

Mathematically Connected Communities - Mathematics Out of School Time Tutoring (MC2-MOST)

Mid-Year Evaluation Summary – Student Math Assessments

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Introduction

MC2 at New Mexico State University are providing teachers across the state with professional learning focused on “Research based diagnostic assessments, learning progressions, and high-quality instructional tools in the form of Ready Set Math Curriculum.” Teachers are also providing tutoring to their students in math as part of the program. This report provides an overview of mid-year student math assessment changes since the start of the academic year.

Approach

Students had a numerical score and a corresponding proficiency level, ranging from Well Below Basic, Below Basic, Basic, and Proficient. Proficiency levels at the start and middle of the year were compared to assess changes over time. Results are broken down by assessment and demographic groups.

Results

First, in terms of demographics for the 351 participating students (only those with a score at the start and middle of the year are included in this summary), ethnicity data indicate that 252 (72 percent) are Latino. In terms of race, 40 (11 percent) are American Indian, 250 (71 percent) are white, and 10 combined are Black or African American or Native Hawaiian and Other Pacific Islander (51 students did not have this information). A slight majority (196 students; 56 percent) are female.

Looking at changes in proficiency, there was an increase in the percent of students who were proficient from the start to the middle of the year for all grade level assessments. Growth was particularly pronounced in the first grade assessment, where 60 percent of students were below basic or well below basic at the start of the year, but 72 percent were proficient in the middle of the year for the second evaluation. All changes in proficiency levels can be found in Table One below, with a visual of these data in Figure One. There were a small number of students who had more than one test included, so the total number of students below is slightly higher than 351.

Test	Total Number of Students	Time	Well Below Basic	Below Basic	Basic	Proficient
Fall 1st Grade Universal Screener for Number Sense	75	Start of Year	17 (23%)	28 (37%)	25 (33%)	5 (7%)
	75	Middle of Year	3 (4%)	5 (7%)	13 (17%)	54 (72%)
Fall 2nd Grade Universal Screener for Number Sense	116	Start of Year	18 (16%)	39 (34%)	35 (30%)	24 (21%)
	116	Middle of Year	5 (4%)	6 (5%)	24 (21%)	81 (70%)
Fall 3rd Grade Universal Screener for Number Sense	176	Start of Year	21 (12%)	86 (49%)	63 (36%)	6 (3%)
	176	Middle of Year	1 (1%)	21 (12%)	75 (43%)	79 (45%)

Table One: Proficiency Level Changes - All Students

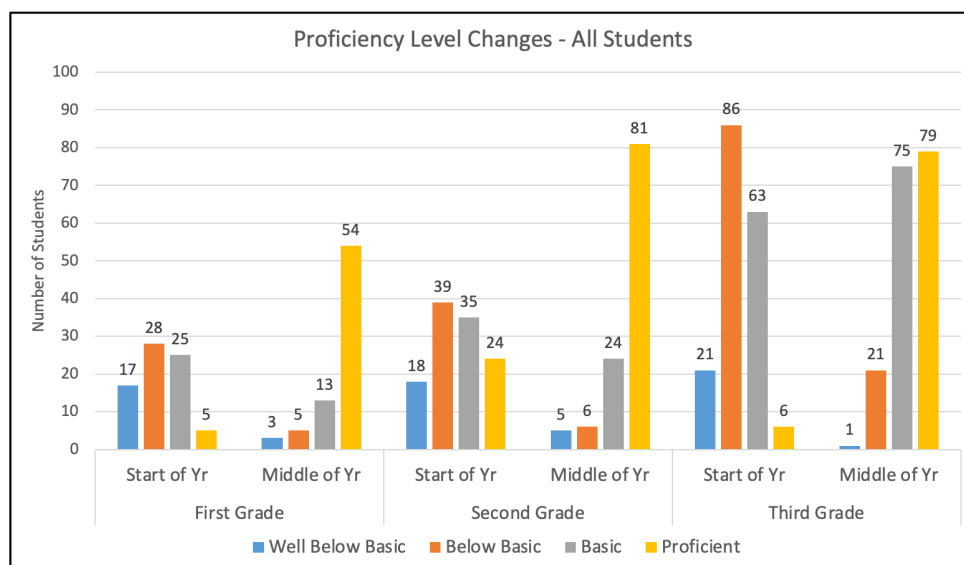


Figure One: Proficiency Level Changes - All Students

Both Latino and American Indian students saw an increase in the number of students who were proficient in the middle of the year compared to the start of the year as well. In particular, first and second grade changes for Latino students and third grade changes for American Indian students were more pronounced (though it is important to note that the smaller number of American Indian students means that just a few students can have large impacts on corresponding percents).

Note that only second and third grade tests were included for American Indian students in these analyses as there were sufficient numbers of students to assess. Proficiency levels for Latino and American Indian students can be found in Tables Two and Three below, with visualizations of these data in Figures Two and Three.

