

# **DIAMOND Data Analysis Brief: Minnesota's Accommodations Analyses for English Learners**

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A paradigm shift in thinking about accessibility and accommodations for statewide assessments has taken place during the past five years. This paradigm shift recognizes the need for accessibility supports and possibly accommodations for all students. To better understand this shift and its implications for states, it is important to examine the extent to which accessibility and accommodations are provided to English learners (ELs). This brief summarizes the results of analyses of regular assessment data from the Minnesota Department of Education.

In Minnesota, data were available for accommodations but not for accessibility supports. Thus, this brief examines accommodations assigned to students. In this report, we first present the results of analyses of participation of ELs in the state's regular assessments (MCA-II and MCA-III), then examine the numbers of ELs who were assigned accommodations, their performance, and their characteristics.

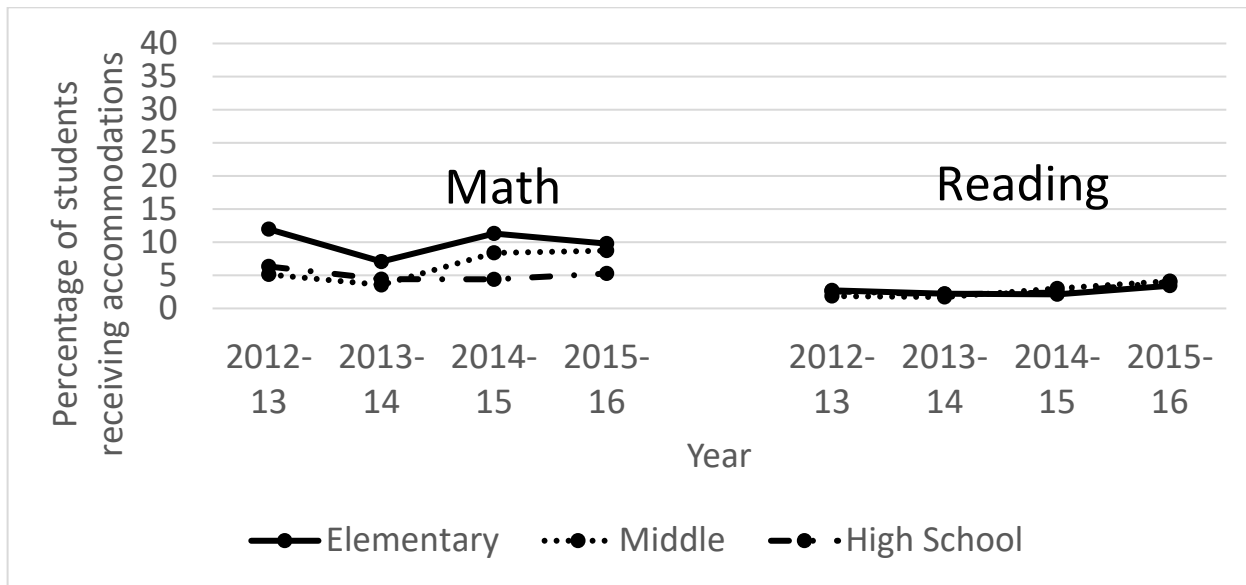
## **Participation in Testing**

For these analyses, the total numbers of ELs included in analyses were approximately 33,000 in math and 34,000 in reading per year (see full report for complete data on numbers of students in analyses).

## **Accommodations Assigned for Regular Assessments**

Figure 1 presents the percentages of ELs participating in the regular assessment who were assigned accommodations during math and reading regular assessments across years. As evident in the figure, percentages were lower for reading than math (approximately 3% versus 7%). Also, percentages on the math assessments tended to be higher in elementary school compared to middle school and high school, with high school generally lower; but not for reading. Differences among school levels were not obvious for reading. There was no obvious pattern across school years for either content area.

