

Title: A Comparison of Colorado School Districts Operating on Four-Day and Five-Day Calendars 2011

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Abstract/Summary

Sixty-seven Colorado school districts operate all their schools on a four-day week rather than a five-day week. Colorado law requires that all districts provide a specified amount of 'contact time' for students. Consequently, the shorter week includes longer days so the actual 'contact time' is the same as the schools with longer weeks.

This report compares the academic achievement and student growth of the four-day districts to the academic achievement of five-day districts of similar size. Overall, the results indicate that both groups of districts perform similarly on the state assessments and that their students show very similar amounts of academic growth as reflected by the Colorado Growth Model.

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A COMPARISON OF COLORADO SCHOOL
DISTRICTS OPERATING ON FOUR-DAY AND
FIVE-DAY CALENDARS 2011

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Abstract

Sixty-seven Colorado school districts operate all their schools on a four-day week rather than a five-day week. Colorado law requires that all districts provide a specified amount of 'contact time' for students. Consequently, the shorter week includes longer days so the actual 'contact time' is the same as the schools with longer weeks.

This report compares the academic achievement and student growth of the four-day districts to the academic achievement of five-day districts of similar size. Overall, the results indicate that both groups of districts perform similarly on the state assessments and that their students show very similar amounts of academic growth as reflected by the Colorado Growth Model.

Colorado law requires school districts to schedule 1080 hours per year of instructional time for secondary schools and 990 instructional hours for elementary schools. The 1080 hours equate to six hours per day for 180 days. The 990 hours equate to five and one-half hours per day. Up to 24 hours may be counted for parent-teacher conferences, staff inservice programs, and closing for reasons of health, safety, or welfare of students. The law also requires any district offering less than 160 days of school to obtain permission from the Commissioner of Education. One of the duties of local school boards is:

C.R.S 22-32-109 (n) (I) To determine, prior to the end of a school year, the length of time which the schools of the district shall be in session during the next following school year, but in no event shall said schools be scheduled to have less than one thousand eighty hours of planned teacher-pupil instruction and teacher-pupil contact during the school year for secondary school pupils in high school, middle school, or junior high school or less than nine hundred ninety hours of such instruction and contact for elementary school pupils or less than four-hundred-fifty hours of such instruction for a half-day kindergarten program. In no case shall a school be in session for fewer than one hundred sixty days without the specific prior approval of the commissioner of education.

However, if a district plans to offer a four-day week, they must still meet the instructional time criteria discussed earlier. They simply do it by scheduling more hours on fewer days. In simple terms, those districts using a four day week schedule 7.5 hours per day for 144 days of school instead of the normal six hours for 180 days of school.

There are currently 67 districts that use the four-day week calendar district wide constituting 37.6% of the 178 school districts in Colorado and serving 3.6% of Colorado's students (See Appendix A for a full list). These 67 districts range in size from 33 students to 8,562 students. One district is located in the Denver metro area, but is a small district in the foothills (Gilpin County). Eleven districts are in the northeast region, six are in the northwest region, 13 are in the Pikes Peak region, 18 are in the southeast region, 11 are in the southwest region, three are in the west central region and four are in the north central region. The 67 districts with district-wide implementation serve a total of 29,022 students (2,531 are in districts with fewer than 200 students, 3,394 are in districts with 200-300 students and 23,097 are in districts with more than 300 students). There are another nine districts that have individual schools, but not the entire district, on this calendar.

In terms of the 2011 accreditation rubric that incorporates both status and growth, six districts were “Accredited with Distinction”, 41 were “Accredited”, 13 were “Accredited with an Improvement Plan”, six were “Accredited with a Priority Improvement Plan” and one district was “Accredited with a Turnaround Plan”.

In terms of the most recent four-year on-time graduation rates (2010), 24 districts had four-year on-time graduation rates between 90 and 100%, and 30 districts had four-year on-time graduation rates between 70 and 89%. Seven districts had four-year on-time graduation rates between 50 and 69% and three districts had four-year on-time graduation rates well below 50%.

In terms of overall CSAP Reading performance in 2011, four-day districts had 71.4% of elementary students their students in the proficient or advanced categories, while districts of a similar size on a normal five-day schedule had 71.0% of their elementary students proficient or advanced. Four-day districts had 68.4% of middle school students in the proficient or advanced categories, while districts of a similar size on a normal five-day schedule had 69.1% of their middle school students proficient or advanced. Four-day districts had 68.4% of high school students in the proficient or advanced categories, while districts of a similar size on a normal five-day schedule had 67.5% of their high school students proficient or advanced. These data are presented in Figure 1.

