



Enacting the Common Core State Standards: Preparing a Next Generation of Mathematics Teacher Leaders

EVALUATION RESULTS

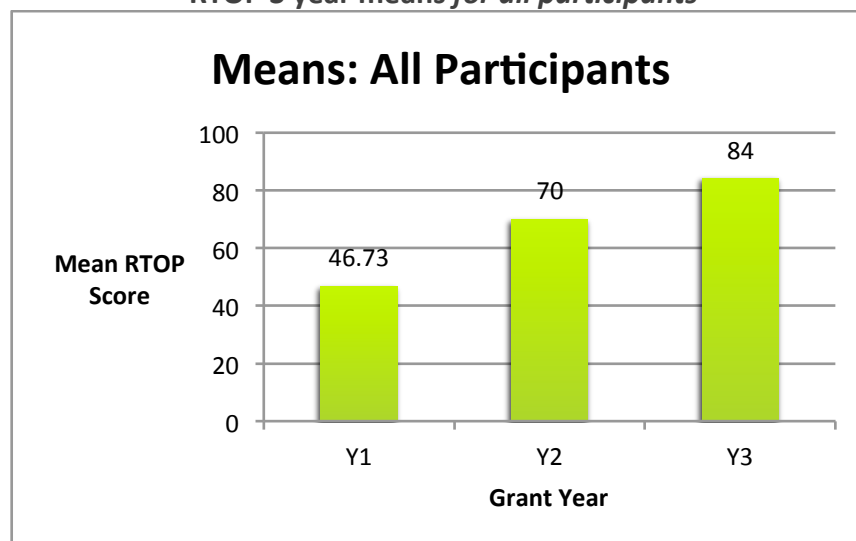
Excerpts from the MEC MSP Evaluator's Report January 2016, with notes from MEC

TEACHER DATA

Note from MEC: The Reformed Teacher Observation Protocol (RTOP), a standardized means for assessing lesson design, content and classroom culture was used to measure changes in classroom practice. The RTOP was administered in spring of Year 1 prior to the start-up of the MEC MSP work. It was administered again in spring of Year 2 and in spring of Year 3. These new teacher leaders, Regional Math Support Team teachers (RMSTs) have expressed a desire to have the RTOP administered over the next few years as they now have a clear vision of what they're working toward in their classrooms, and are convinced their practice is only going to get better. Whether or not the changes in classroom practice are lasting is an important question, and following up in this way would be an optimal next step. For information about the professional development program these teachers participated in, go to <http://www.mec-math.org/mec-msp/>.

RTOP means showed impressive annual gains over baseline each year. In fact, the mean RTOP score among 3-year RMSTs nearly doubled from Y1 to Y3 (46.18 vs. 86.82)... The Y3 mean score for RMSTs increased by nearly 41 points as compared with Y1 (86.82 vs. 46.18). One-way repeated measures of analysis of variance revealed this difference to be significant at $p < .001$

Chart 2
RTOP 3 year means for all participants



Note from MEC: The RTOP contains 25 items, each on a scale of 0 to 4.