**Figure 1. Percentages of ELs Who Participated in the Regular Assessment and Were Assigned Accommodations**

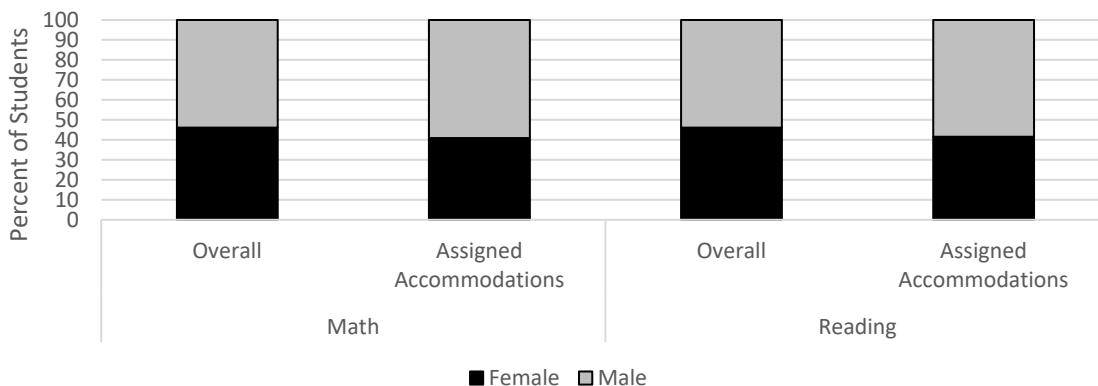


## Characteristics of ELs Who Were Assigned Accommodations

Data on the characteristics of ELs who were assigned accommodations and those not assigned accommodations were examined across years 2012-13 through 2015-16 and across school levels. Results were essentially the same for years and for school levels, so only the findings for 2015-16, with school levels combined, are presented here. For student characteristics, we examined gender, ethnicity, and free/reduced lunch for math and reading.

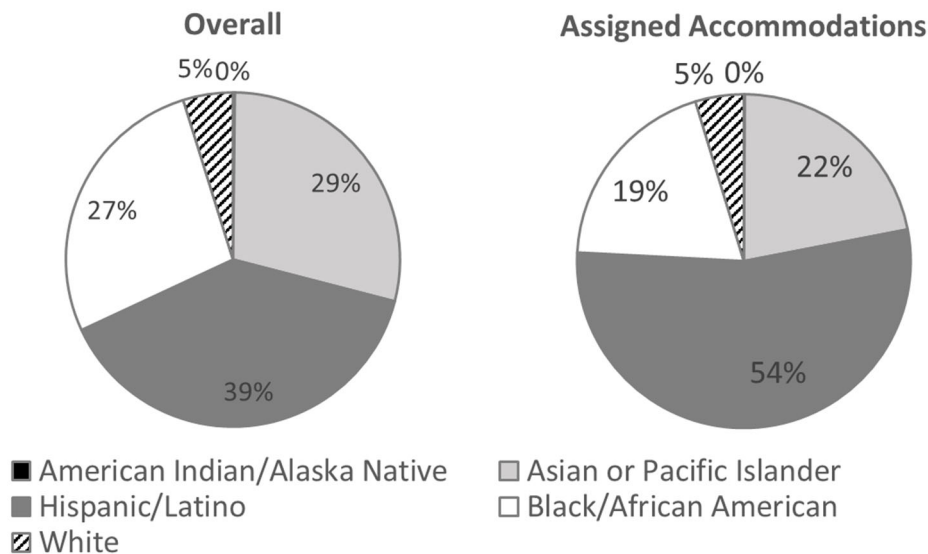
**Gender.** Figure 2 shows the gender distribution of ELs overall and ELs who were assigned accommodations. The gender distributions for the two groups were very similar, with just slightly more of the ELs who were assigned accommodations being male.