Figure 1: Reading Proficiency by School Level by Calendar Type

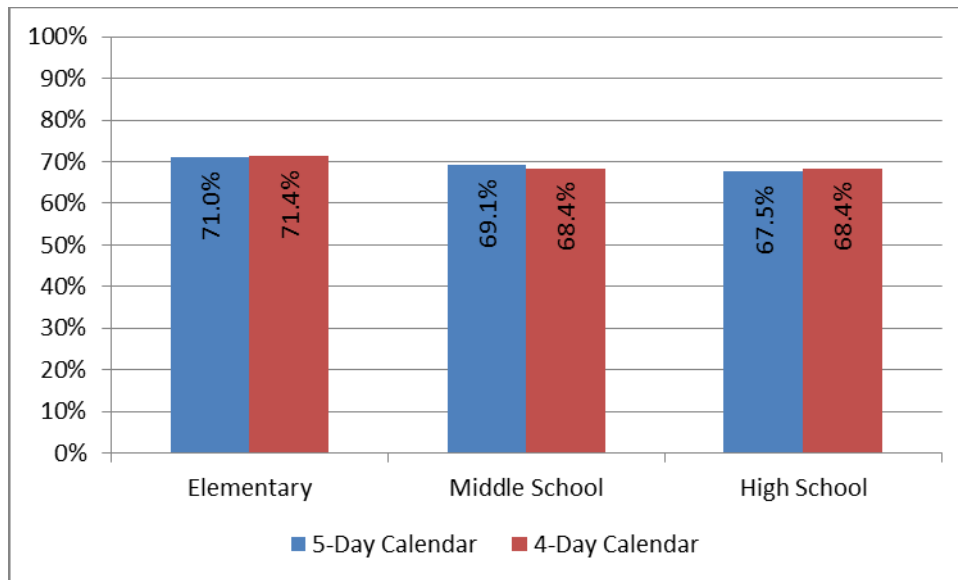
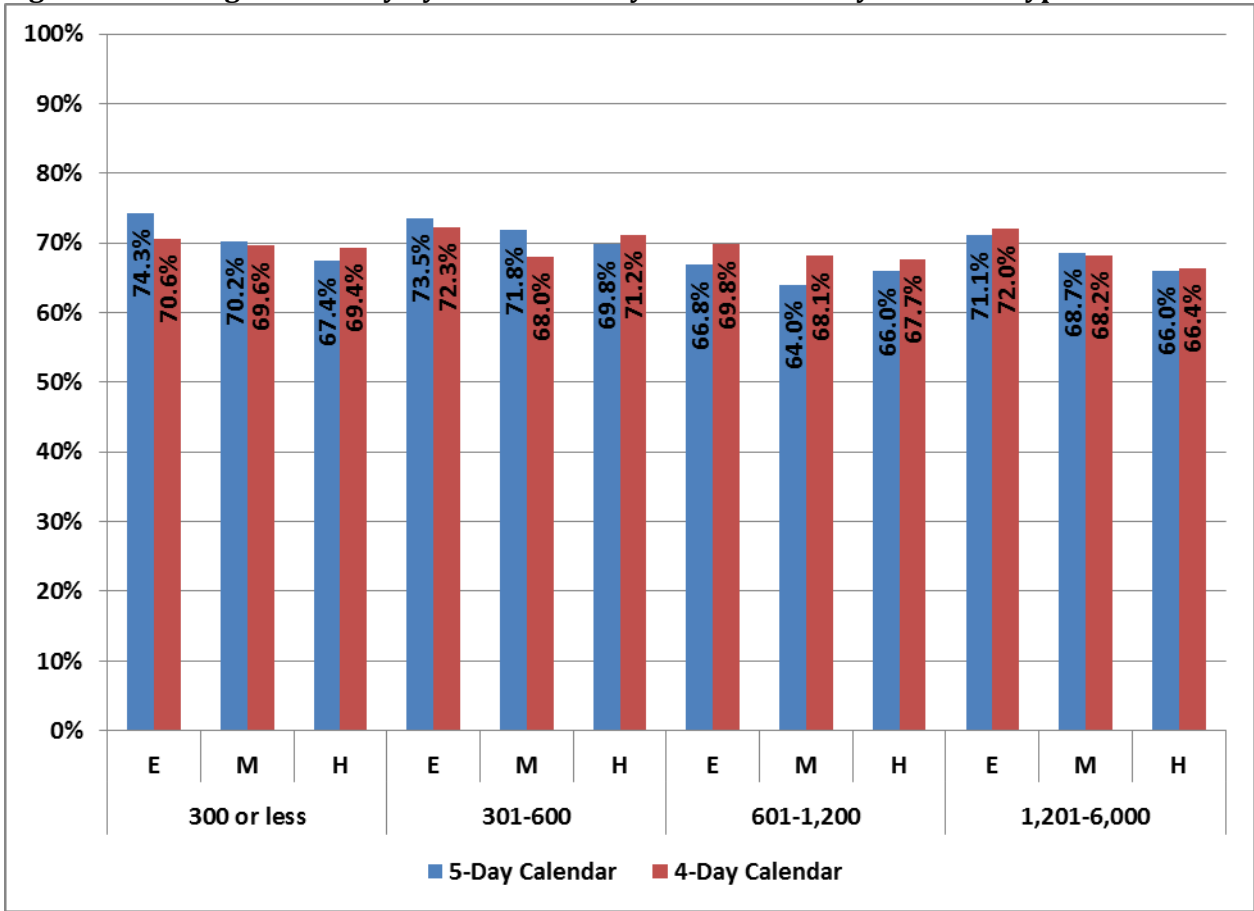


Figure 2: Reading Proficiency by District Size by School Level* by Calendar Type



When comparing results of districts of similar sizes, in the districts with fewer than 300 students and in districts with fewer than 600 students, districts with five-day calendars scored slightly above those with four-day week calendars in elementary school reading achievement. In districts with 600 or more students schools utilizing four-day calendars scored equal to or slightly higher than students in schools with five-day calendars in reading achievement. These data are presented in Figure 2.

Figure 3 shows the results by region of the state. The four-day districts generally have higher reading scores than the five-day districts in most regions of the state. The notable exceptions are in the Southwest Region and the Pikes Peak Region where the scores for the five-day districts exceed those for the four-day districts.

