

Middle Grades Assessment Performance by Configuration

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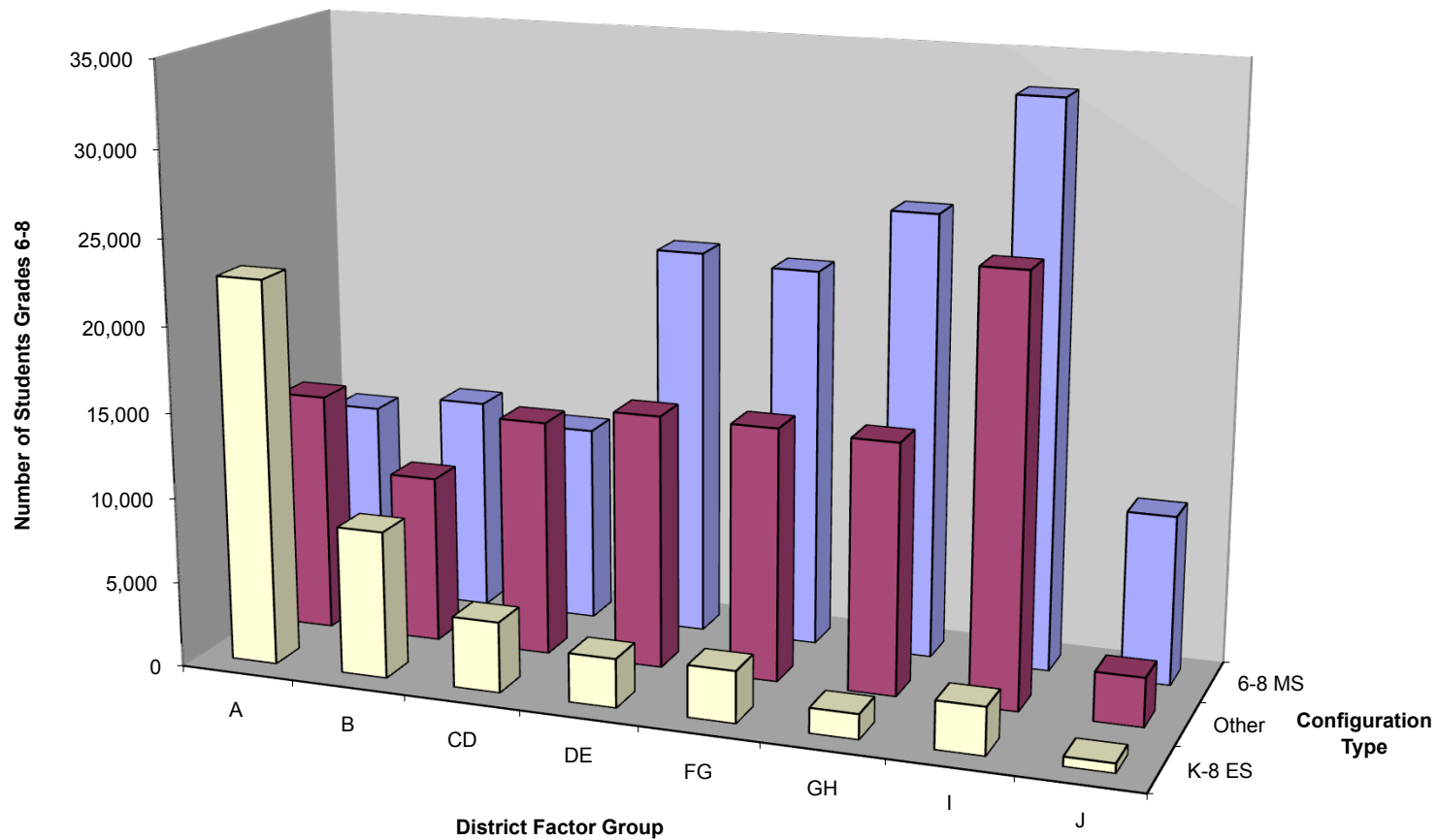
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Using a statistical model helps answer the question whether configuration affects middle school performance on state achievement tests

- Configuration type falls into three broad camps:
 - “K-8 ES” (Kindergarten through 8th grade ES)
 - “6-8 MS” (6th through 8th grade MS)
 - “Other” (e.g. K-6 ES, 7-9 Jr. HS, etc.)