Chart 3
RTOP item mean scores by year for all participants

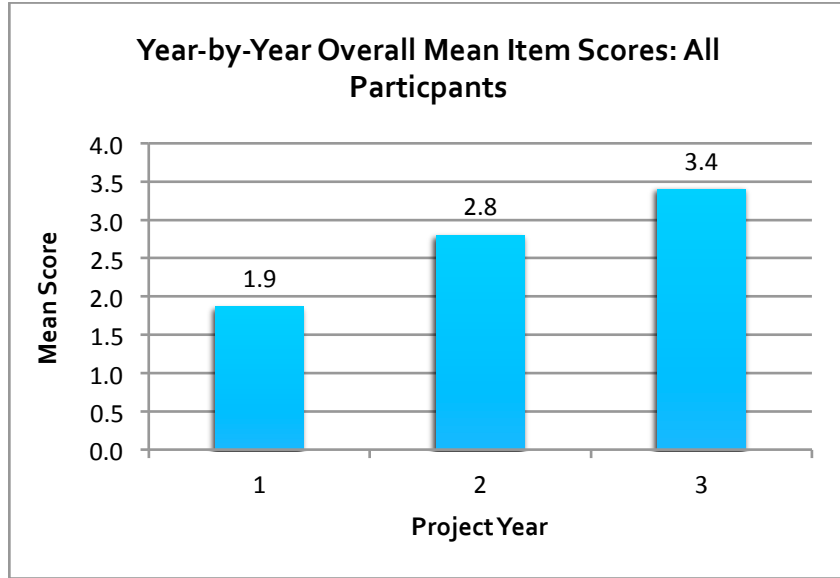
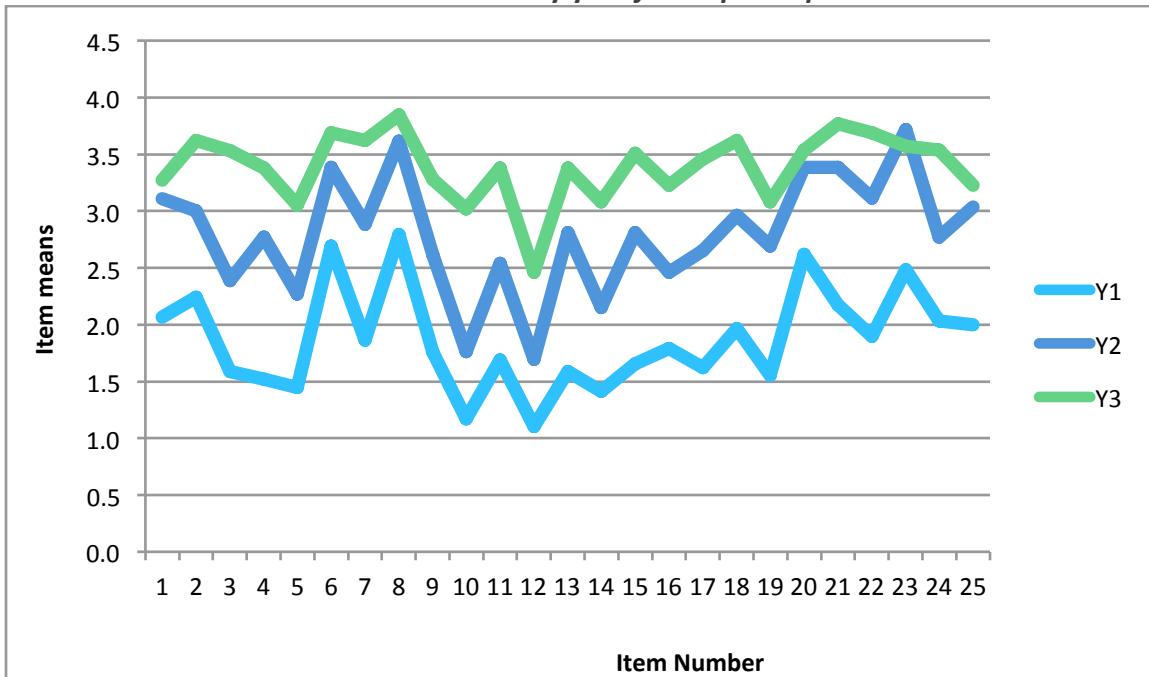


Chart 4
RTOP item means by year for all participants



STUDENT DATA

NOTE FROM MEC: This Smarter Balanced Assessment student data is from spring of 2015, just two years into the intervention. The participant group consists of students of MEC MSP teacher participants, now new teacher leaders. The data are from students of the 30 teacher participants who teach in 29 different school districts throughout the State.