**Figure 2. Gender Distribution of ELs Overall and ELs Who Were Assigned Accommodations in 2015-16**

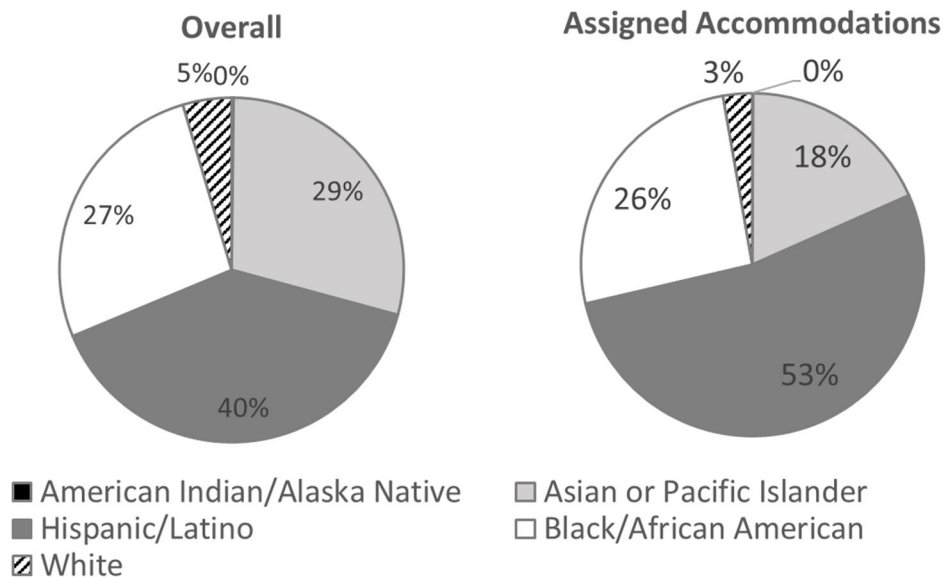


**Ethnicity.** Figures 3 and 4 present the ethnicities of ELs overall and ELs who were assigned accommodations for math and reading separately. As shown in these figures, there are slight differences in the ethnicity distributions of ELs overall and ELs who were assigned accommodations. For math, more ELs who were assigned accommodations were Hispanic/Latino, and fewer ELs were Asian or Pacific Islander and Black/African American, compared to ELs overall. For reading, again more ELs who were assigned accommodations were Hispanic/Latino, and fewer ELs were Asian or Pacific Islander compared to ELs overall, but the percentages who are Black/African American students were similar for ELs overall and for ELs who were assigned accommodations.

**Figure 3. Ethnicity of ELs Overall and ELs Who Were Assigned Accommodations in 2015-16 - Math**

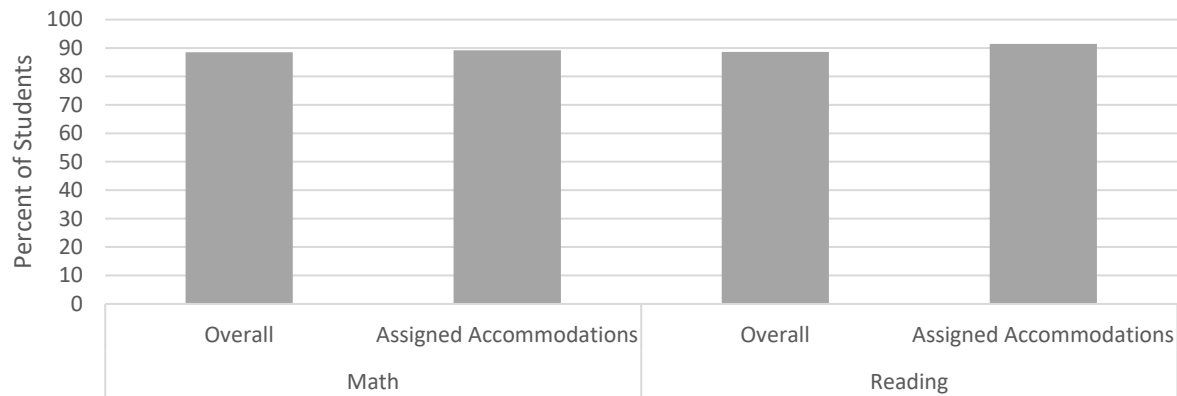


**Figure 4. Ethnicity of ELs Overall and ELs Who Were Assigned Accommodations in 2015-16 - Reading**



**Free/Reduced Lunch.** Figure 5 shows the percentage of ELs overall and the percentage of ELs who were assigned accommodations who received free or reduced price lunch. For both math and reading, the percentages of ELs in each group receiving free/reduced price lunch were similar, with approximately 90% having free/reduced price lunch status regardless of group.

**Figure 5. Free/Reduced Price Lunch Status of ELs Overall and ELs Who Were Assigned Accommodations in 2015-16**



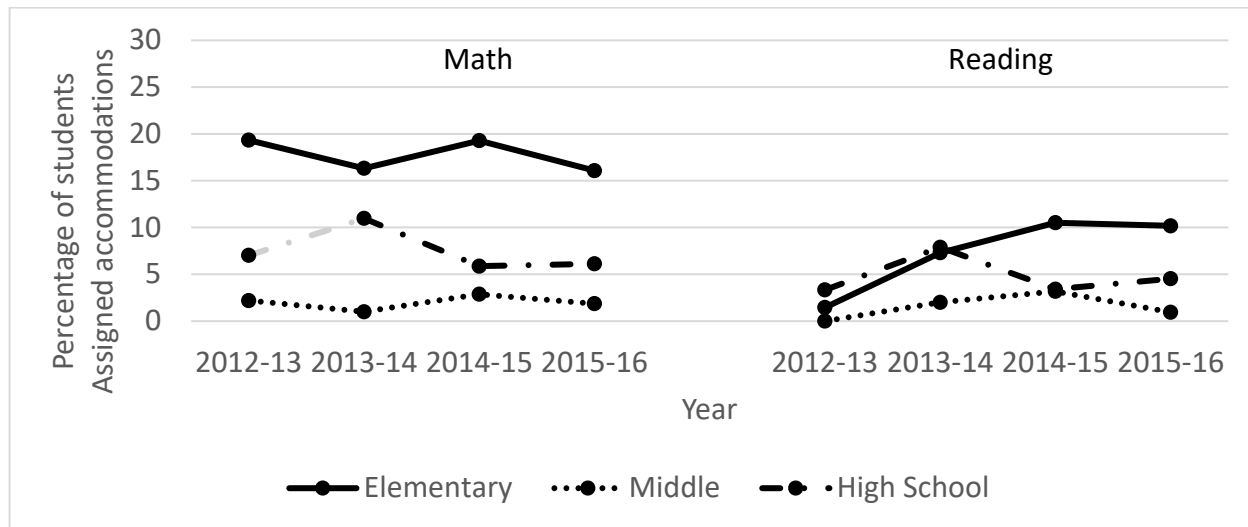
## Performance of ELs Who Were Assigned Accommodations