Figure 3: Reading Proficiency by Region by School Level and Calendar Type

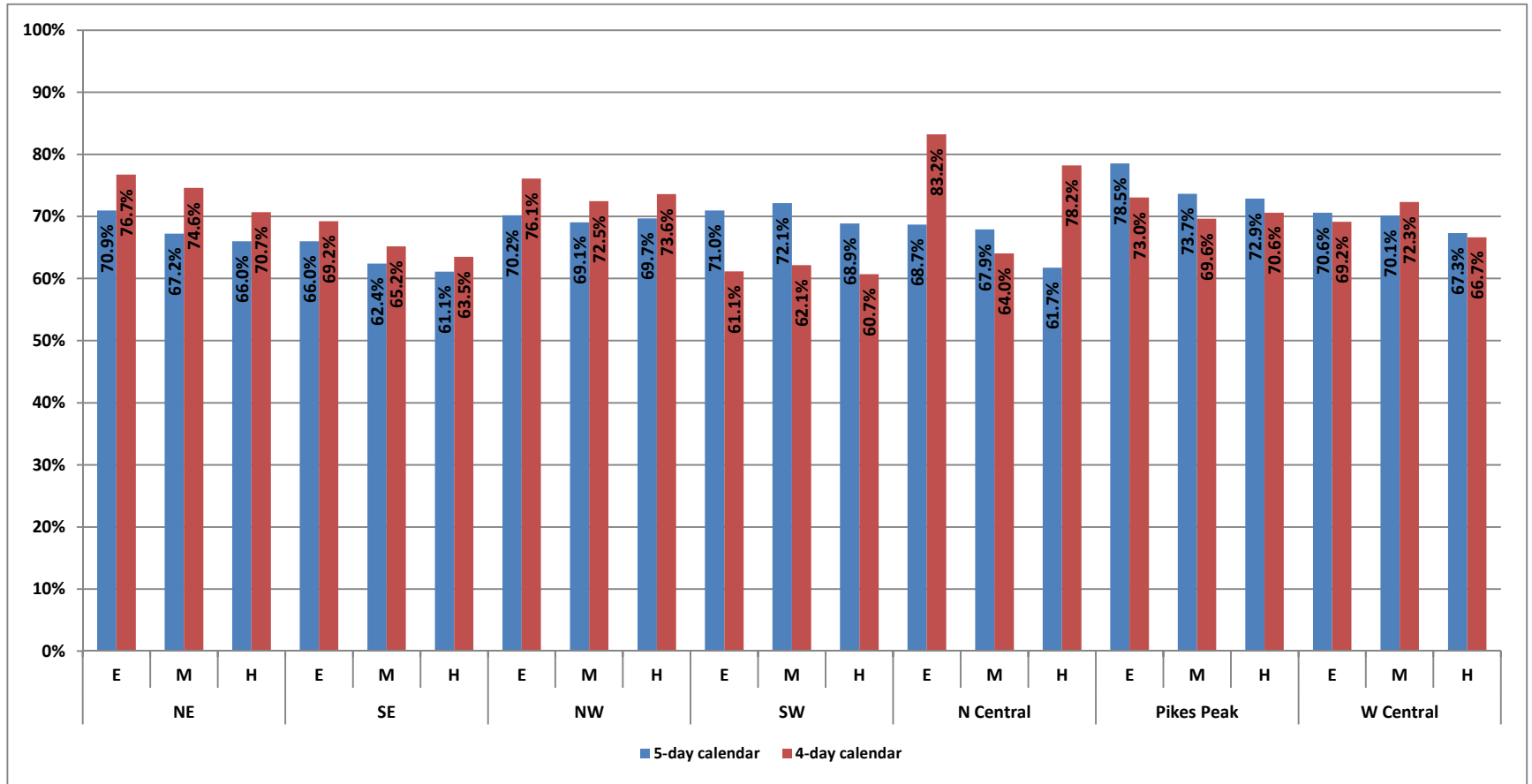


Figure 4 and Figure 5 display the median reading growth (SGP) percentiles. The state average for growth is always at the 50th percentile. Scores at the 50th percentile are considered average. Low achieving students will need growth percentiles that are well above

the state average to take them to high levels of proficiency. The SGP are actual observed growth for a group of students. There appears to be little difference in observed growth based on district size or region.