The findings revealed strong SBA performance by students in participating classrooms and offered a robust conclusion to the project. Meaningful to administrators and others is the percent of students who met the standard. Differences were impressive: overall, 60% of participant students met state standards compared with 38% of their comparison counterparts.

Chart 9
SBA percent students meeting standard, all grades combined

Participant n=1,253
Comparison n=7,053

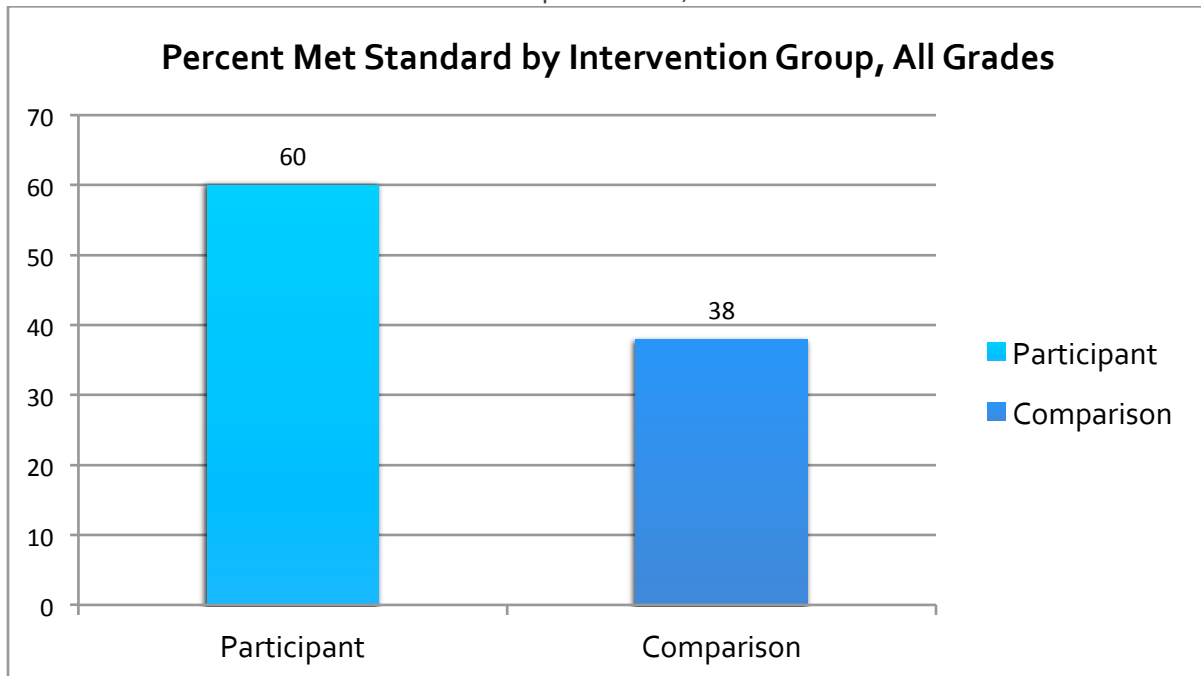


Chart 7
Mean SBA scale scores by grade/ column chart

Participant n=1,253
 Comparison n=7,053

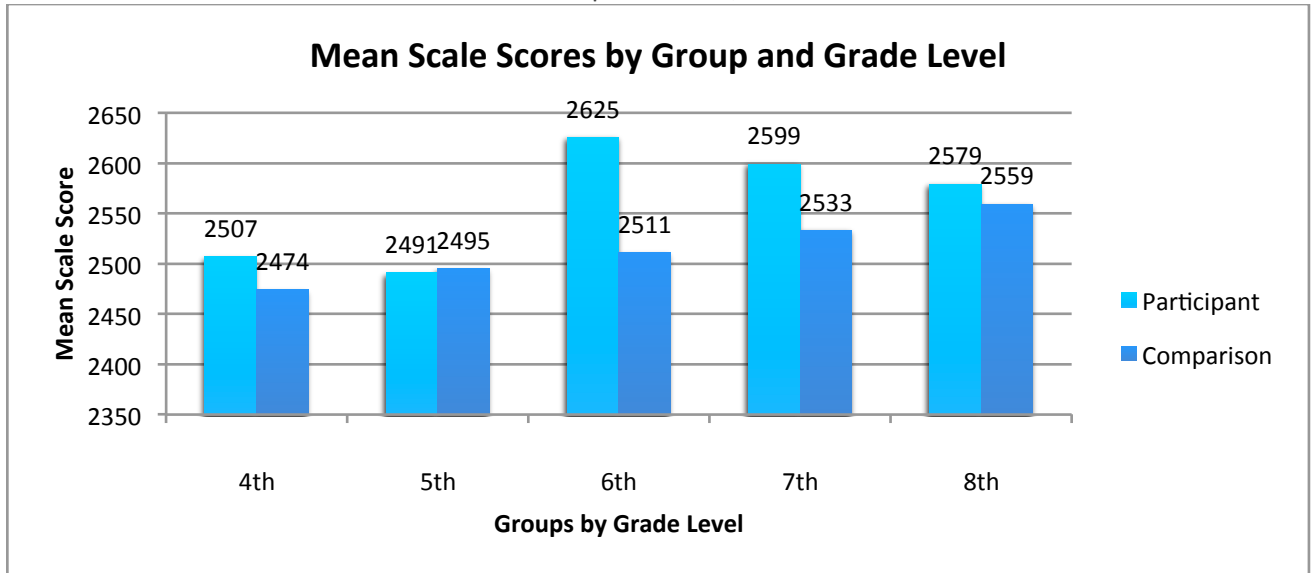


Chart 8
Mean SBA scale scores by grade/ line chart

Participant n=1,253
 Comparison n=7,053

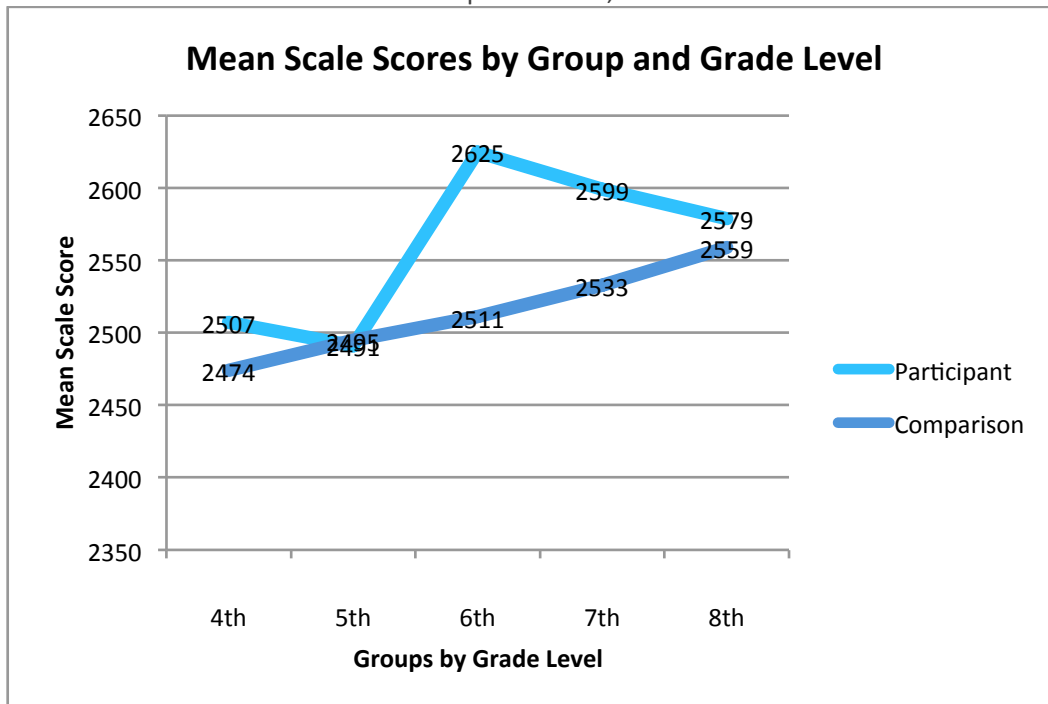


