



california dropout prevention network
motivation and maintenance program:
summary of adequate yearly progress data analysis

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Summary

M&M Schools Step Ahead on API Improvement

The SB65 Motivation and Maintenance (M&M) programs provide whole school dropout prevention and student achievement strategies for historically low-achieving public schools in California. To provide a preliminary assessment of the success of this program, Ceres Policy Research analyzed California Department of Education (CDE) data from the 2002-2003 academic year. Data collected included Academic Performance Index improvement rates (API), graduation rate improvement, English/Language Arts (ELA) participation rates and scores, and mathematics participation rates and scores.

Ceres Policy Research finds that schools with M&M programs have higher rates of API improvement. This finding is corroborated by two separate comparisons. Some non-corroborated evidence also suggests that M&M schools have improved graduation rates as well as higher rates of test participation when compared to other schools in their district.

In addition, Ceres Policy Research finds that schools with M&M programs have lower rates of ELA proficiency. This finding is corroborated by two separate comparisons. Some non-corroborated evidence also suggests that M&M schools have lower rates of math proficiency when compared to schools with comparable demographics.

Research Design

Ceres Policy Research collected data for 367 M&M schools, the 67 districts containing M&M schools, 220 schools with comparable demographic data¹, and 227 of the schools in California that qualify for Immediate Intervention for Underperforming Schools (IIUSP).²

Data was collected on the following variables:

- improvement on the Academic Performance Index (API)
- improvement in graduation rates
- participation rates and proficiency in English/Language Arts (ELA)
- participation rates and proficiency in mathematics

¹ For every school in the API database, the CDE provides a list of 100 schools with comparable demographics (measures include race, the percentage of socio-economically disadvantaged students, and the percent of teachers with credentials). We randomly selected one of these “comparable” schools for each M&M school and then eliminated duplicates and M&M schools accidentally included in the “comparable” school sample.

² There are 1131 IIUSP schools throughout California. We alphabetized the list and chose every fifth school for our IIUSP sample, eliminating each M&M school that was included in the IIUSP sample.

The analysis was conducted in two parts. Ceres Policy Research first compared M&M schools to the other schools in their district.

Ceres Policy Research then compared M&M schools to two types of schools:

- schools identified by the CDE as having comparable demographic data to M&M schools
- schools that qualify for Immediate Intervention for Underperforming Schools (IIUSP)

Findings

M&M Outperform Their Districts in API and Graduation Rate Improvements

Table 1 reports the differences between M&M schools and the other schools in their district on two measures: improvement in API and improvement in graduation rate. The table shows that M&M schools score higher on both measures. These differences are statistically significant.

Table 1: API and Graduation Rate Improvement

	API Improvement	Graduation Rate Improvement
M&M	98*	92*
Other Schools	91	79

*significantly higher ($p < .06$) in paired-sample t-tests

Table 2 reports the differences between M&M schools and the other schools in their district on four measures: ELA test participation rates, ELA proficiency rates, math test participation rates, and math proficiency rates. M&M schools score significantly higher on ELA participation and math participation. M&M schools score significantly lower on ELA proficiency.

Table 2: ELA and Math Participation and Proficiency Data

	ELA Participation	ELA Proficiency	Math Participation	Math Proficiency
M&M	98*	23	98*	29
Other Schools	97	29*	97	30

*significantly higher ($p < .06$) in paired-sample t-tests

M&M Schools Outperform IIUSP Schools in API Improvement

In addition to comparing M&M schools to the schools in their district, we compared M&M schools to schools with comparable demographic data and to IIUSP schools.

We analyzed the differences between the three types of schools on two measures: improvement in API and improvement in graduation rate. We found that M&M schools are significantly more likely to improve their API

scores when compared to IIUSP schools (see Table 3). There were no differences between M&M schools and “comparable” schools.

Table 3: API and Graduation Rate Improvement

	API Improvement	Graduation Rate Improvement
M&M	99*	88
IIUSP Schools	96	86

*significantly higher ($p < .06$) than IIUSP Schools in independent-sample t-tests

We then analyzed the differences between the three types of schools on four additional measures: ELA test participation rates, ELA proficiency rates, math test participation rates, and math proficiency rates. We found that M&M schools score significantly lower on ELA and math proficiency compared to schools with comparable demographics. There were no significant differences between M&M schools and IIUSP schools.

Conclusion

The results of our first set of analyses indicate that M&M schools have higher rates of API improvement, higher improvement in graduation rates, and higher test participation rates than the other schools in their district. M&M schools have lower rates of ELA proficiency when compared to other schools in their district.

The results of our second set of analyses indicate that M&M schools are more likely to improve their API scores when compared to IIUSP schools. Also, when compared to schools with comparable demographics, M&M schools have lower rates of ELA and math proficiency.

Overall, we find that M&M schools step ahead of other schools on improvements in API scores. This is the most promising finding from our research, as evidence is corroborated by our district and single school analyses.

There is also corroborated evidence that M&M schools score lower on ELA proficiency tests. Yet, the ELA proficiency test scores do not measure change over the 2002-3 year. Rather, they only measure end-of-the-year proficiency. Thus, schools in the control groups may have had higher proficiency scores at the beginning of the school year. Without longitudinal data, we are hesitant to make conclusions about proficiency scores. A study addressing change over time and accounting for previous academic achievement would be required to make such conclusions.