ECOnorthwest

DATE:	February 2, 2026
TO:	Stand for Children Oregon
FROM:	ECOnorthwest
SUBJECT:	Increased Instructional Time in Oregon

Introduction

On average, Kindergarten through 12th grade (K-12) students in Oregon public schools spend less time in school than students in most other states. At about nine percent below the national average, Oregon's students receive fewer instructional *hours* than students in all but four other states. While the typical K-12 public school in the United States is in session for about 180 days, the average Oregon school provides instruction for only about 165 days.[1]

In addition, students in Oregon attend school less often even when schools are open: the state has one of the lowest attendance rates in the nation. During the 2023-24 school year, over one-third of students in Oregon were chronically absent (meaning they missed at least 10 percent of school days)—43rd out of 45 states with available data—compared to 23 percent of students nationwide.[2]

Factors other than instructional time, both inside and outside of school, also determine students' educational success, but the relatively short amount of time Oregon students spend in a classroom places them at a disadvantage from the start, with potential negative short and long-term consequences.

Indeed, from a national perspective, academic outcomes in Oregon have fallen over the past decade. While student performance has worsened across the country, Oregon students' rank among the 50 states and DC has declined from 35th to 48th (reading) and 49th (math) in 4th grade, and from about average to 37th (reading) and 40th (math) in 8th grade.[3] Although Oregon's short school calendars and low attendance rate likely explain only a part of the observed differences compared to other states, research generally confirms that both additional instructional time and a reduction in chronic absenteeism are positively associated with improved educational outcomes. (Some studies also find social or behavioral benefits from increasing classroom time and reducing absenteeism).

[1] The "165" figure is based on the weighted average of instructional time from Oregon school districts collected from Stand for Children Oregon. For a direct comparison, the weighted average was adjusted to account for the fact that Oregon school days are also shorter than the national average.
[2] http://www.future-ed.org/tracking-state-trends-in-chronic-absenteeism/
[3] https://www.nationsreportcard.gov/ndecore/landing

Recognizing this context, Stand for Children Oregon (Stand) engaged ECOnorthwest to assess the potential for improving student outcomes through an extended school schedule and improved attendance. This memorandum summarizes this work.

We modeled several scenarios of increased instructional time in Oregon: (1) increasing mandated instructional time to at least the national average in every school district; (2) reducing chronic absenteeism to pre-pandemic levels; and (3) a combination of (1) and (2). Model results indicate the potential for substantial improvements in student outcomes, although the estimates come with a high degree of uncertainty. The more optimistic estimates are for changes in instructional time and attendance that are furthest from changes observed in the literature and thus, provide an approximate magnitude for potential changes, rather than a precise prediction.

Below, we provide a brief review of the literature on the effects of increased instructional time, including longer school calendars and increased attendance on academic outcomes. Next, we present additional information about instructional time in Oregon, based largely on a set of district-level instructional-time data collected by Stand during the summer of 2025. Finally, we describe a set of scenarios modeled to identify potential improvements in academic outcomes and discuss the findings.

Instructional Time and Absenteeism in the United States

The decentralized nature of the American education system leads to great differences in total school time between states and even school districts, as well as difficulties in collecting data to provide robust comparisons across and within states. All states have minimum requirements for instructional time, but these requirements differ in kind between states. Some only mandate a minimum number of days, some only impose a minimum number of total hours, and others impose both.

Instructional time comparisons across states are further complicated by the fact that states differ on whether and how to count non-academic activities such as lunch and recess as part of that instructional time. In addition, school districts frequently exceed the minimum mandated instructional time, leading to substantial variation within states.

Yet despite difficulties in creating precise comparisons, the available data identify stark differences within and across states. According to Kraft and Novicoff's analysis of instructional time, students attending schools in states with the top 5 most instructional time are in school for at least 1.4 years longer than students in the 5 states with the least (which includes Oregon) over the course of their k-12 education. The contrast is starker at the district level. Students attending schools at the 90th percentile of the distribution of total instructional time are in class for almost 200 hours longer per year than schools in the 10th percentile, which equates to more than two full school years by the end of high school. (Similar disparities within Oregon school districts are explained below).[4]

In addition to differences in formal instructional time, there are multiple classroom- and individual-level factors that can interrupt the instructional time experienced by students, the largest of which is student absence from the classroom. High absenteeism can even affect students who attend class, as teachers may need to adjust instruction to bring absent students up to speed when they return. As with instructional time, absenteeism varies considerably across and within states. Rates of chronic absenteeism (defined as the share of students who miss at least 10 percent of enrolled school days) differ by almost 30 percentage points between states (Alaska's rate was 43 percent in 2023-24, compared to 15 percent for Idaho).