Table 11: Averages for Intervention Groups

Group	Mean*	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Comparison Group	2518.096	1.092	2515.954	2520.237
Treatment Group	2549.472	3.352	2542.902	2556.042

*Difference is significant; $p < .001$

Note from MEC: In the disaggregated data that follows, we see both success and sites for further growth and study. Remembering that this data represents students who had only one or two years at most in transformed classrooms, we are left wondering what is possible were students to have multiple years in such classrooms. Clearly an income achievement gap still exists, as well as gaps between different ethnic groups. There is much work left to be done on those fronts. Yet we are encouraged by the significant progress demonstrated across nearly all demographic groups.

Table 12: Average SBA scaled score by Income Group

Income Group	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Not Low Income	2567.710	2.282	2563.236	2572.184
Low Income	2499.858	2.687	2494.591	2505.124

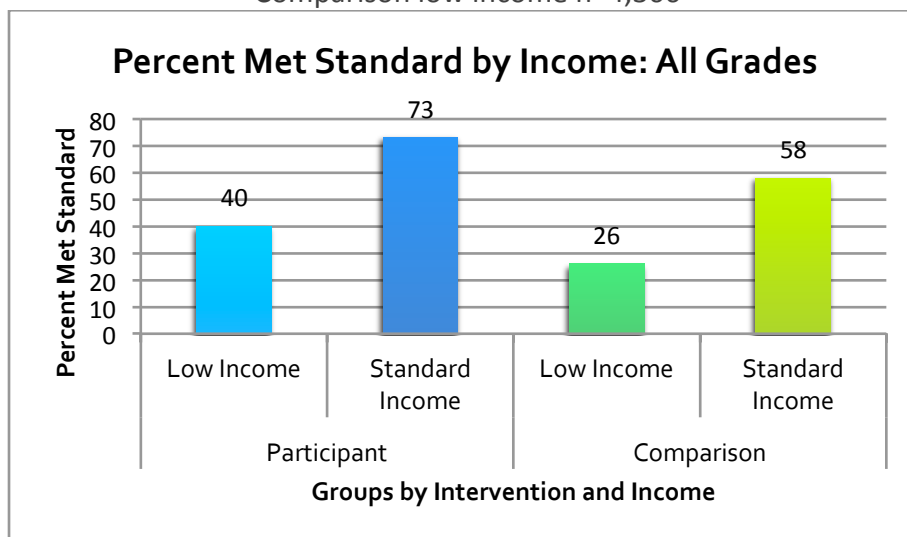
*Difference is significant; $p < .001$

Chart 10

SBA percent students met standard by income and intervention, all grades

Participant low income n=507

Comparison low income n=4,366



Mean SBA scale score by income within group

Comparison low income met n= 1156
 Comparison low income not met n=3216
 Comparison standard income met n=1545
 Comparison standard income not met n=1130
 Participant low income met n=205
 Participant low income not met n=302
 Participant standard income met n=540
 Participant standard income not met n=204

