

## A comparison of Colorado school districts operating on four-day and five-day calendars

### Executive Summary

Sixty-three Colorado school districts operate 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.*

Districts scheduling a school year of 160 days or more need no state approval. Local boards of education annually establish district calendars, but there is no requirement to report or submit calendars to the Colorado Department of Education (CDE). Scheduling a school year of more than 160 days is at the discretion of local districts.

Sixty-Two school districts, constituting 34% of the 178 school districts in Colorado, serving 2.7% of students, utilize the four-day week as the structure for organizing their school year. In simple terms, those districts schedule 7.5 hours per day for 144 days of school instead of the normal six hours for 180 days. In some cases, only a few of the district schools are on a four-day week<sup>1</sup>.

There are currently 55 districts that use the four-day week calendar district wide. There are another six districts that have individual schools, but not the entire district, on this calendar. The districts range in size from 48 students to 1,493 students. One district is located in the Denver

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<sup>1</sup> The Four-Day School Week, Colorado Department of Education, August 2006

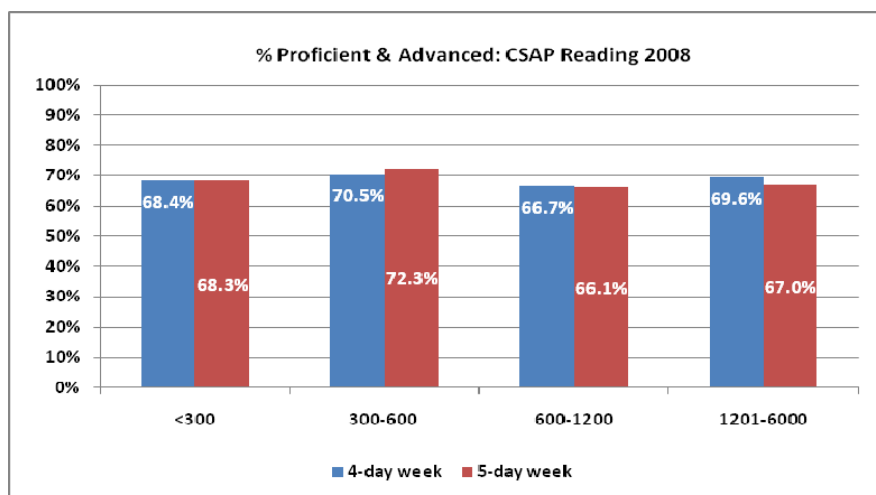
metro area, but is a small district in the foothills (Gilpin County). Ten districts are in the northeast region, five are in the northwest region, 11 are in the Pikes Peak region, 15 are in the southeast region, 10 are in the southwest region, one is in the west central region and two are in the north central region. The 55 districts with district-wide implementation serve 19,180 students (1,731 are in districts with fewer than 200 students, 3,645 are in districts with 200-300 students and 13,804 are in districts with more than 300 students).

In terms of the 2008 accreditation rubric that incorporates both status and growth, four districts were accredited with distinction, 21 were accredited, 17 were accredited with a letter of support, 12 were accredited with notice of support and one district was on probation. The accreditation levels reported here were prior to the addition of the improvement plan points.

In terms of the most recent graduation rates (2008), 22 districts had rates between 90 and 100%, and 29 districts had graduation rates between 70 and 89%. Two districts had graduation rates between 50 and 69% and two districts had graduation rates well below 50%.

In terms of overall CSAP Reading performance in 2008, four-day districts had 68.9% of their students in the proficient or advanced categories, while districts of a similar size on a normal five-day schedule had 67.7% of their students proficient or advanced. 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. There does not seem to be an advantage for either calendar as shown in Figure 1 and Figure 2.