Tardiness, suspensions, and teacher absences, as well as external interruptions caused by intercom announcements, phone calls, or other disturbances, can also widen the gap between formal instructional time and actual learning time, though these are generally difficult to measure across jurisdictions. Kraft and Novicoff's (2022) case study of an urban school district estimated that elementary school students lost an average of 16 percent of

[4] This section informed by Kraft and Novicoff, 2024.

allocated instructional time from such absences and other interruptions while high schoolers lost around 25 percent.[5]

Instructional Time in Oregon Relative to Other States

Across states, Oregon has one of the lowest mandated levels of in-person instructional times. As one of the 10 states that does not specify a minimum number of school days, Oregon requires 900 total instructional hours each year for K-8th graders, elementary schoolers and 990 hours for 9th-11th graders, and 966 hours for 12th graders, on the lower end nationally.[6] When measured by actual instructional time, Oregon ranks 47th in the nation. Only three states (Maine, Nevada, and Hawaii) have shorter levels of average instructional time.[7]

Oregon similarly stands out as a state with high rates of chronic absenteeism. During the 2023-2024 school year, the state had a 34 percent chronic absenteeism rate, behind only Alaska and the District of Columbia. Meanwhile, the national rate of chronic absenteeism was only around 23 percent.

[5] This section informed by Kraft and Novicoff, 2022 and Desilver, 2023.
[6] https://nces.ed.gov/programs/statereform/tab5_14.asp
[7] Kraft and Novicoff, 2024.

What Does The Research Say about The Benefits of Instructional Time?

Many studies find a significant, albeit generally modest relationship, between mandated instructional time and academic performance, while some find relatively large effects. The estimated effects of instructional time vary substantially, likely due in part to the wide range of approaches to increasing instructional time and contexts within which increases occur, and not all studies find a statistically significant positive correlation. The magnitude of impact can vary by such factors as existing instructional time, the manner of increase (such as extra days or additional hours in a day), the grade level, and the subject. The largest effect sizes are typically associated with efforts that package increased instructional time with other interventions, such as at charter schools.[8]

Researchers typically find what are considered relatively "small" effects. For example, many find that an extra hour of school per day (an increase of about 14 percent) can lead to learning gains of between one-twentieth and one-eighth of typical annual gains.[9,10] The estimated effects are generally higher for math test scores than for English and language arts (ELA) scores, often by about two times. Additionally, while the literature on school time has generally focused on standardized test scores, some studies also find increased instructional time to be associated with improved social behavior and a reduced likelihood of suspensions.[11]

Likewise, research consistently demonstrates that absences can negatively impact student performance, including for other students in the classroom. Here again, the available research contains a wide range of estimated effects. One fewer day of absence has been associated with between one and twelve percent of test score gains a year (the latter effect was for absences relatively close to the test administration date). Research has also found absences to be associated with a reduced likelihood of on-time graduation and college enrollment as well as decreased executive functions, including among the classmates of those who were absent.[12]

Finally, absences are generally found to have a greater effect than mandated instructional time on academic performance. One study found that elementary school absences are about three times as detrimental to achievement as a comparable loss in instructional time. Another study found absences induced by bad weather reduced math achievement but instructional time lost due to bad weather (cancelled school days) did not.[13]

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[8] Kraft and Novicoff, 2024.
[9] Based on effect sizes of 0.02 and 0.05 standard deviations in test scores and a standard benchmark that a year of learning gains corresponds to about 0.40 standard deviations in test scores.
[10] Aucejo and Romano, 2016; Figlio, et al, 2018; Kraft and Novicoff, 2024.
[11] Abt Associates, 2016; Schueler, 2020
[12] Gershenson et al, 2017; Gottried and Ansari, 2022, Gottfried and Kirsksey, 2017; Liu et al, 2021
[13] Aucejo and Romano, 2016; Goodman, 2014

Instructional Time and Chronic Absenteeism in Oregon

To supplement the limited data on within-state variation in mandated instruction time available from other sources (e.g., Kraft and Novicoff, 2024), Stand compiled school calendar and related data from 165 school districts in Oregon, during the summer of 2025 (also updated during January 2026). These data collectively cover about 93 percent of Oregon's public K-12 students. The data collection included instructional time for elementary and high school. Middle school grades were omitted to allow timely collection of reasonably complete data for other grades. These data highlight that, like nearly all states, students within Oregon experience a wide range of instructional time during the school year.