K-8 ES Predominate in lower DFGs, while 6-8 MS are more common in wealthier communities



To maintain a balance in the number of observations by configuration, analysis was limited to DFGs A, B, and CD

Count of Students by District Factor Group by Configuration Type				
DFG 2000	Configuration Type			
	K-8 ES	Other	6-8 MS	DFG Total
A	115,429 (45.74%)	69,332 (27.47%)	67,610 (26.79%)	252,371 (100.00%)
B	46,990 (29.18%)	49,975 (31.03%)	64,091 (39.79%)	161,056 (100.00%)
CD	23,945 (15.88%)	71,459 (47.38%)	55,409 (36.74%)	150,813 (100.00%)
Config. Tot	186,364 (33.03%)	190,766 (33.81%)	187,110 (33.16%)	564,240 (100.00%)

**Accounting for these independent factors
which are known to affect assessment
outcomes allows appropriate comparisons**

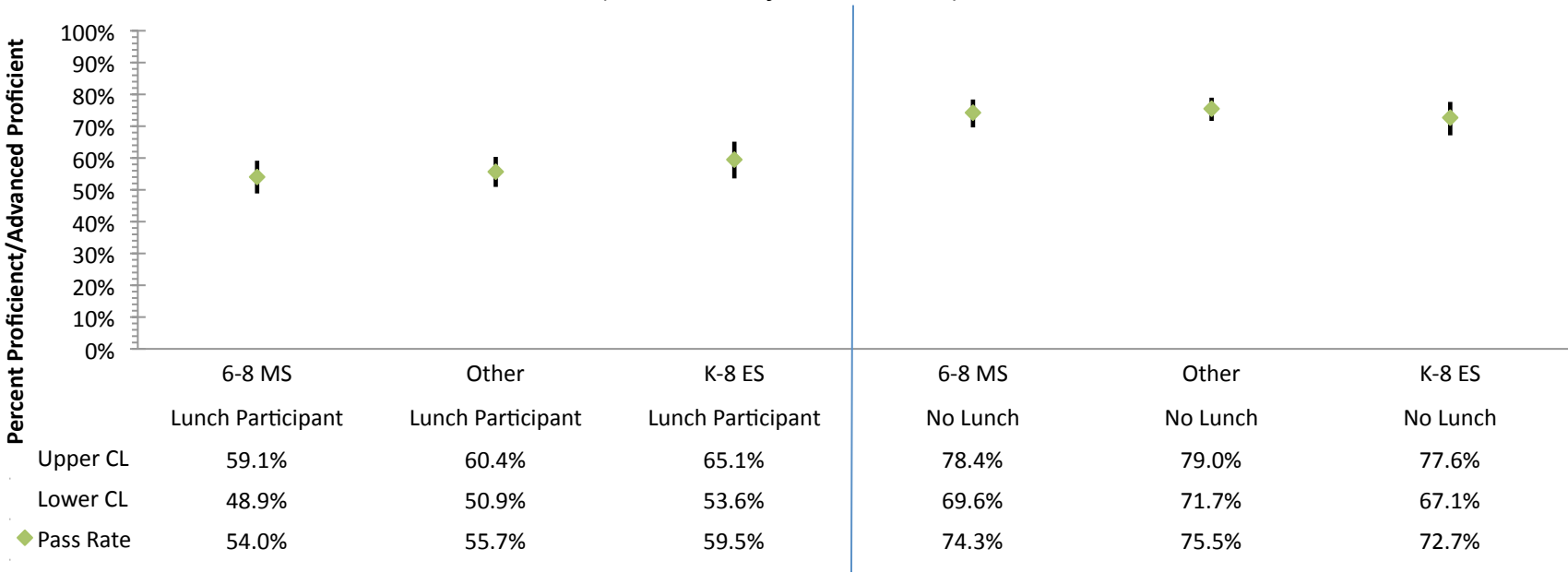
- Poverty status (free or reduced-price lunch participation)
- Instructional Group (General Education, Special Education only, Limited English Proficient only, but excluding Special Education/Limited English Proficient)

Data source and outcome measures

- Data relies on State assessments in grades 6-8 over five years (2006-2010 inclusive)
- Language arts and mathematics sections were modeled separately
- Outcome measure is the probability of achieving proficiency/advanced proficiency on the ASK6 through ASK8
- “Treatment” variable (i.e. variable of interest) is configuration type