Data for ELs who were assigned accommodations during school years 2012-13 through 2015-16 were analyzed to examine the percentages of ELs who were proficient or above on the regular assessment at each school level (elementary, middle, and high school).

Minnesota changed its academic standards for high school math in 2013-14. This means that it is not possible to compare proficient rates from 2013-14 to 2014-15 (non-comparable years are indicated by gray lines).

Figure 6 presents the percentages of ELs scoring at the proficient or above level on the regular assessment in each year, based on those ELs who participated in the regular assessment and were assigned accommodations. The percentage of ELs proficient across years was generally higher for math compared to reading for ELs in the elementary school level, but about the same for ELs in the middle school and high school levels.

**Figure 6. Percentage of ELs Who Were Assigned Accommodations and Were Proficient or Above on the Regular Assessment**



MCA-II high school Math were administrated in 2012-13 and MCA-III were administrated from 2013-14. The new academic standards administrated from 2013-14 for high school math only.

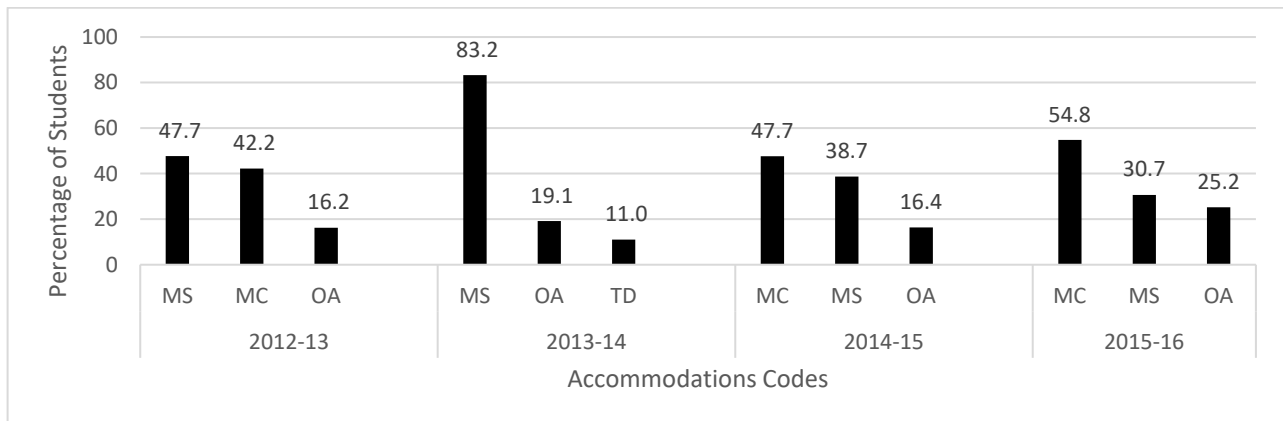
## Relationship Between Percentage Assigned Accommodations and Performance

To examine the relationship between the percentages of ELs who were assigned accommodations on the regular assessment and their performance, *Phi Coefficients* ( $\phi$ ) were calculated. Results indicated that generally, regardless of content area, school level, or year, there was a significant negative relationship between being assigned accommodations and scoring proficient on the assessment (see full report for the correlations).