We explored relationships between instructional time, chronic absenteeism, student demographics, and student outcomes. Most of our analysis focuses specifically on elementary school instructional time. Based on the collected data, annual instructional time in Oregon ranges from 925 hours to 1,176 hours, with students attending schools that provide, on average, 1,111 hours. Similarly, mandated instructional time in high school ranges from 925 to 1,304 hours across districts, with schools providing an average of 1,177 hours.[14]

The observed variation indicates substantially different access to learning across districts. In effect, elementary school students in the district with the most instructional hours in the state receive about 1.4 years of additional instructional time by 5th grade and almost 3 additional years by 12th grade than a student in districts providing the least amount of instructional time. Students attending schools at the 90th percentile of the instructional time distribution receive the equivalent of about two-thirds of an additional year of classroom time before 6th grade and around 1.3 additional years by high school graduation, than schools in the 10th percentile.[15]

Oregon also stands out as a state in which many districts (at least 60 districts, or about 15 percent of public K-12 students, as of 2025) have four-day weeks. Although these districts generally have longer school days than standard five-day districts, the four-day schedules can be as short as 137 days a year. On average, elementary school students in four-day districts have access to about two percent less instructional time than those in 5-day districts. In high school, the difference is about five percent.

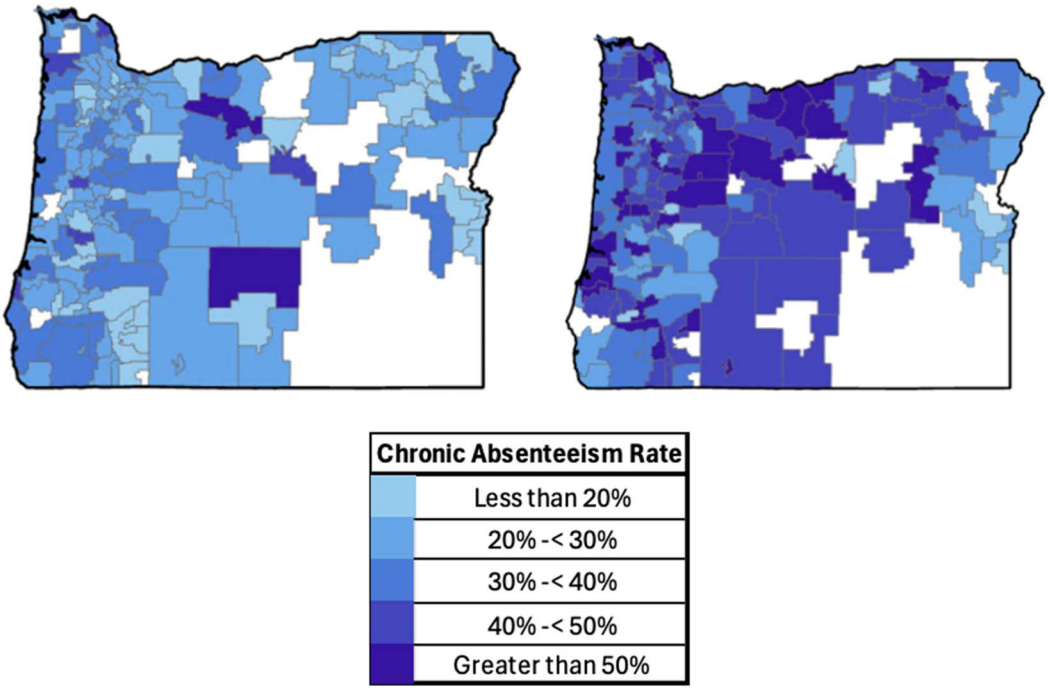
Chronic absenteeism also varies considerably across districts. Of districts for which the Oregon Department of Education published data, chronic absenteeism ranged from 5 to 60 percent in 2024-25, with a statewide average of 33.5 percent. Chronic absenteeism also

[14] Kraft and Novicoff, 2024, indicate that instructional time in Oregon averages 1,164 hours across all grades (based on a different data source).
[15] We do not have middle school instructional time data so these calculations are approximate.

differs across grades, from a low of 25.5 percent in 3rd grade to 52.5 percent in 12th grade. Exhibit 1 displays the geographic distribution of chronic absenteeism in 3rd and 11th grades in 2024-25, corresponding with the first and last grades at which Oregon students take the state standardized achievement tests. Although there is some geographic concentration, districts with high and low rates appear throughout the state.

We find a small, positive correlation between mandated instructional time and chronic absenteeism at both the elementary and high school levels. Students in high mandated instructional-time districts tend to miss more school than those in districts with less mandated instructional time, although only the latter is statistically significant at conventional levels (p=0.12 and p=0.04, respectively). The available attendance data do not contain enough information to determine the extent to which these patterns serve to equalize the amount of time students actually spend in the classroom.

Exhibit 1. Map of Chronic Absenteeism in 3rd (left) and 11th (right) grade by District, 2024-25



We also examined how mandated instructional time and chronic absenteeism varied with student demographics, specifically the share of students identified as non-white or Hispanic and the share of students experiencing poverty. This analysis sought to determine whether the identified variation in instructional time disproportionately affects certain student

populations. (We did not examine subpopulation-specific outcomes, such as chronic absenteeism, by race and ethnicity).