When holding lunch status constant there are no significant differences* between configurations in middle school language arts predicted pass rates**

Adjusted Overall Middle School Language Arts Percent Proficient/Advanced Proficient by Lunch Status by Configuration
(with 95% confidence interval)

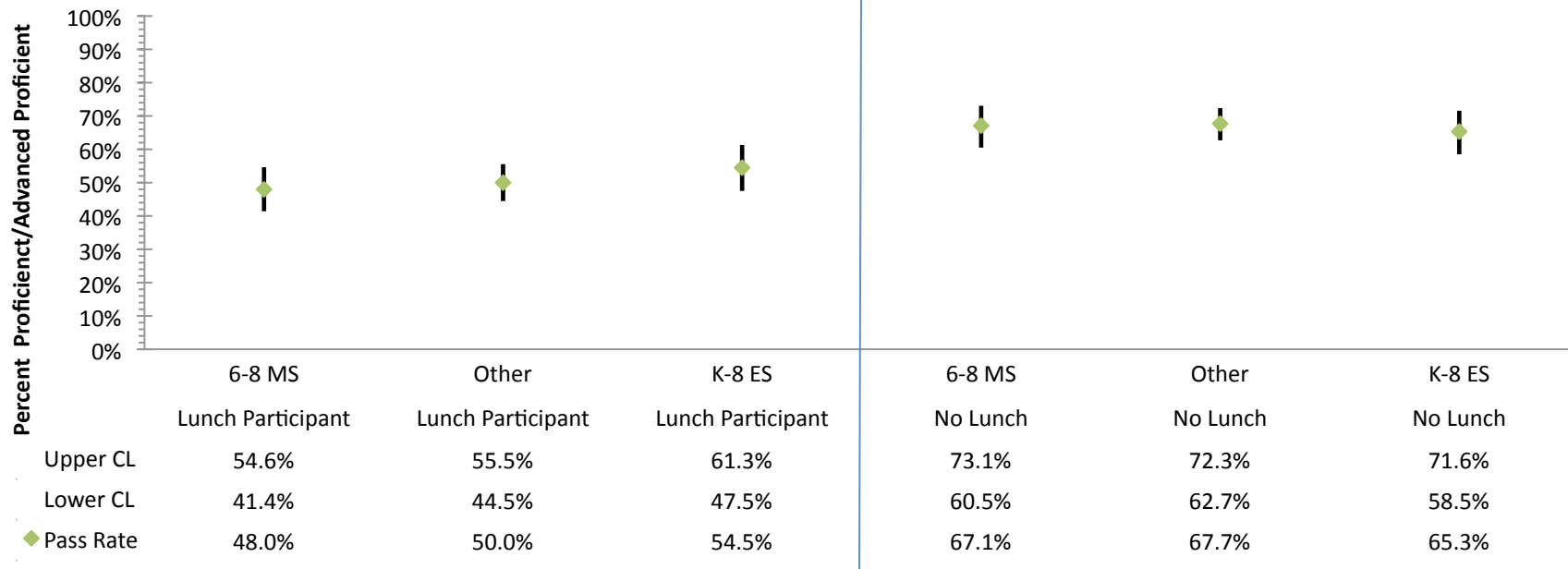


*Statistical significance for the difference in the predicted pass rates is determined by whether their respective confidence interval contains the other’s predicted pass rate; if each predicted pass rate lay outside the others’ respective confidence interval then the difference is considered statistically significant at the given confidence level (95 percent in this case)

**“Predicted Pass Rate”: proficiency/advanced proficiency percentage after adjustment for other factors across grades and years

When holding lunch status constant there are no significant differences* between configurations in middle school mathematics predicted pass rates**

Adjusted Overall Middle School Mathematics Percent Proficient/Advanced Proficient by Lunch Status by Configuration
(with 95% confidence interval)



*Statistical significance for the difference in the predicted pass rates is determined by whether their respective confidence interval contains the other's predicted pass rate; if each predicted pass rate lay outside the others' respective confidence interval then the difference is considered statistically significant at the given confidence level (95 percent in this case)

**"Predicted Pass Rate": proficiency/advanced proficiency percentage after adjustment for other factors across grades and years

Conclusions

- After controlling for numerous factors known to affect proficiency on state assessments, school configuration type was, by itself, not a significant factor
- School configuration has significant association with lunch participation, but within each level of lunch status there are no statistically significant differences across configurations in language arts or mathematics