



DATE: May 18, 2012

TO: Board of Education

FROM: Daniel A. Nerad, Superintendent

RE: Hanover Research Evaluation of the Mondo Reading Program

**APPENDIX NNN-11-27
May 21, 2012**

Hanover Research has completed its evaluation of the effectiveness of the Mondo reading intervention for the first two quarters of the 2011-12 school year. MMSD staff has reviewed and expanded upon Hanover's report. The first part of this memo describes Hanover's findings and observations of MMSD staff; the second expands on the Hanover evaluation to include data not available at the time of their analysis.

SUMMARY OF HANOVER'S FINDINGS – A copy of the full Hanover report is attached. Summary findings from the report are:

Question #1: Do students at schools with the Mondo intervention have higher Quarter 2 text reading levels or stronger gains in text reading levels in kindergarten and first grade than similar students at non-Mondo comparison schools?

Answer: We did not see any significant difference between the Quarter 2 levels or gains in text reading levels of students who participated in the Mondo intervention and non-participants.

Question #2: Does student participation in the Mondo intervention predict either Quarter 2 text reading levels or gains in text reading levels?

Answer: We did not find convincing evidence to suggest that participation in Mondo predicted subsequent student performance as described by either of these measures.

These results indicate that participation in the Mondo intervention does not have a statistically significant impact on subsequent student text reading levels. Nevertheless, there are a number of limiting factors which may account for this lack of impact.

Encouraging results. While the impact of Mondo on text reading level between PLAA and Quarter 2 may not be statistically significant, the results are encouraging. Kindergarten students in Mondo classrooms had an average Quarter 2 text reading level of 3.4, which is 0.3 levels above students in classrooms without Mondo. First grade students in classrooms with Mondo saw a similar difference – 13.7 versus 13.4 levels.

Gains from PLAA to Quarter 2 made by Kindergarten and Grade 1 students in classrooms with Mondo gained 0.1 point less than those without. These results are not statistically significant, and the difference is small. This is encouraging in that a newly deployed curriculum is performing just as well as the old with only two months of implementation.

Further, two grades in three buildings had higher gains. These were Kindergarten at Gompers and Grade 1 at Mendota and Thoreau. This result could be masked when looking at averages and may suggest these classrooms exhibited strengths in delivery, fidelity or other factors.

Limitations of the evaluation. There are several limitations of the analysis that both MMSD and Hanover recognize. From the Hanover report:

We have identified a number of factors which limited the depth and scope of this analysis. First, we were limited in our knowledge of which Mondo intervention was implemented or confirmation of exactly which kindergarten and first grade students received the intervention. Confirmation regarding the start date of the Mondo intervention and the degree of implementation across classes, grades and schools would also have added value to this work. A more complete description of the Quarter 2 assessment would have also allowed us to make more informed decisions regarding the potential interaction of Quarter 2 reading levels and demographic/ interventional factors and learning outcomes.

Neither the Hanover report nor the MMSD staff expansion provides perspective on qualitative issues. For example, it is understood there is a great deal of enthusiasm among building staff and administrators. Students may also be more enthusiastic about the Mondo curriculum, but this was not explored.

Neither work assesses how well Mondo is being implemented. Specifically, the degree of fidelity was not explored quantitatively or qualitatively.

Both reviews were limited to text reading level for their pre- and post-tests. Some buildings use Dibels which could be another data point to consider, but it is not universally administered or recorded in any District database.

A larger “n” would help offset this small amount of variance and possibly yield more statistically significant results. Not only was the Hanover review conducted with only three Mondo schools compared to three non-Mondo schools, but there were entire classrooms without text reading level scores recorded in Infinite Campus.

A view longer than one quarter would also be helpful. MMSD staff has attempted to take a longer range look at the performance of Mondo classrooms by analyzing Quarter 3 text reading level scores. These were not available at the time of Hanover’s review.