## Changes Over Time in Most Commonly Assigned Accommodations

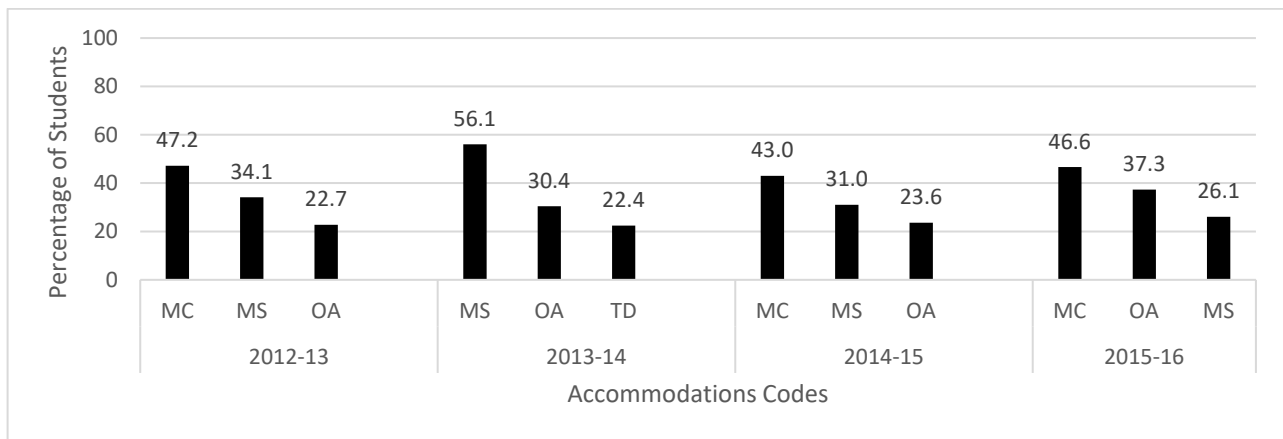
Analyses were limited to the top three most often assigned accommodations by ELs for math in each year from 2012-13 through 2015-16 (see full report for reading findings). Results for math showed that regardless of year, math script and “other” (non-defined) accommodations were always among the top three most commonly assigned accommodations. Math script was always used by the largest percentage of students at the elementary school level (see Figure 7). In middle school, the largest percentage of students, except for 2013-14, was assigned a Math CD as an accommodation (see Figure 8). In high school, other (undefined) accommodations were more frequently assigned, except for 2014-15 (see Figure 9).

**Figure 7. Most Commonly Assigned Accommodations for Elementary ELs - Math**



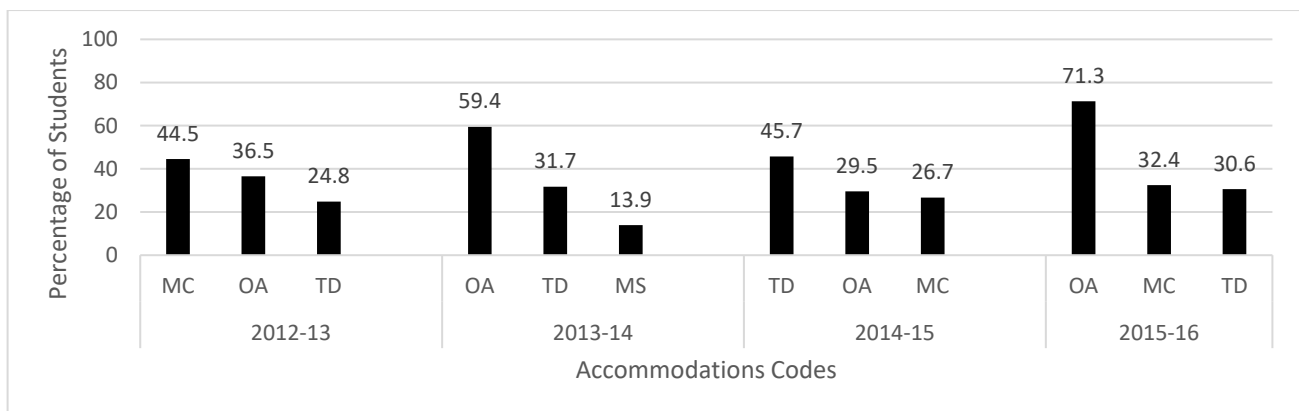
Note. MS = math script; MC – math CD; OA = other accommodation; TD = translated directions.

**Figure 8. Most Commonly Assigned Accommodations for Middle School ELs - Math**



Note. MS = math script; MC – math CD; OA = other accommodation; TD = translated directions.