We found no statistically meaningful relationships between instructional time and the identified demographic characteristics. We did find positive correlations between district chronic absenteeism and the share of a district's students identified as non-white, and with the share of students experiencing poverty ($p<0.001$). Estimates indicate that a 10 percentage point increase in the share of students identified as non-white corresponds to a 2.4 percentage point increase in chronic absenteeism within the district. Meanwhile, a 10 percentage point increase in the share of students experiencing poverty corresponds with a 5.8 percentage point increase in chronic absenteeism.

Exhibit **2** and Exhibit 3 display these relationships visually. Although not a primary focus of this study, these well-known relationships highlight the importance of addressing disparities in the time students spend in school to ensure equitable outcomes for all of Oregon's students.

Finally, we examined how outcomes on Oregon's standardized achievement tests (OSAS) vary with mandated instructional time and chronic absenteeism. Exhibits 4 through 7 below illustrate these relationships for 3rd grade proficiency in math and ELA (patterns are similar for 8th grade). None of the relationships were statistically significant, but the trends illustrate findings from the literature, specifically, that chronic absenteeism has a stronger correlation with achievement than instructional time and that math achievement is more strongly associated with both chronic absenteeism and instructional time than ELA achievement.

Exhibit 2. Share of Students Experiencing Poverty by District Chronic Absenteeism Rate, 2024-25

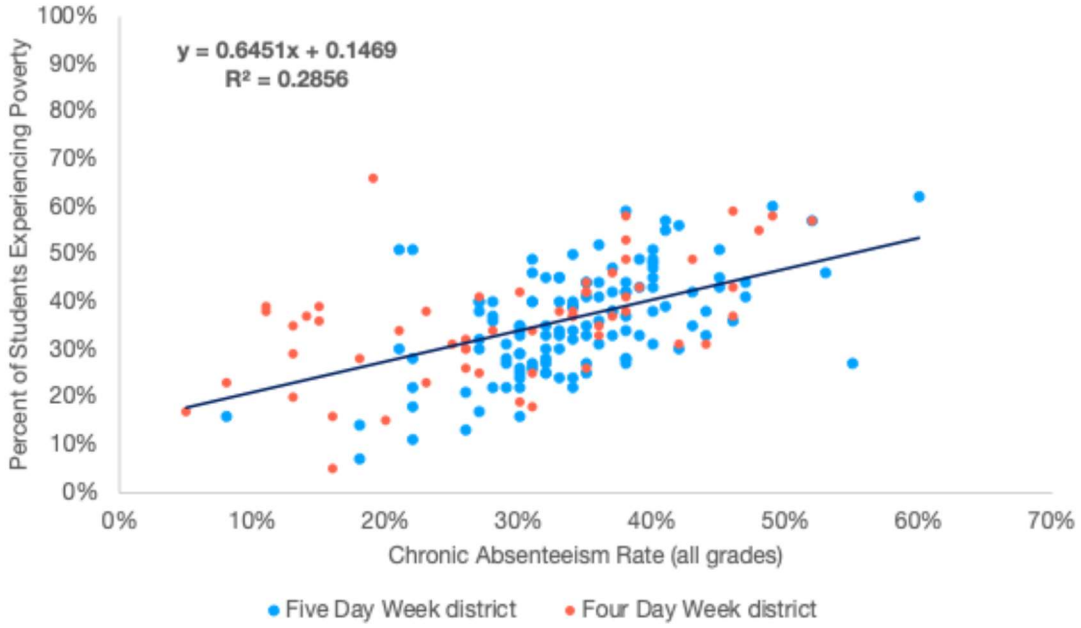


Exhibit 3. Share of Students Identified as a Hispanic or non-white by District Chronic Absenteeism Rate, 2024-25