Test	Total Number of Students	Time	Well Below Basic	Below Basic	Basic	Proficient
Fall 1st Grade Universal Screener for Number Sense	46	Start of Year	7 (15%)	20 (43%)	14 (30%)	5 (11%)
	46	Middle of Year	1 (2%)	1 (2%)	8 (17%)	36 (78%)
Fall 2nd Grade Universal Screener for Number Sense	87	Start of Year	14 (16%)	32 (37%)	25 (29%)	16 (18%)
	87	Middle of Year	5 (6%)	3 (3%)	21 (24%)	58 (67%)
Fall 3rd Grade Universal Screener for Number Sense	128	Start of Year	12 (9%)	60 (47%)	50 (39%)	6 (5%)
	128	Middle of Year	0 (0%)	18 (14%)	58 (45%)	52 (41%)

Table Two: Proficiency Level Changes – Latino Students

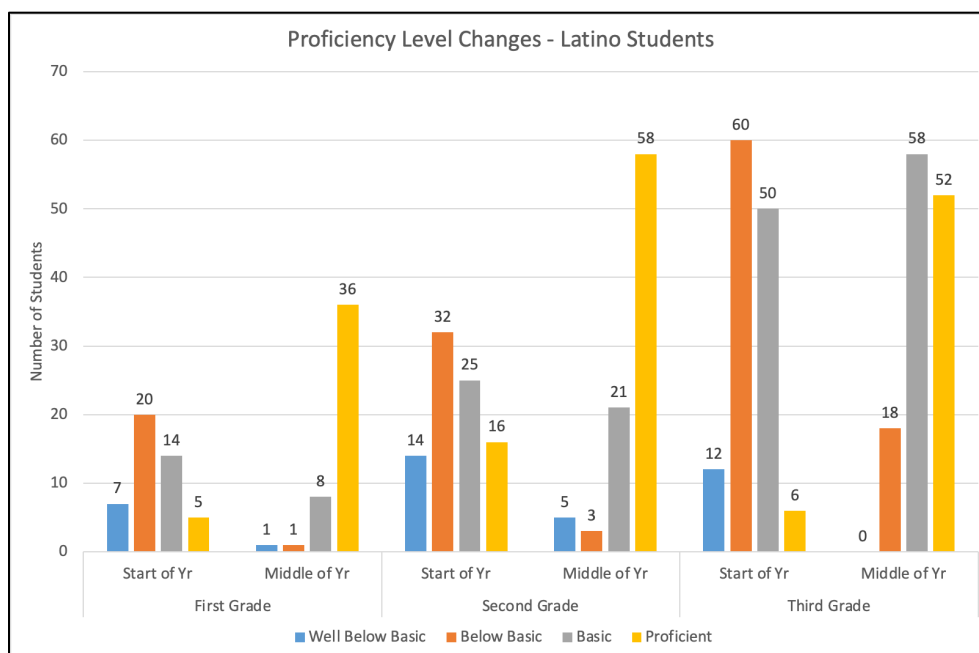


Figure Two: Proficiency Level Changes – Latino Students

Test	Total Number of Students	Time	Well Below Basic	Below Basic	Basic	Proficient
Fall 2nd Grade Universal Screener for Number Sense	19	Start of Year	3 (16%)	3 (16%)	6 (32%)	7 (37%)
	19	Middle of Year	0 (0%)	2 (11%)	2 (11%)	15 (79%)
Fall 3rd Grade Universal Screener for Number Sense	21	Start of Year	4 (19%)	14 (67%)	3 (14%)	0 (0%)
	21	Middle of Year	1 (5%)	3 (14%)	7 (33%)	10 (48%)

Table Three: Proficiency Level Changes – American Indian Students

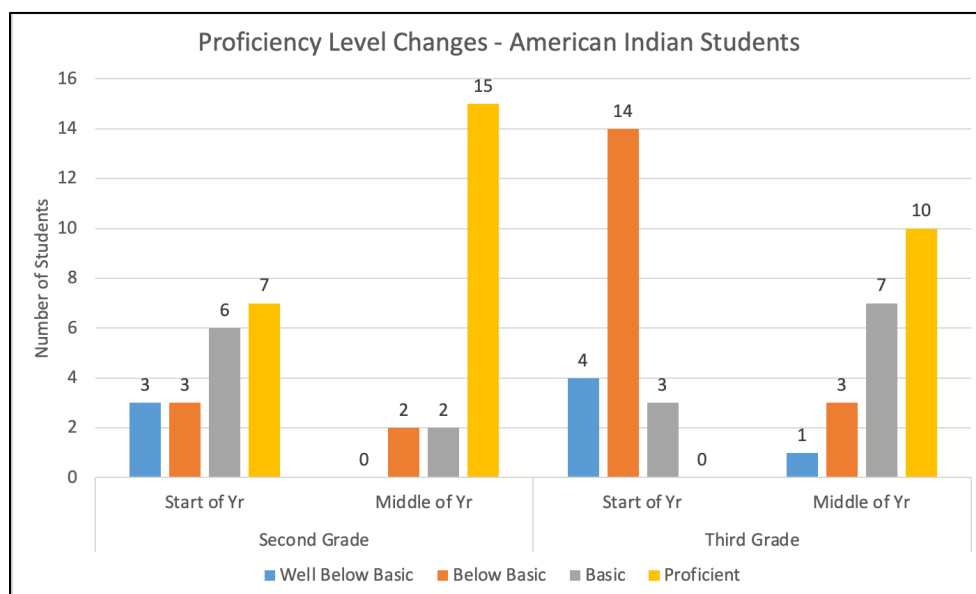


Figure Three: Proficiency Level Changes – American Indian Students

Key Takeaways

Overall, students participating in the MC2 – MOST tutoring program demonstrated notable improvements in their math assessment scores. This is true for all students in the data and for race/ethnicity subgroups as well. It will be important to look at the data at the end of the academic year to determine if these trends continue, and it will also be helpful to have additional data points included (e.g., more complete time two data) so that as many participants can be included in the analyses as possible.