**Figure 9. Most Commonly Assigned Accommodations for High School ELs - Math**

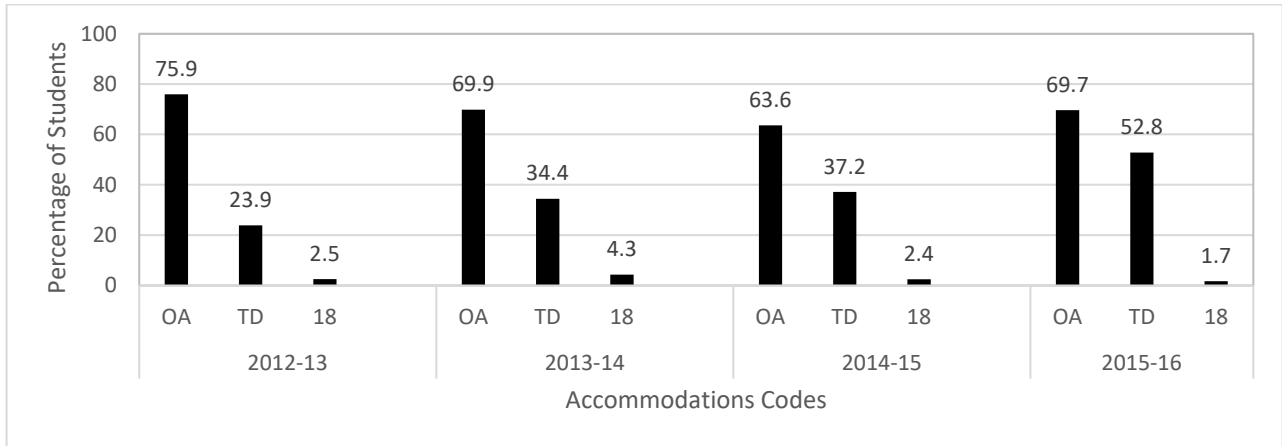


Note. MS = math script; MC – math CD; OA = other accommodation; TD = translated directions.

In contrast to math, results for reading showed that regardless of year, “other” (non-defined) accommodations was always the top most commonly assigned accommodation across school levels

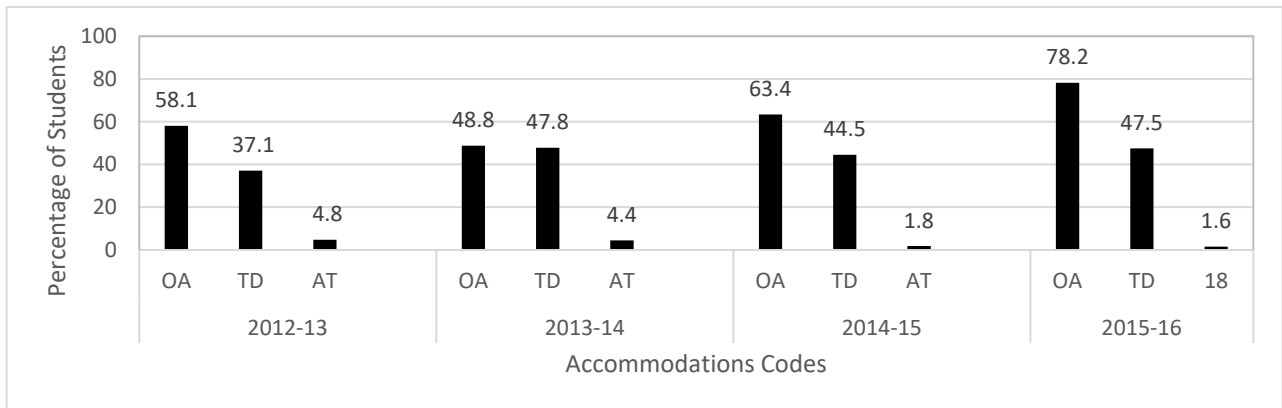
(see Figures 10-12). Approximately 94% of ELs were assigned the other (undefined) accommodations in 2015-16.

**Figure 10. Most Commonly Assigned Accommodations for Elementary ELs – Reading**



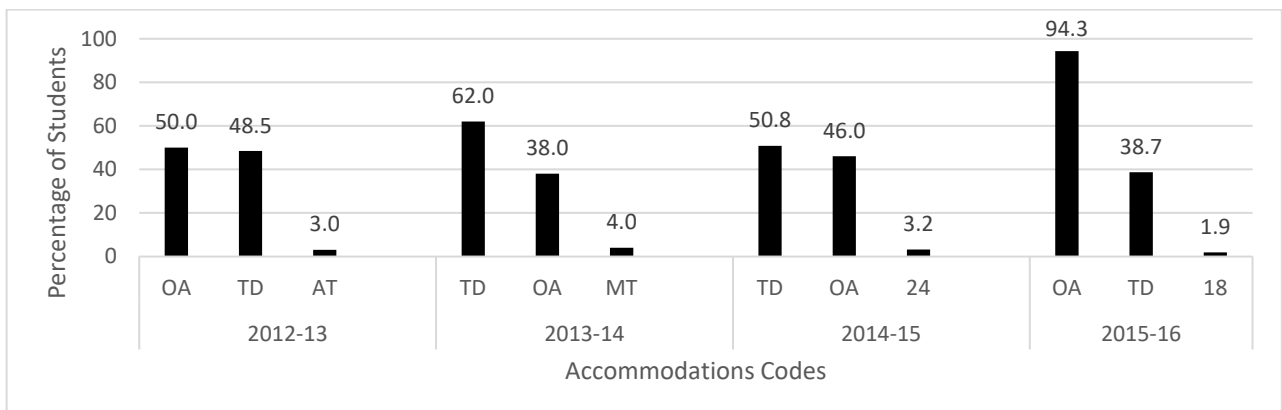
Note. OA = other accommodation; TD = translated directions; 18 = large print