**FIGURE 1**



**FIGURE 2**

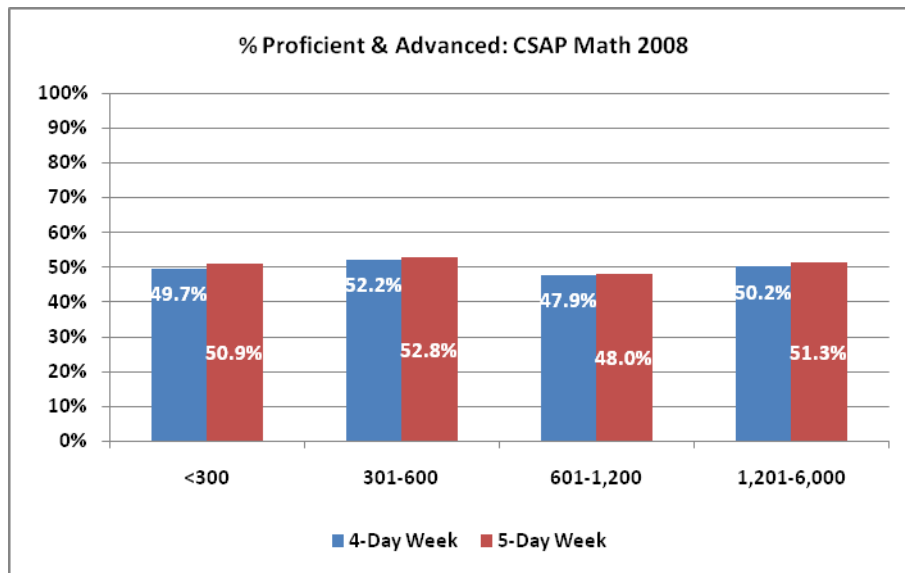


Figure 3 and Figure 4 display the median reading growth percentiles. There appears to be a slight advantage in growth for small districts using the 4-day calendar.