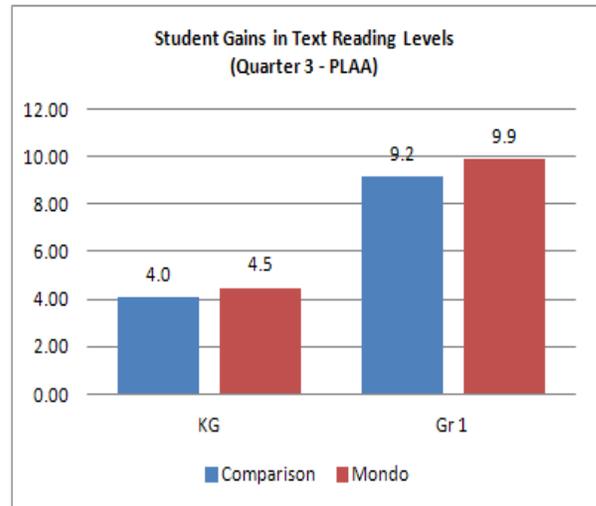
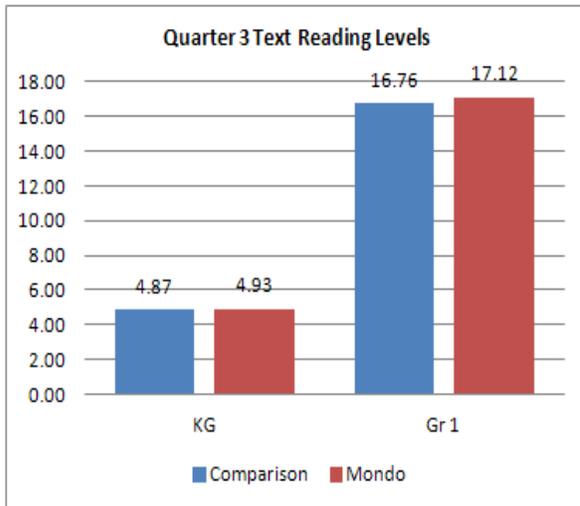
Further, text reading level is a limited measure because it is not in equal interval variable. There are steps and plateaus between the scores. The distance between 0 and 1 is different from the distance between 11 and 12. Also, measuring gain is hard overall and increasingly harder at younger grades because of very tight ranges of

results. Kindergarten starts at an expected score of zero with the end of year score being 5, which means that each quarter is only expected to see growth of one or two levels. Finally, the District did not purchase or administer Mondo materials in Spanish. As a result, 23 ELL students have lower scores that may have had an impact overall.

INCLUSION OF QUARTER 3 RESULTS – This is intended as a supplement to the Hanover evaluation which looked at Fall PLAA text reading levels and the Quarter 2 grade text reading levels. This extends the analysis to Quarter 3 text reading levels.

Question #1: Do students at schools with the Mondo intervention have higher Quarter 3 text reading levels or stronger gains in text reading levels in kindergarten and first grade than similar students at non-Mondo comparison schools?

Answer: Quarter 3 grades indicate that Mondo students started behind their peers at comparison schools but, overall, they had higher text reading levels at the end of Quarter 3. None of these gains or differences was statistically significant but the results are encouraging.



Question #2: Does student participation in the Mondo intervention predict either Quarter 3 text reading levels or gains in text reading levels?

Answer: There is some limited evidence that Mondo had a significant impact on gains in text reading level from the beginning of the year to Quarter 3 in both Kindergarten and Grade 1. A regression analysis controlling for significant factors (e.g. Income, ELL status, parent education, special education, prior score including Quarter 2 grade) indicates a gain at Kindergarten of about 0.8 text reading levels for Mondo students compared to similar students at comparison schools. The gain at Grade 1 for Mondo students is 0.5 text reading levels higher than comparison students.

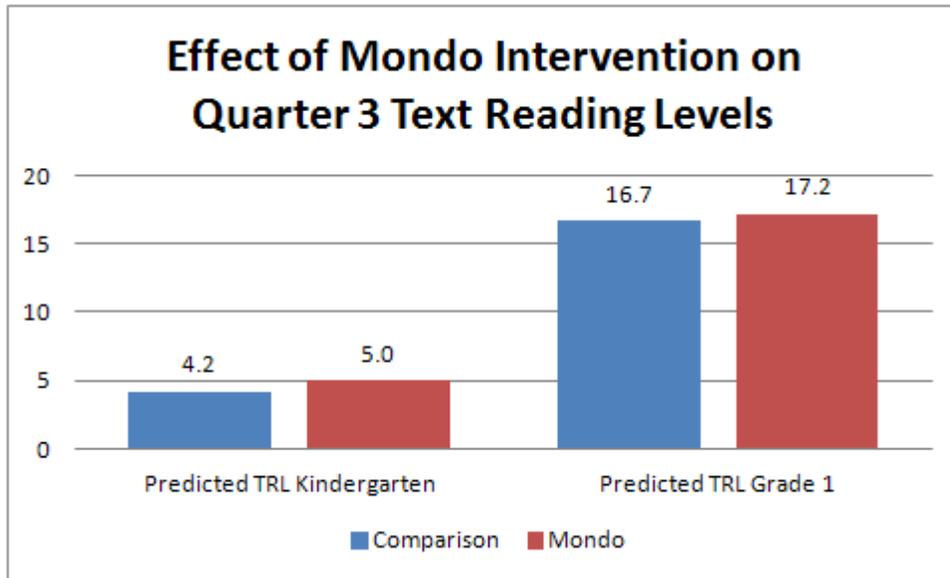
These results are statistically significant, but it is currently unclear how meaningful this gain is. Most students are proficient on the text reading level, but not all proficient students do well on subsequent assessments that are more rigorous (e.g. MAP, WKCE).