**Figure 11. Most Commonly Assigned Accommodations for Middle School ELs – Reading**



Note. OA = other accommodation; TD = translated directions; AT = assistive technology; 18 = large print.

**Figure 12. Most Commonly Assigned Accommodations for High School ELs – Reading**



Note. OA = other accommodation; TD = translated test directions; 18 = large print; MT = made tape for answers

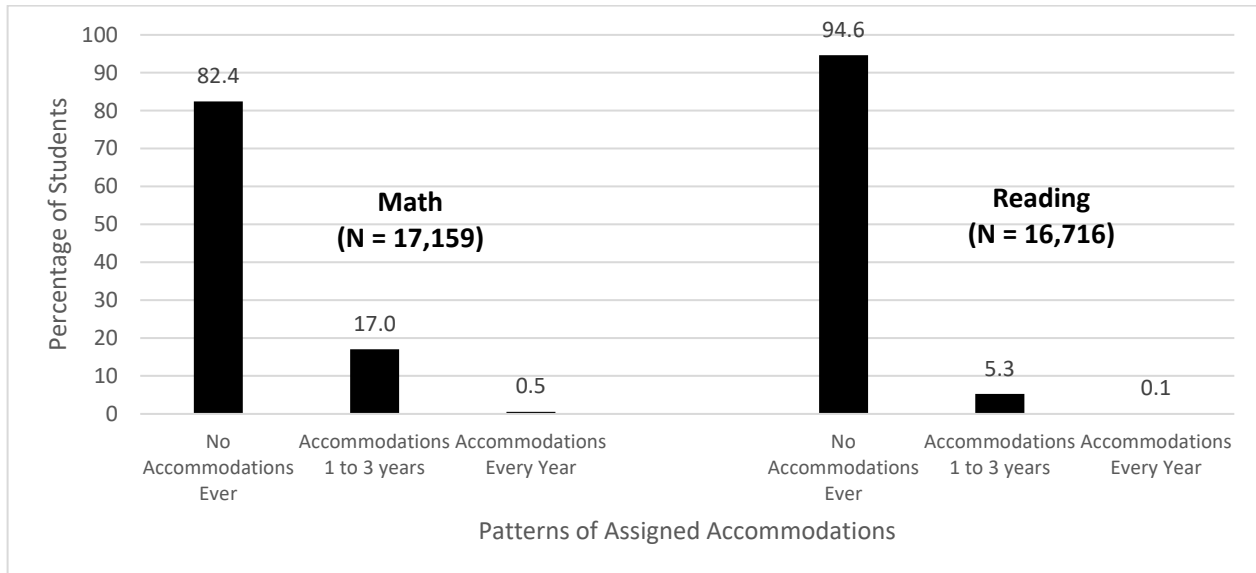
## Relationship Between Commonly Assigned Accommodations and Performance

*Phi Coefficients* ( $\phi$ ) were calculated to examine the relationship between ELs who were assigned the most commonly assigned accommodations and whether they were proficient on the regular assessment. Results were similar across years, with the correlations showing slight negative relationships for both reading and math at the elementary and middle school levels, but not at the high school level where there was no relationship (see full report).

## Performance Related to Changes Over Time in Accommodations Assigned for Individual ELs

Approximately 24% of ELs had four years of records for both math and reading. All ELs with four years of data were in elementary school. As shown in Figure 13, most of these ELs were assigned no accommodations over the four-year period (82% math, 95% reading). A small percentage of students (0.5% math; 0.1% reading) was assigned accommodations all four years for which they had data.