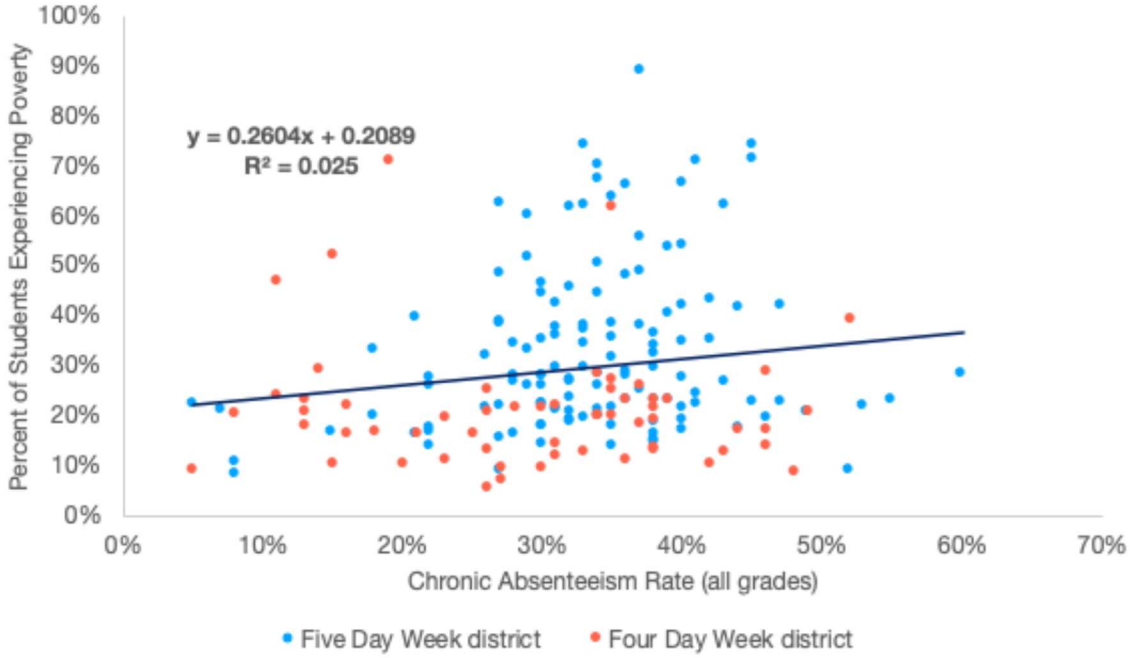


Exhibit 4. 3rd Grade Language Arts Proficiency by Instructional Time (by District)

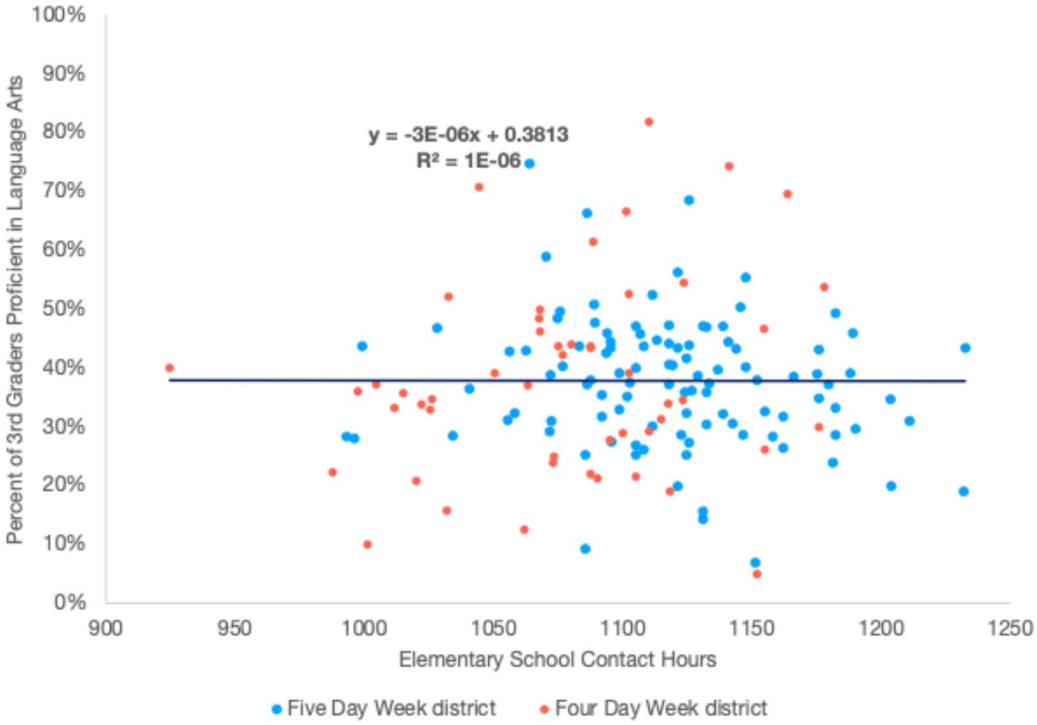


Exhibit 5. 3rd Grade Math Proficiency by Instructional Time (by District)