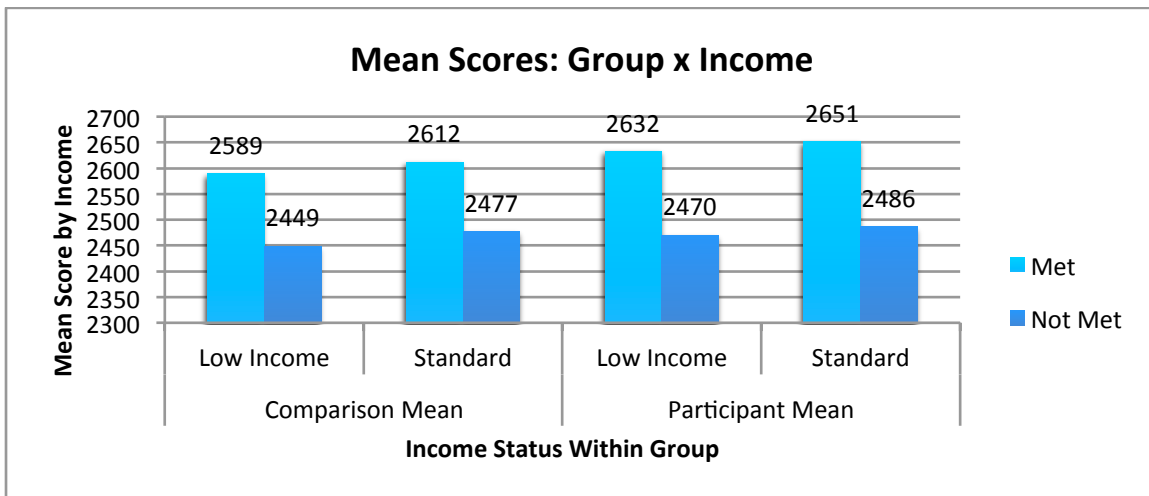


Chart 11

SBA percent students meeting standard by intervention and gender, all grades combined

Male Participant n=640 Female Participant n=613
 Male Comparison n=3,507 Female Comparison n=3,546

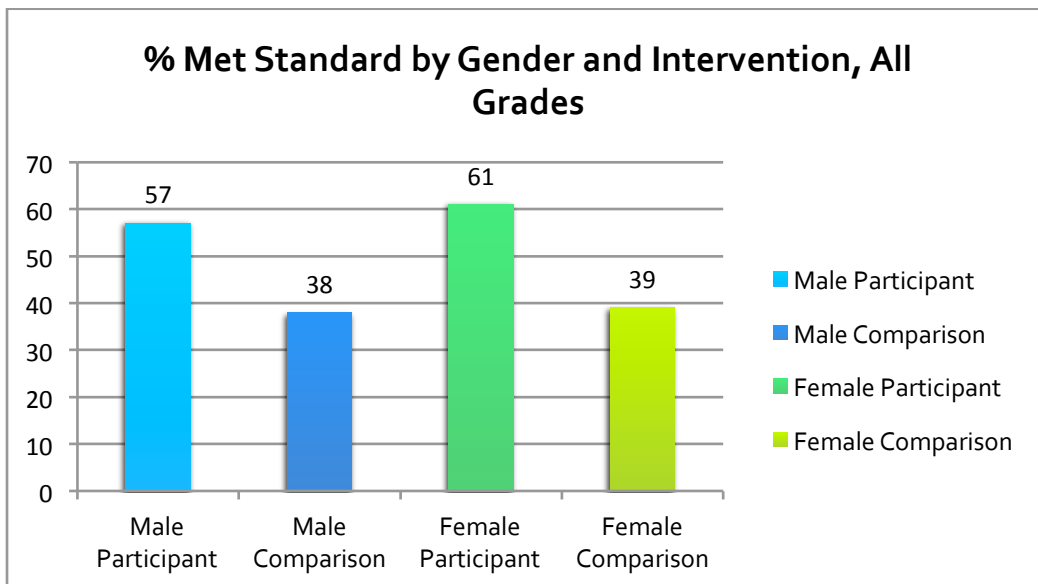


Chart 12

SBA percent students meeting standard by race and group, all grades combined

PARTICIPANT

Native American n=21

Asian n=92

Black n=21

Hispanic n=184

White n=850

Other n=86

COMPARISON

Native American n=148

Asian n= 146

Black n= 107

Hispanic n= 3247

White n=3241

Other n= 400