Figure 4: Reading Growth by Size by School Level and Calendar Type

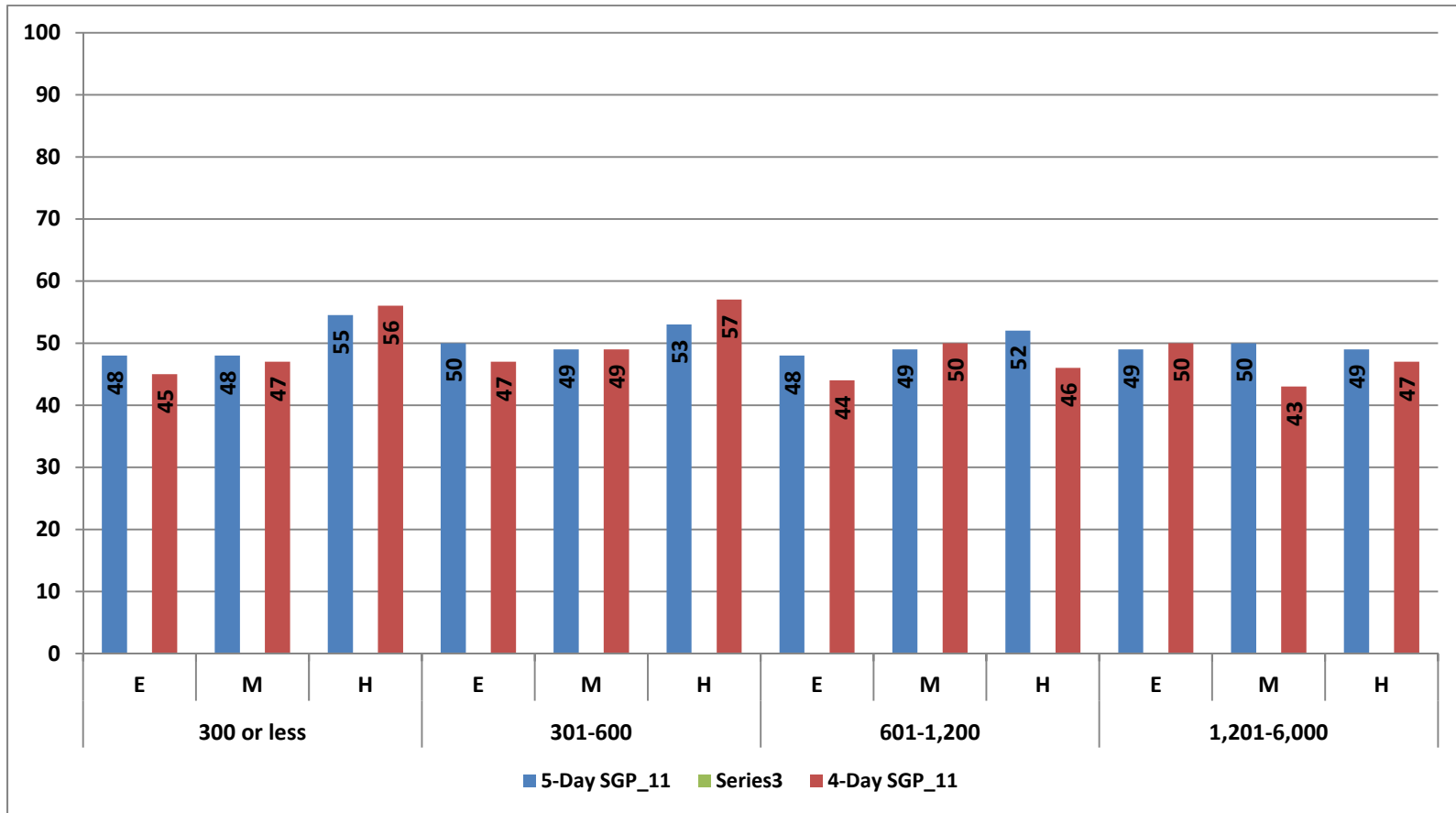
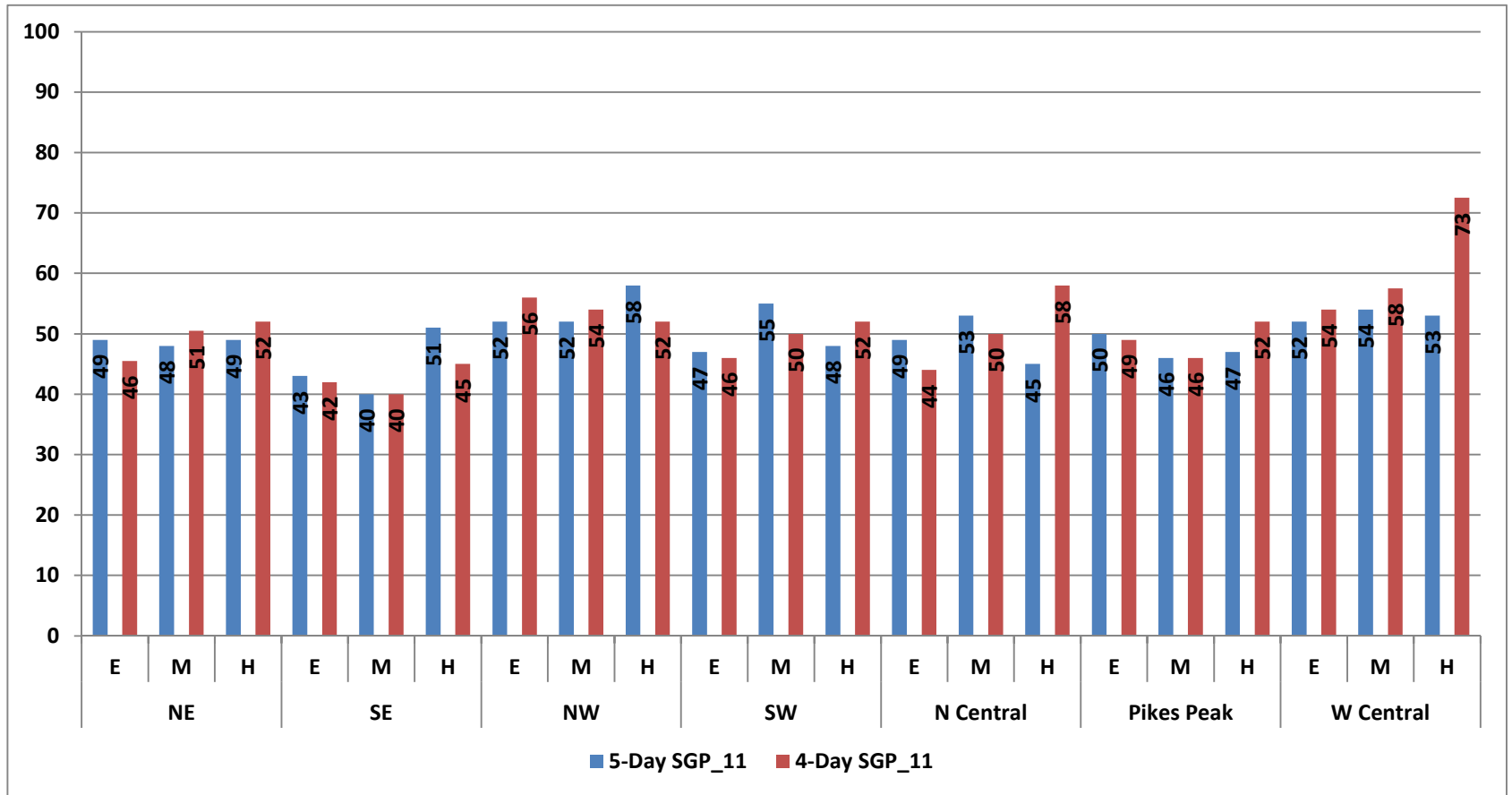


Figure 5: Reading Growth by Region by School Level and Calendar Type



In terms of overall CSAP Math performance in 2011, 69.9% of elementary students in four-day districts were in the proficient or advanced categories, while districts of a similar size on a normal five-day schedule had 69.7% of their elementary students proficient or advanced. Four-day districts had 49.5% of middle school students in the proficient or advanced categories, while districts of a similar size on a normal five-day schedule had 52.4% of their middle school students proficient or advanced. Four-day districts had 28.6% of high school students in the proficient or advanced categories, while districts of a similar size on a normal five-day schedule had 31.9% of their high school students proficient or advanced. These data are presented in Figure 6.