Both MAP and WKCE begin in Grade 3. It is recommended that this program be evaluated on these outcomes when results from these two assessments are available.

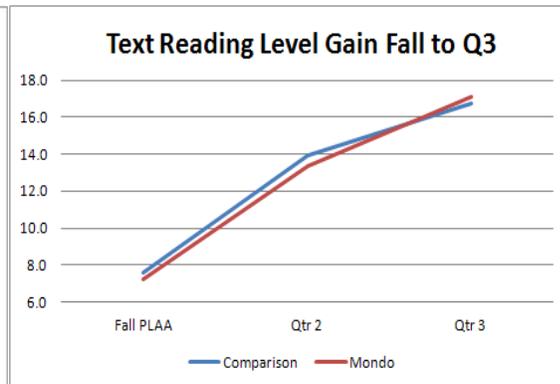
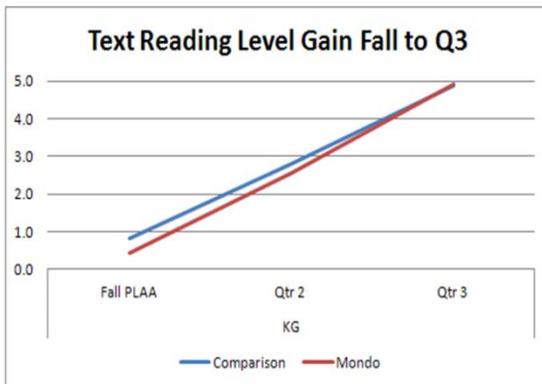
Numbers are too small to run effects on subgroups.

In both Kindergarten and Grade 1, participation in Mondo was a significant factor in predicting Quarter 3 text reading levels for students for this time period.

Again, numbers were too small to run by subgroups.



Lastly, Mondo students lagged behind or were very close to comparison students in Quarter 2. By Quarter 3 Mondo students were even with the comparison students. Also, Mondo students were slightly behind comparison students at Quarter 2. By Quarter 3 Mondo students, on average, had higher text reading levels than comparison students. The difference was not statistically significant. Results for Kindergarten and Grade 1 follow.



Kindergarten: Effect of Mondo on Quarter 3 Text Reading Level						
		Unstandardized Coefficients		Standardized Coefficients		
	Mean	B	Std. Error	Beta	t	Sig.
(Constant)		1.82	.333		5.465	.000
Fall PLAA Text Reading Level	0.69	-.28	.071	-.133	-3.986	.000
Q2 Text Reading Level	2.70	1.25	.049	.931	25.577	.000
Low Income	0.63	-.92	.315	-.088	-2.914	.004
Parent College Degree or Higher (1,0)	0.37	.87	.325	.077	2.685	.008
Single Parent Household	0.41	-.23	.255	-.022	-.897	.370
Mondo	0.39	.77	.233	.074	3.307	.001

Mondo	4.97	137				
Comparison	4.20	215				
Net Difference in Text Reading Level Quarter 3	0.77					

Grade 1 Effect of Mondo on Quarter 3 Text Reading Level						
		Unstandardized Coefficients		Standardized Coefficients		
	Mean	B	Std. Error	Beta	t	Sig.
(Constant)		4.55	.350		12.976	.000
Fall PLAA Text Reading Level	7.68	-.10	.039	-.108	-2.672	.008
Q2 Text Reading Level	13.90	.97	.039	1.031	25.146	.000
Black (1,0)	0.28	-1.21	.256	-.081	-4.740	.000
Mondo	0.47	.53	.217	.039	2.432	.016

Mondo	17.19	134				
Comparison	16.67	152				
Net Difference in Text Reading Level Quarter 3	0.53					