**FIGURE 3**

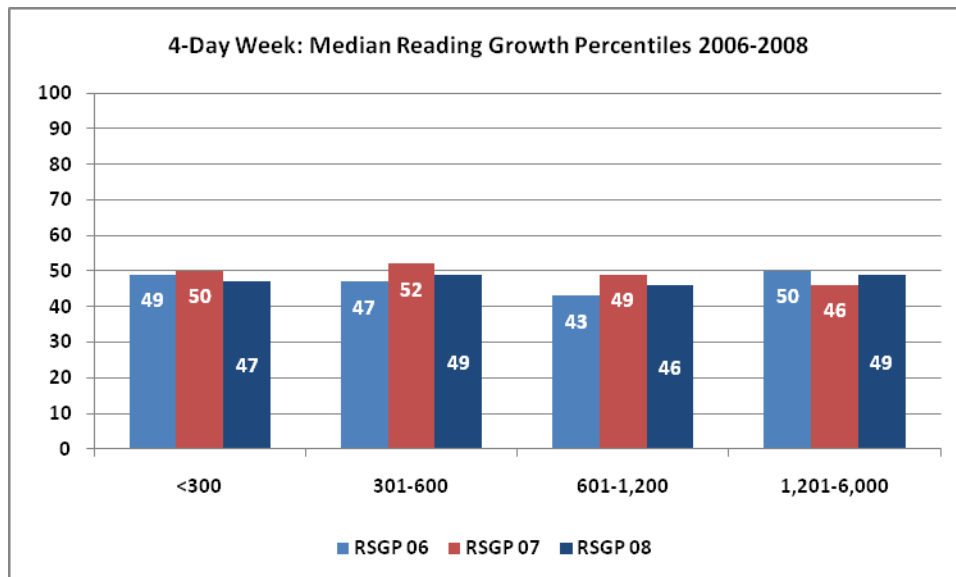


Figure 4

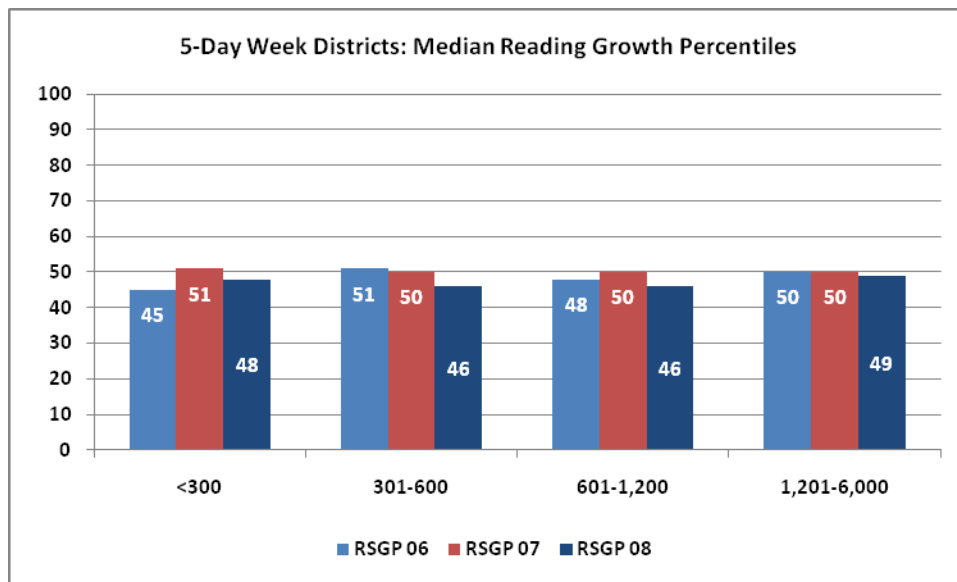
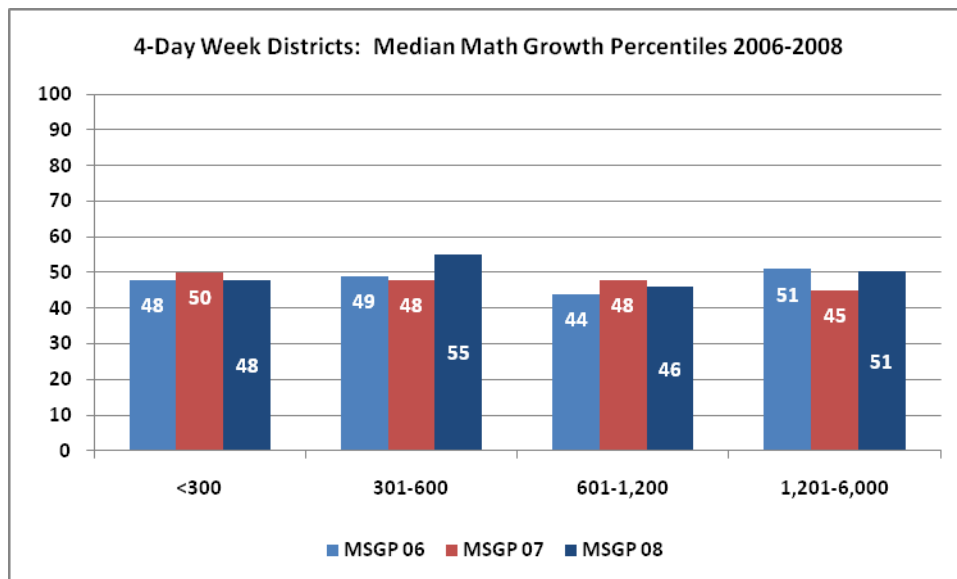


Figure 5 and Figure 6 display the math median growth percentiles. There appears to be a slight advantage in growth for small districts using the 5-day calendar.