Figure 6: Math Proficiency by School Level by Calendar Type

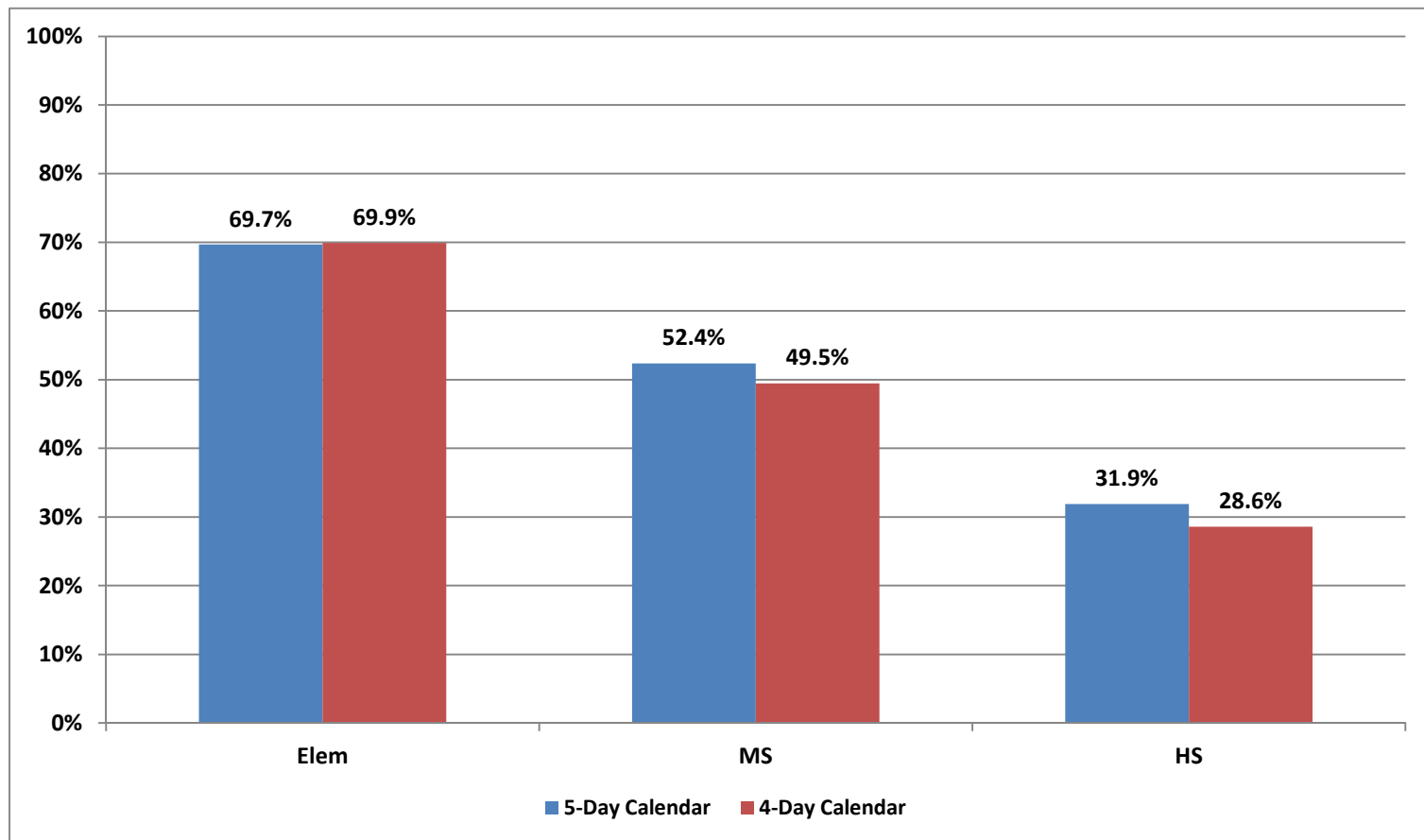


Figure 7: Math Proficiency by District Size by School Level by Calendar Type

