32%
11	55%	136	Q3	132	39%
12	60%	127	Q3	125	56%
13	65%	127	Q3	124	60%
14	70%	114	Q3	111	73%
15	75%	106	Q3	105	78%
16	80%	72	Q4	70	99%
17	85%	63	Q4	62	94%
18	90%	60	Q4	60	100%
19	95%	40	Q4	40	100%
20	100%	11	Q4	11	100%
Total		1879		1826	$r = .75$



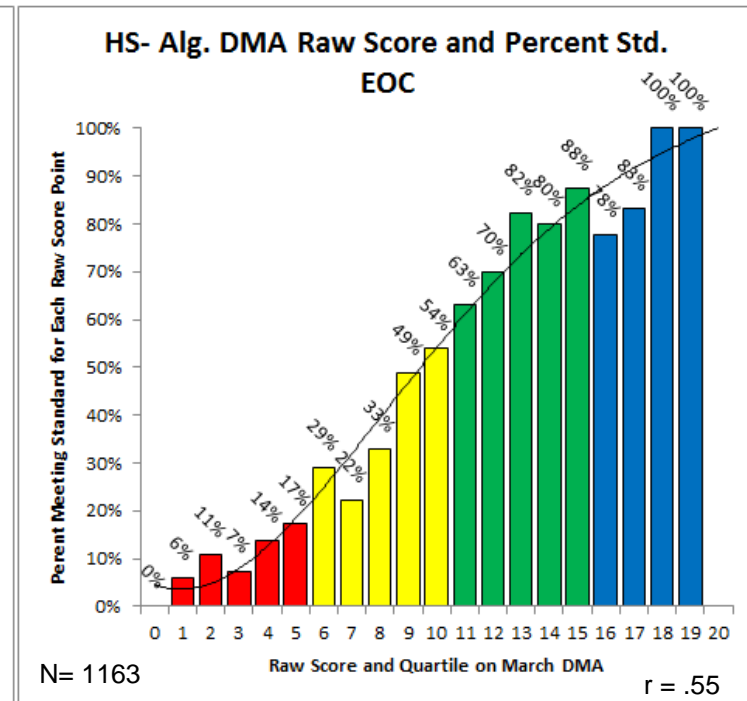
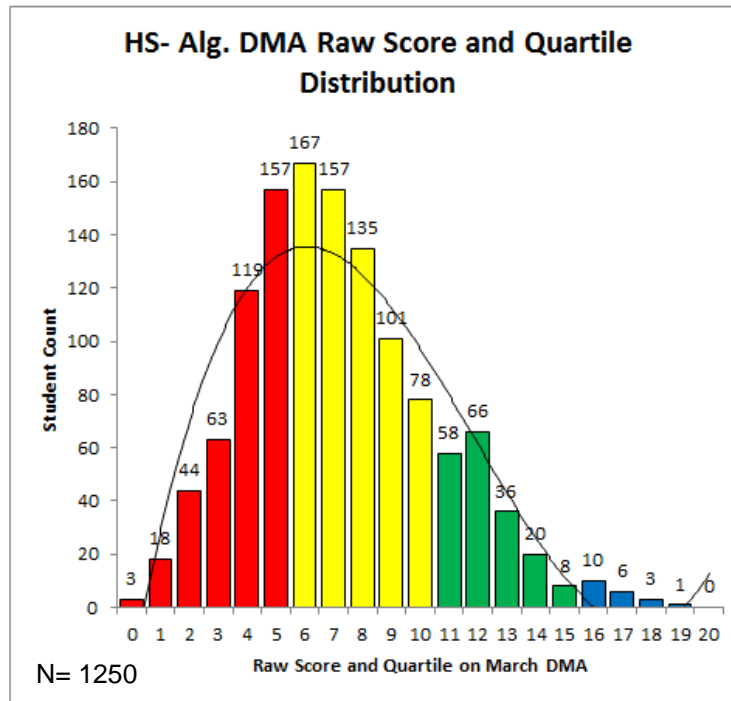
# Grade 8 DMA and the Grade 8 MSP

DMA Raw	DMA % Corr.	DMA Count		MSP Count	MSP % Std
0	0%	2	Q1	2	0%
1	5%	4	Q1	4	0%
2	10%	17	Q1	17	6%
3	15%	47	Q1	47	4%
4	20%	79	Q1	73	8%
5	25%	116	Q1	111	7%
6	30%	152	Q2	150	7%
7	35%	144	Q2	142	15%
8	40%	163	Q2	159	17%
9	45%	136	Q2	134	22%
10	50%	118	Q2	117	43%
11	55%	117	Q3	115	47%
12	60%	75	Q3	75	55%
13	65%	69	Q3	65	86%
14	70%	74	Q3	74	84%
15	75%	62	Q3	62	97%
16	80%	41	Q4	41	98%
17	85%	36	Q4	36	94%
18	90%	29	Q4	29	100%
19	95%	11	Q4	11	100%
20	100%	4	Q4	4	100%
Total		1496		1468	r = .75



# HS Algebra DMA and the EOC Algebra

DMA Raw	DMA % Corr.	DMA Count		EOC Count	EOC % Std
0	0%	3	Q1	2	0%
1	5%	18	Q1	17	6%
2	10%	44	Q1	37	11%
3	15%	63	Q1	54	7%
4	20%	119	Q1	108	14%
5	25%	157	Q1	144	17%
6	30%	167	Q2	152	29%
7	35%	157	Q2	148	22%
8	40%	135	Q2	131	33%
9	45%	101	Q2	96	49%
10	50%	78	Q2	74	54%
11	55%	58	Q3	57	63%
12	60%	66	Q3	63	70%
13	65%	36	Q3	34	82%
14	70%	20	Q3	20	80%
15	75%	8	Q3	8	88%
16	80%	10	Q4	9	78%
17	85%	6	Q4	6	83%
18	90%	3	Q4	2	100%
19	95%	1	Q4	1	100%
20	100%	0	Q4	0	
Total		1250		1163	r = .55



# HS Geometry DMA and the EOC Geometry

DMA Raw	DMA % Corr.	DMA Count	EOC Count	EOC % Std
0	0%	0	Q1	0%
1	5%	9	Q1	38%
2	10%	22	Q1	11%
3	15%	47	Q1	13%
4	20%	79	Q1	20%
5	25%	104	Q1	30%
6	30%	135	Q2	27%
7	35%	140	Q2	39%
8	40%	163	Q2	50%
9	45%	164	Q2	62%
10	50%	165	Q2	65%
11	55%	145	Q3	85%
12	60%	146	Q3	81%
13	65%	118	Q3	89%
14	70%	72	Q3	94%
15	75%	54	Q3	98%
16	80%	44	Q4	98%
17	85%	24	Q4	100%
18	90%	10	Q4	90%
19	95%	8	Q4	100%
20	100%	4	Q4	100%
Total		1653	1581	r = .68