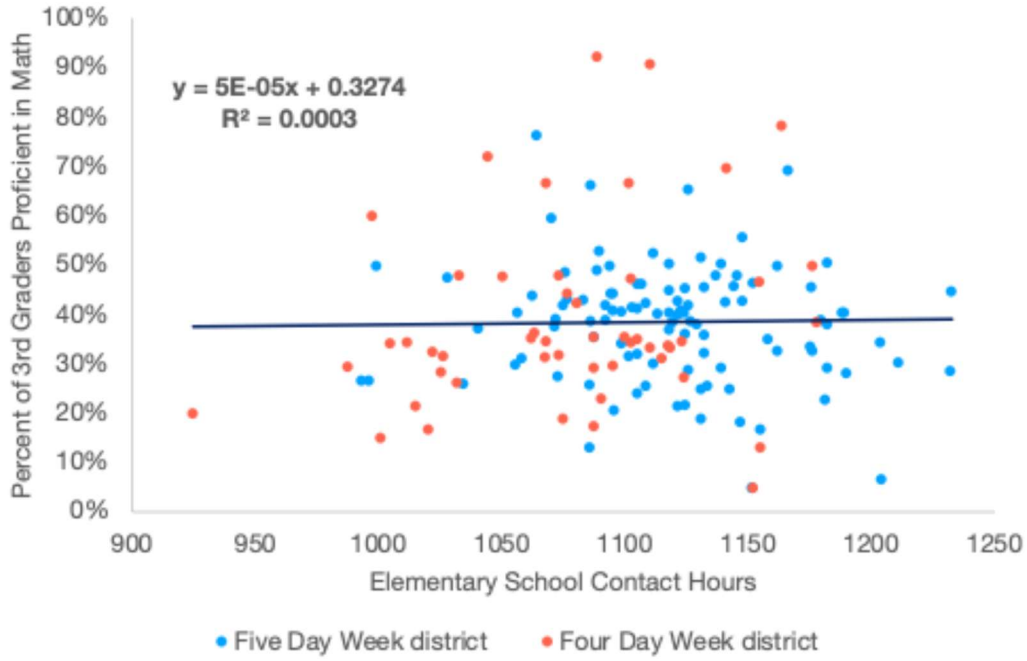


Exhibit 6. 3rd Grade Language Arts Proficiency by Chronic Absenteeism Rate (by District)

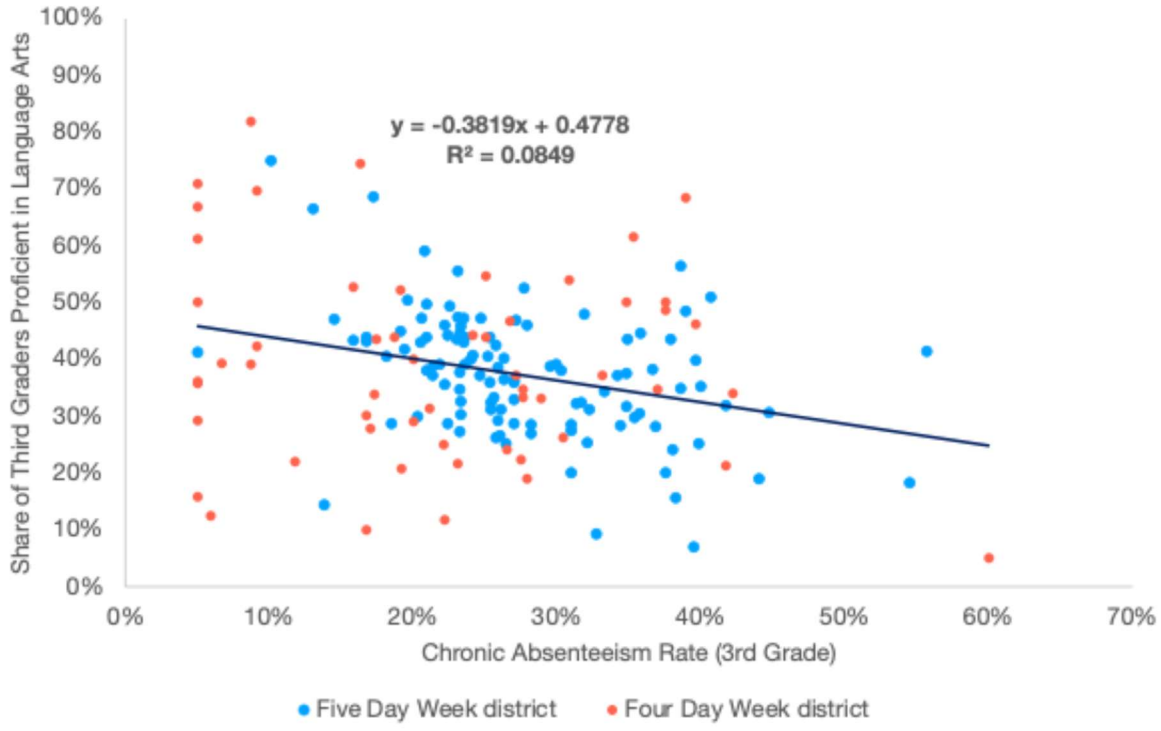
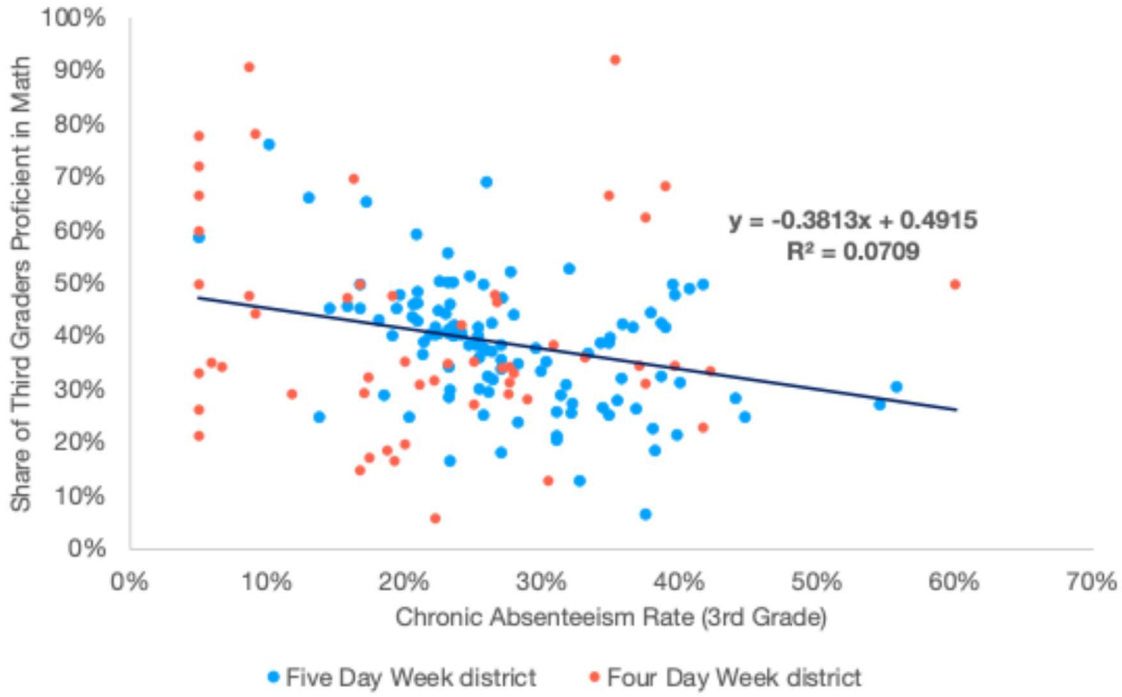