**Figure 13. Percentages of ELs Who Were Assigned Accommodations Across Four Years**

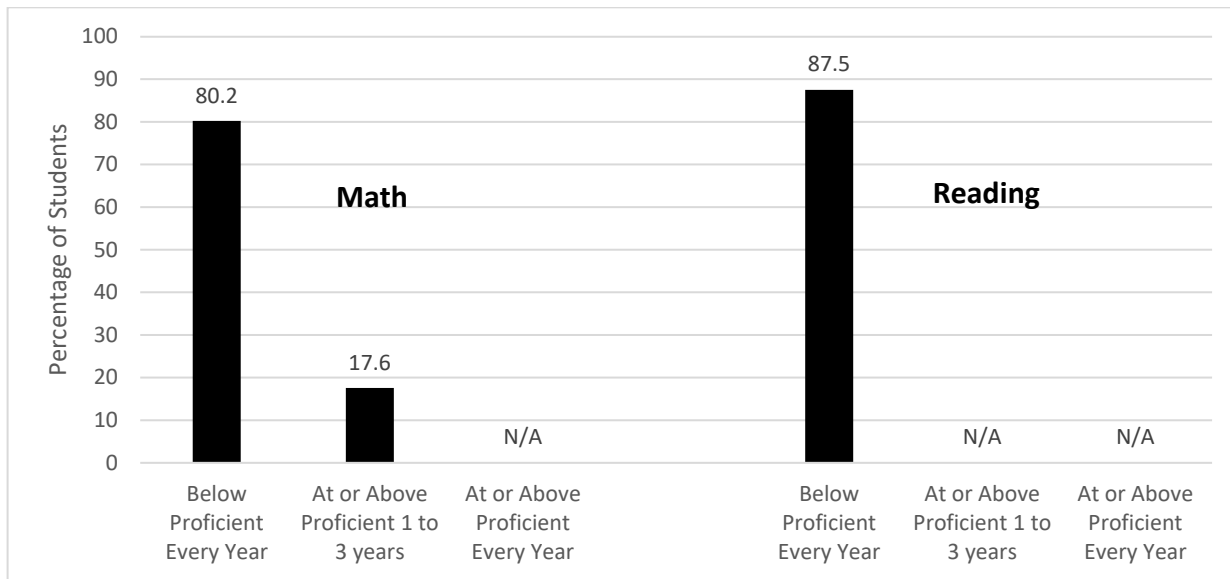


Note. Math: 54,089 students were excluded because they did not have four years of records; Reading: 52,230 students were excluded because they did not have four years of records.

Figure 14 shows the performance of ELs who were assigned accommodations for all four years for which data were available. Most ELs who were assigned accommodations for four years had performance below proficient. In math, only 18% showed proficient performance in at least one year.



**Figure 14. Performance Patterns of ELs Who Were Assigned Accommodations for Four Years (Math N = 91; Reading N = 16)**



Note. N/A: No bar is presented due to cell size is less than 10.

## Number of Assigned Accommodations

The majority of ELs who were assigned accommodations during regular assessments in 2015-16 were assigned one accommodations (73% for math and 71% for reading). The number of accommodations for students with disabilities ranged from 1 to 5 for math and 1 to 3 for reading. For ELs assigned accommodations, the average number of and accommodations assigned to them across all school levels in 2015-16 was 1.3 for the regular math assessments and 1.4 for the regular reading assessments (see full report for the detailed information).

To examine the relationship between the number of assigned accommodations on the regular assessment and the performance of students with disabilities, *Phi Coefficients* ( $\phi$ ) were calculated. Results indicated that generally, regardless of content area, school level, or year, there was either no relationship or a significant negative relationship between the number of assigned accommodations and scoring proficient on the assessment (see full report for detailed information).

## Conclusions

Math and reading regular assessment data for ELs allowed for examination of the percentages of ELs who were assigned accommodations across content areas, grades, and year. These data revealed slight differences by content area, with more ELs being assigned accommodations in math than in reading, and generally more elementary ELs being assigned accommodations than ELs in middle and high school. The characteristics of ELs who were assigned accommodations were similar to the characteristics of ELs overall, with some slight differences in ethnicities of the two groups.

The most frequently assigned accommodations by ELs almost always included “Other accommodation.” This is a group of undefined accommodations; thus it is not possible to know exactly which accommodations students were assigned. Consideration should be given to adding codes to obtain more detail on exactly which accommodations are being assigned to ELs.

An important finding is the percentage of ELs with four years of data who never were assigned accommodations during those four years – this accounted for 82% of ELs for math and 95% of ELs for reading. Fewer than 0.5 percent of ELs for math and 0.1 percent of ELs for reading were assigned accommodations all four years. These percentages seem particularly low, and may warrant additional monitoring of accommodations decisions.

The negative relationship between being assigned accommodations and performance suggests that decision makers may be making decisions about whether to provide accommodations based on the poor performance of students rather than their need for accommodations. This also requires further monitoring of the decision making process.

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