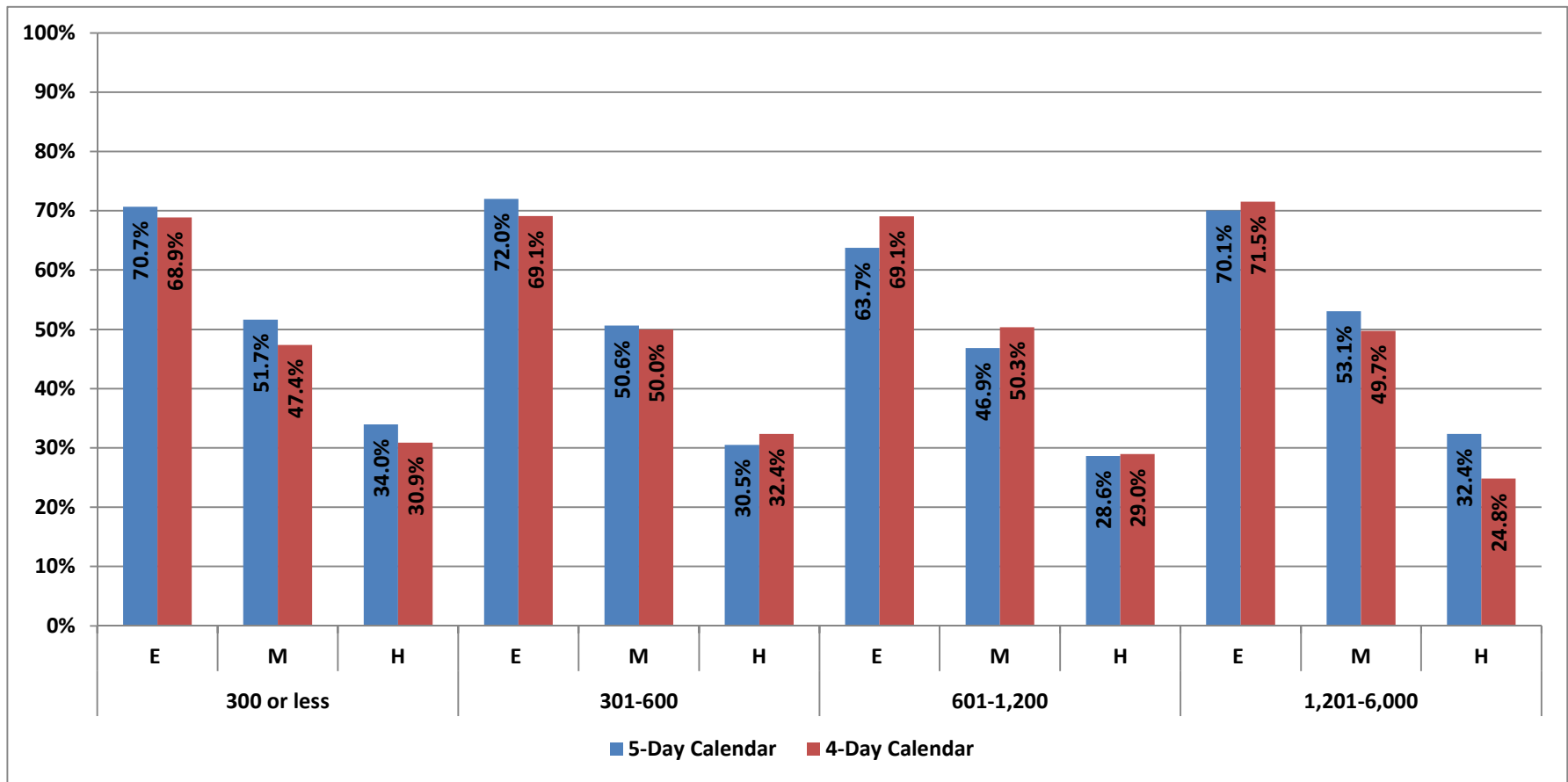


Figure 8: Math Proficiency by Region by School Level by Calendar Type

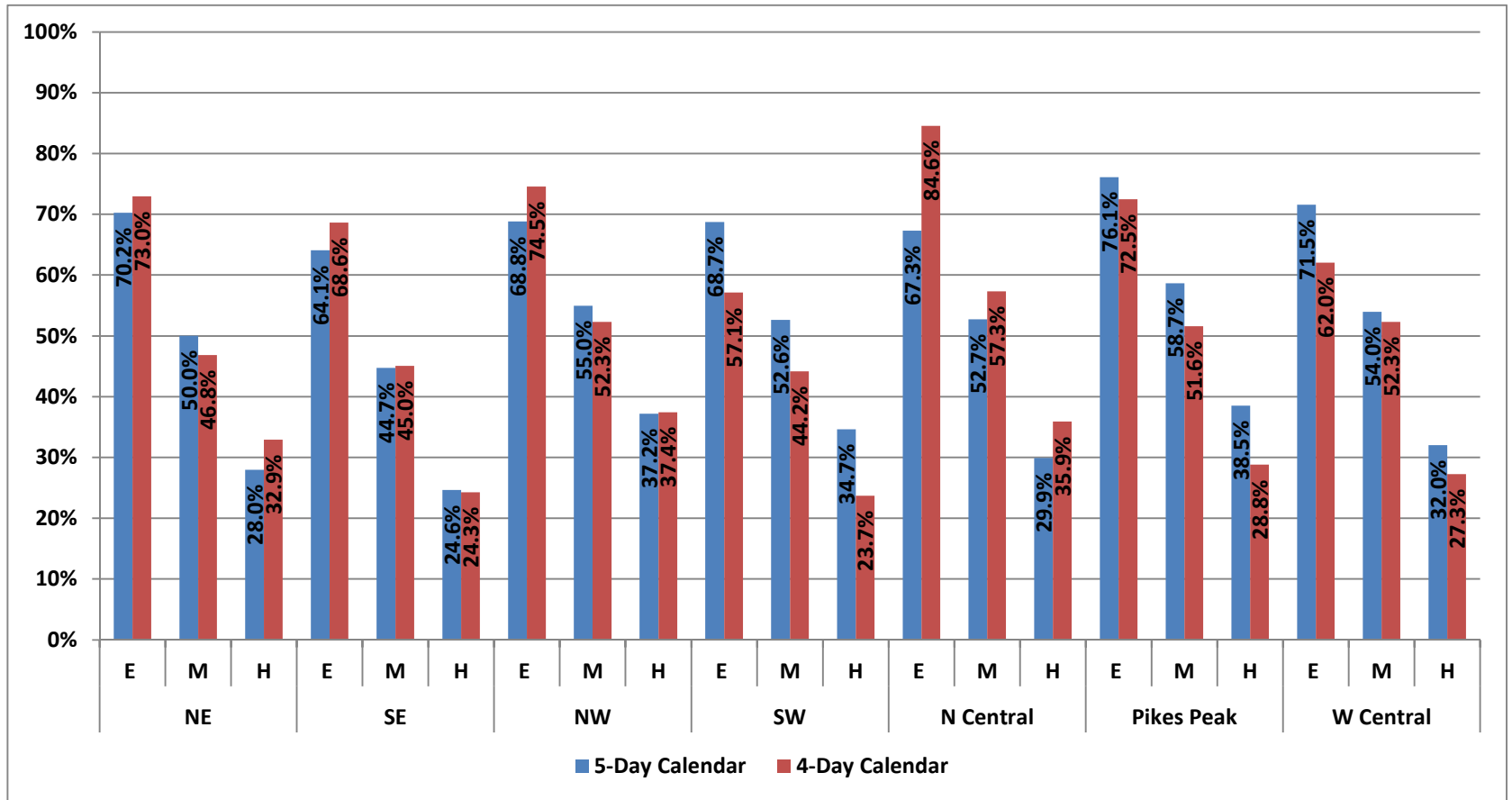