Exhibit 7. 3rd Grade Math Proficiency by Chronic Absenteeism Rate (by District)



Estimating the Effects of Increasing Instructional Time on Student Achievement

To understand how increasing instructional time could improve these outcomes, we rely on the research literature rather than the descriptive statistics for Oregon, which do not by themselves identify causation. We cannot conclude from the Oregon data alone the extent to which higher rates of chronic absenteeism create differences in proficiency. Conversely, despite the seeming lack of strong correlations shown in Exhibit 4 and Exhibit 5, we cannot assume that instructional time has no impact on the performance of Oregon students.[16]

In this section we describe three scenarios that apply findings from the research literature to Oregon-specific data to provide high-level estimates of how specified increases in mandated instructional time and student attendance could affect student outcomes within Oregon and relative those in other states based on their National Assessment of Educational Progress (NAEP) performance. Scenario 1 models an increase in mandated instructional time; Scenario 2 models a decrease in chronic absenteeism; and Scenario 3 combines Scenario 1 and Scenario 2. Results follow the descriptions of the basic modeling approach and of each scenario.

Basic Modeling Approach

The basic modeling approach proceeds as follows.

- **First, we identify an "effect size" from the relevant literature.** Estimated effective sizes provide empirically-based parameters for the model that identify the change in an outcome (e.g., math achievement) expected from a given "dosage" (e.g., 10 percent increase in instructional time) of an intervention on the outcome. For the modeling, we rely on so-called standardized effect sizes that are measured in units independent of a specific test, allowing us to apply results based on one test to outcomes from another.[17]
- **Second, quantify the change in instructional time ("dosage") associated with the scenario and scale the selected effect size.** This involves applying the assumed change to the district-level data available for this project. For example, we assume in Scenario 1 that, based on the literature, increasing instructional time by 10 percent (about 17 school days in Oregon) would improve achievement by about 11 days of typical learning gains. In that scenario, the modeled increase in instructional time is

[16] For example, Thompson (2021) finds a positive effect of instructional time on achievement in a study of Oregon student outcomes.
[17] A 10 percent increase in instructional time would not typically increase achievement by 10 percent of annual learning gains largely because so many factors other than classroom time affect academic outcomes.

on average nine percent, and the net modeled effect is slightly less than two weeks of learning gains.

- **Third, adjust the results from Step 2 to account for increased instructional time across multiple years, and other factors.** Most studies examine the effects of increased instructional time after one year, but students in a district that increase mandated instructional time would benefit in every grade that provides more classroom time. However, research indicates that the effects of instructional time can vary by grade and that the effects of educational interventions typically fade out to some extent over time, and we model outcomes after one, four, five, and nine years of increased instructional time.