FIGURE 5



**Figure 6**

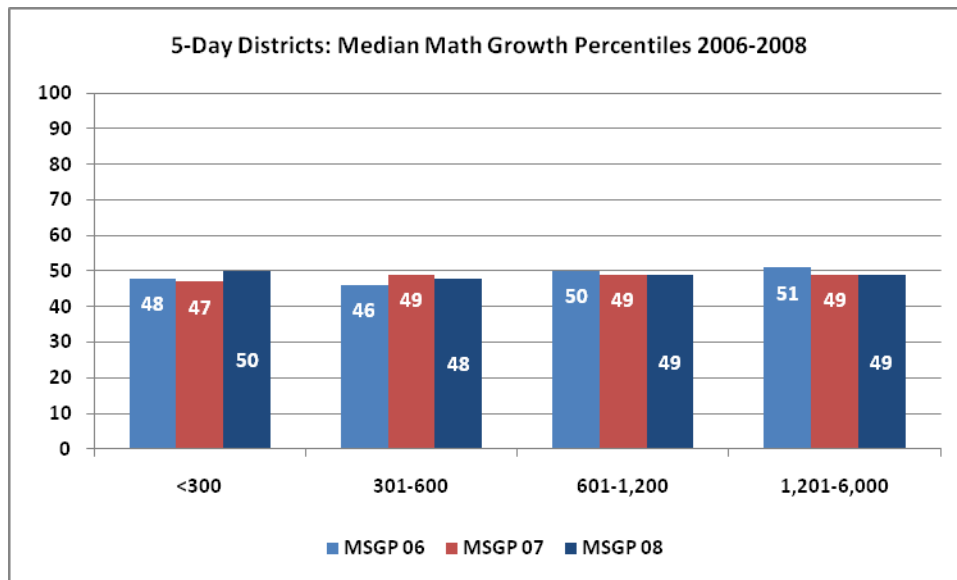
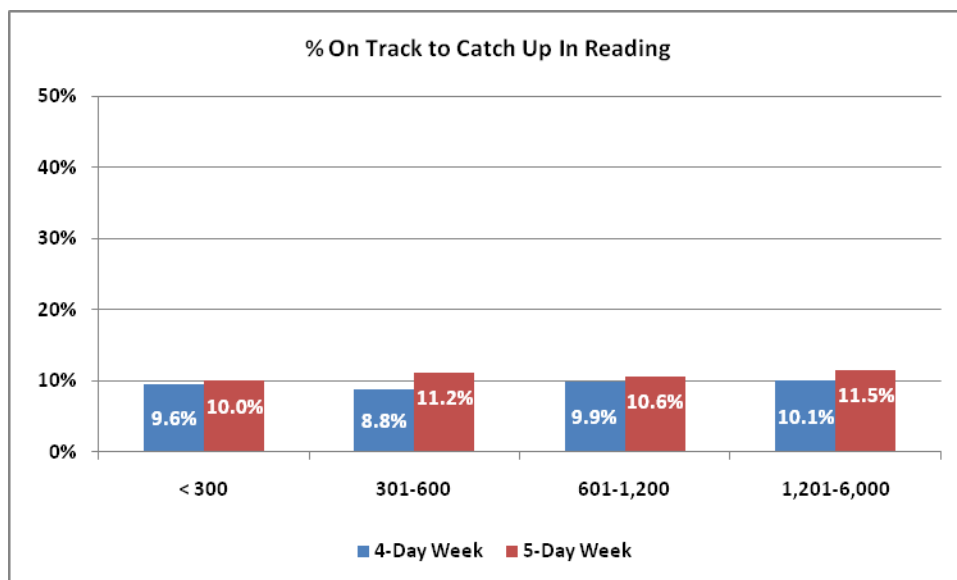


Figure 7 and Figure 8 display the percent of students on track to catch up and keep up in reading. There appears to be a slight advantage in growth for these districts using the 5-day calendar in both cases.