Figure 9: Math Growth by District Size by School Level by Calendar

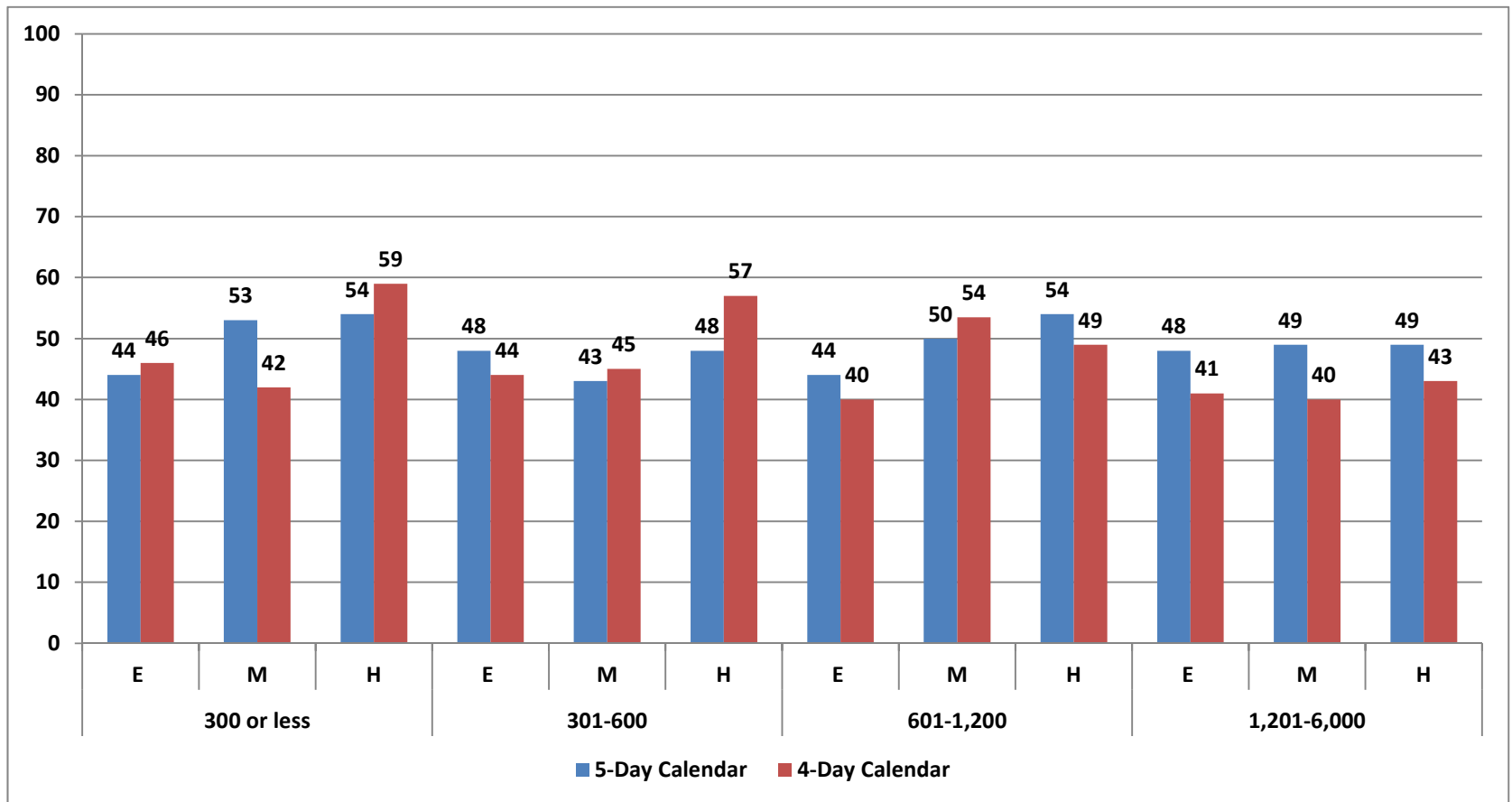
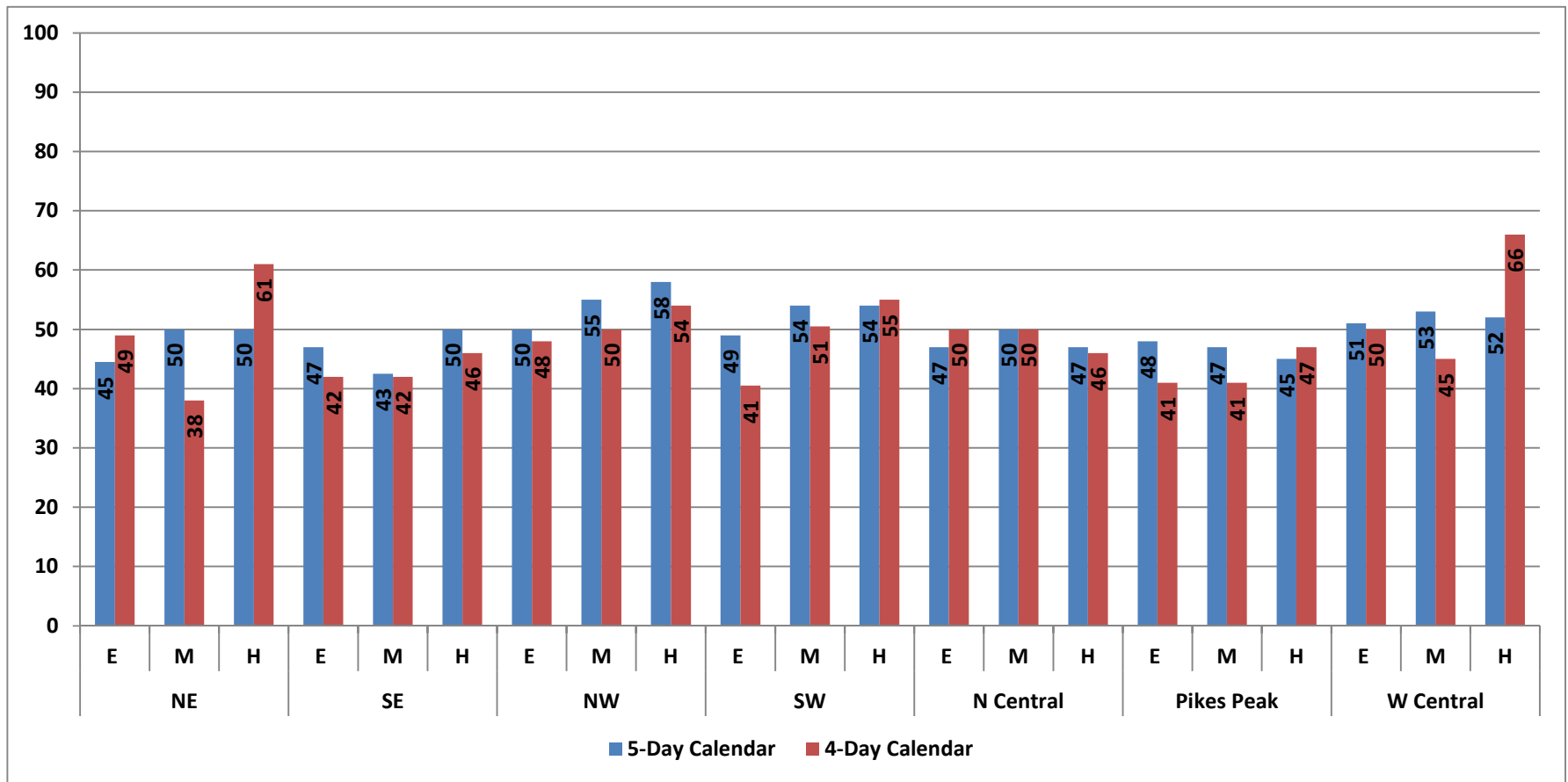


Figure 10: Math Growth by Region by School Level by Calendar



Overall, there appears to be little difference between four and five day weeks in terms of status as reflected in percent proficient and advanced regardless of content area. There also appears to be little clear difference in terms of median growth percentiles in either content area.

There are many other important variables to be considered beyond the achievement and growth data. One of the most prevalent reasons for school districts choosing the four-day week over the five-day week is financial. The research question is whether districts actually save money by using this calendar. Primary savings as a result of being closed one day a week would likely be in transportation, custodial and utility services. Because these costs vary by district, the department may not be able to pull firm data without knowing local district variables.

Appendix A

Districts Using 4-Day Calendar 2011 by Region

| Region | District | October Count 2010 | CSAP Testing Count 2011 |
|------------------|-------------------------|---------------------------|--------------------------------|
| Metro | GILPIN COUNTY RE-1 | 337 | 210 |
| Northeast | DEER TRAIL 26J | 151 | 91 |
| | AGATE 300 | 33 | 15 |
| | HI-PLAINS R-23 | 102 | 68 |
| | GENOA-HUGO C113 | 154 | 88 |
| | LIMON RE-4J | 435 | 250 |
| | KARVAL RE-23 | 233 | 121 |
| | FRENCHMAN RE-3 | 185 | 105 |
| | PLATTE VALLEY RE-3 | 120 | 71 |
| | LONE STAR 101 | 104 | 59 |
| | WOODLIN R-104 | 99 | 61 |
| Southeast | PRITCHETT RE-3 | 60 | 43 |
| | CAMPO RE-6 | 52 | 21 |
| | LAS ANIMAS RE-1 | 503 | 298 |
| | MCCLAVE RE-2 | 272 | 166 |
| | CROWLEY COUNTY RE-1-J | 471 | 298 |
| | HUERFANO RE-1 | 537 | 311 |
| | LA VETA RE-2 | 211 | 130 |
| | EADS RE-1 | 167 | 104 |
| | PLAINVIEW RE-2 | 76 | 51 |
| | TRINIDAD 1 | 1352 | 827 |
| | PRIMERO REORGANIZED 2 | 205 | 116 |
| | HOEHNE REORGANIZED 3 | 323 | 218 |
| | AGUILAR REORGANIZED 6 | 97 | 46 |
| | BRANSON REORGANIZED 82 | 464 | 266 |
| | KIM REORGANIZED 88 | 56 | 39 |
| | CHERAW 31 | 204 | 126 |
| | HOLLY RE-3 | 266 | 157 |
| | WILEY RE-13 JT | 213 | 153 |
| Northwest | WEST GRAND 1-JT | 429 | 270 |
| | EAST GRAND 2 | 1271 | 764 |
| | NORTH PARK R-1 | 185 | 111 |
| | PARK COUNTY RE-2 | 520 | 281 |
| | RANGELY RE-4 | 435 | 261 |
| | HAYDEN RE-1 | 378 | 215 |
| Southwest | SANGRE DE CRISTO RE-22J | 296 | 193 |
| | SANFORD 6J | 318 | 204 |
| | SOUTH CONEJOS RE-10 | 237 | 145 |

| Region | District | October Count 2010 | CSAP Testing Count 2011 |
|-------------------|--------------------------------|----------------------|-------------------------|
| | CENTENNIAL R-1 | 234 | 131 |
| | SIERRA GRANDE R-30 | 260 | 162 |
| | DOLORES COUNTY RE NO 2 | 278 | 150 |
| | CREEDE 1 | 88 | 42 |
| | DEL NORTE C-7 | 567 | 360 |
| | MONTE VISTA C-8 | 1132 | 626 |
| | MOUNTAIN VALLEY RE 1 | 106 | 57 |
| | MOFFAT 2 | 191 | 116 |
| North Central | WELDON VALLEY RE-20(J) | 198 | 127 |
| | BRIGGSDALE RE-10 | 142 | 89 |
| | PRAIRIE RE-11 | 166 | 100 |
| Pikes Peak | CUSTER COUNTY SCH DISTRICT C-1 | 426 | 279 |
| | KIOWA C-2 | 344 | 231 |
| | BIG SANDY 100J | 300 | 199 |
| | ELBERT 200 | 213 | 137 |
| | CALHAN RJ-1 | 585 | 365 |
| | ELLCOTT 22 | 929 | 566 |
| | PEYTON 23 JT | 651 | 417 |
| | HANOVER 28 | 210 | 144 |
| | EDISON 54 JT | 206 | 81 |
| | MIAMI/YODER 60 JT | 294 | 197 |
| | COTOPAXI RE-3 | 204 | 118 |
| | PUEBLO COUNTY 70 | 8562 | 5444 |
| | CRIPPLE CREEK-VICTOR RE-1 | 392 | 217 |
| | West Central | HINSDALE COUNTY RE 1 | 80 |
| PLATEAU VALLEY 50 | | 442 | 196 |
| Total | | 28751 | 17547 |