**FIGURE 7**



**FIGURE 8**

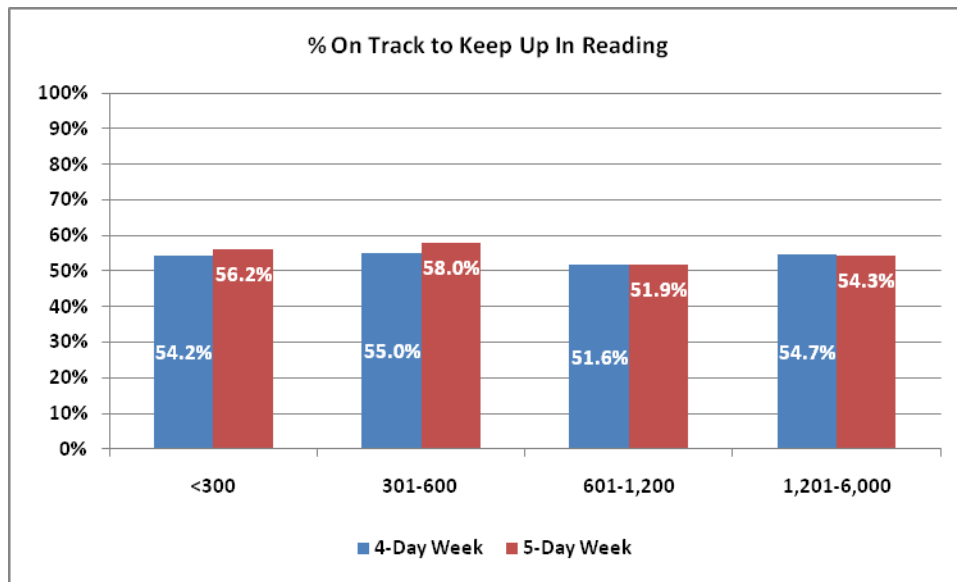
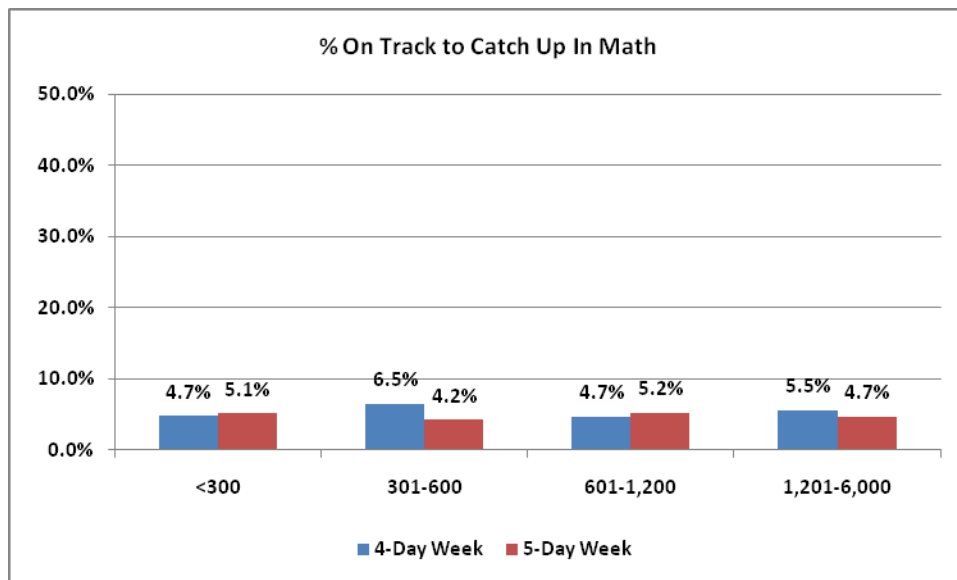
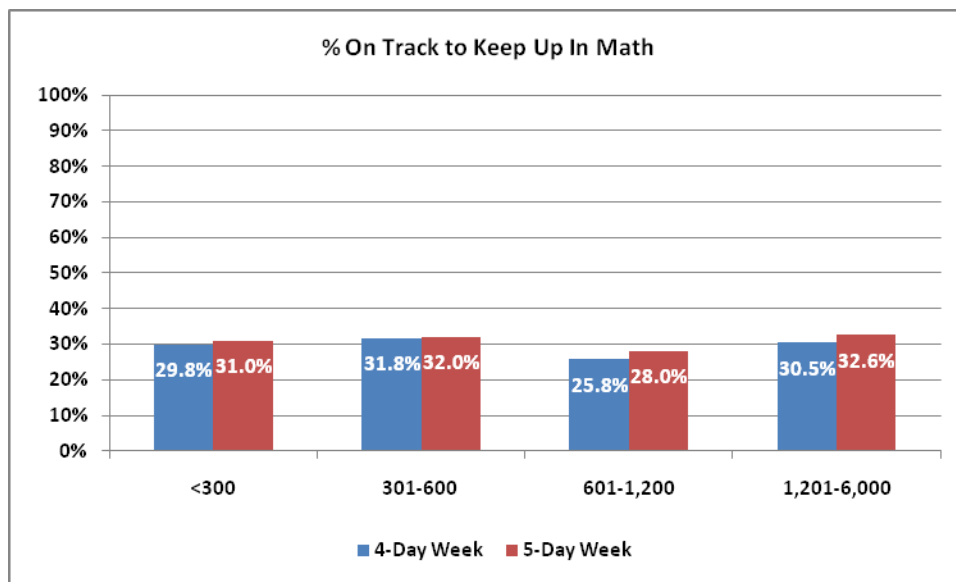


Figure 9 and Figure 10 display the percent of students on track to catch up and keep up in math. Again, there appears to be a slight advantage in growth for these districts using the 5-day calendar in both cases.

**FIGURE 9**



**FIGURE 10**



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. However, there does appear to be a slight consistent differences in the percentage of students on track to catch up or keep up in either content area. This difference favors the five-day school week.

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. Jhon Penn approached Vody Herrmann regarding how we might obtain the financial data to analyze this important variable. 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.