  As a result, the scenarios incorporate the following adjustments:

  - Based on Gersheson et al, 2017, we assume that effects on kindergarten and 1st grade students are one-third as large as the assumed effects on 4th and 5th grade students; effects on 2nd and 3rd grade students are assumed to be two-thirds as large.
  - Based on Watts et al, 2025, we assume that beneficial effects are reduced by 50 percent in the second year and by 75 percent for subsequent years.
  - Finally, many Oregon students move into the state after kindergarten and would not directly benefit from increased instructional time in grades they attended in other states. Thus, we reduced the assumed effects by 2.5 percent each year to account for this migration, based on patterns observed in data from the 2024 American Community Survey.

- **Last, apply the results of the third step to achievement data.** We apply calculated effects to estimate the change in Oregon 4th and 8th grade NAEP performance relative to other states . We provide output for the scenarios as stated as well as adjusted for the fact that much research finds stronger effects on math than on ELA outcomes.

Calculations are generally done at the district level. The scenario descriptions below provide statewide average changes.

Scenario 1: Increase Mandated Instructional Time

- **Effect size:** 10 percent increase in mandated instructional time increases achievement by the equivalent of about 11 days of annual learning gains (0.025 of the standard deviation of test scores).
- **Improvement in instructional time:** Increase instructional time to the national median among states for all districts with below-average mandated instructional time. This results in a net increase of about 9 percent (100 hours per year, or about

15 additional school days). Only three districts had mandated elementary school instructional time above the threshold of 1,211 hours per year.

Scenario 2: Reduce Chronic Absenteeism

- **Effect size:** 10 percent increase in average attendance increases achievement by the equivalent of about 33 days of annual learning gains (0.075 standard deviations), based on Aucejo and Romano (2016), among others.
- **Improvement in chronic absenteeism:** Reduce chronic absenteeism from 2024-25 levels to the pre-pandemic statewide average from 2018-19.
    - The elementary school (K-5th grade) chronic absenteeism rate was 15.7 percent in 2018-19 and 28.0 percent in 2024-25.
    - The scenario would reduce elementary school chronic absenteeism to 15.6 percent (some districts already had rates lower than the benchmark of 15.7 percent).
    - Assume that average attendance falls by half of the change in chronic absenteeism, in percentage point terms. This assumption is consistent with the observed change in average attendance and chronic absenteeism in Oregon between 2014-15 and 2016-17, the last year for which ODE published average attendance and chronic absenteeism data. However, the observed changes were much smaller than those described for this scenario and we do not have data on current average attendance.

Scenario 3: Combined

- Scenario 3 combines the effects modeled for Scenarios 1 and 2.

Scenario Results

Exhibit 8 presents the results of each scenario. The left panels provide the average change in achievement in standard deviation units ("Change in SD") and the corresponding estimate of the associated learning gains expressed as a percent of typical annual learning growth. The right panels provide the estimated change in Oregon's rank among states had students demonstrated the modeled achievement increase as of the 2024 NAEP test administration. As noted in the table, results are provided assuming one year of improvement (4th grade), five years of improvement (K-4th grade), and nine years of improvement (K-8th grade)

Across outcomes and modeled years, we estimate increasing effects of Scenario 1 (increased mandated instructional time), Scenario 2 (reduced chronic absenteeism), and Scenario 3 (combined). Not surprisingly, effects are larger for estimates associated with more years of exposure to improved conditions as students are assumed to benefit from more years of increased instructional time and improved attendance.

Improvements estimated for one year of exposure (4th grade, top of the NAEP panel) are fairly minimal. However, estimated improvements for 8th grade outcomes are substantial under Scenario 3.

Exhibit 8. Scenario Results

4th grade (one year of imp.)	Change in SD	Approx. years of learning gains	4th Grade ELA (current: 48th)	4th Grade Math (current: 49th)
Scenario 1	0.023	6%	47	49
Scenario 2	0.053	13%	44	48
Scenario 3	0.076	19%	41	47
4th grade (five years of imp.)	**Change in SD**	**Approx. years of learning gains**	**4th Grade ELA (current: 48th)**	**4th Grade Math (current: 49th)**
Scenario 1	0.038	10%	46	49
Scenario 2	0.087	22%	41	46
Scenario 3	0.125	31%	37	40
8th grade (nine years of imp.)	**Change in SD**	**Approx. years of learning gains**	**8th Grade ELA (current: 48th)**	**8th Grade Math (current: 49th)**
Scenario 1	0.060	15%	27	41
Scenario 2	0.139	35%	13	32
Scenario 3	0.199	50%	6	25

Conclusions

The results of the scenario modeling described above suggest that sustained commitment to increasing classroom time for Oregon's public K-12 students could yield large benefits. Importantly, the results indicate the importance of sustained investment in providing learning opportunities across all grades.

The results are supported by rigorous research but come with several important caveats. Specifically, data limitations, range of estimates suggested by the literature, and ambitious changes embodied in the scenarios mean that the results should be treated as order-of-magnitude estimates rather than precise predictions. For example, we estimate that Scenario 3 could have moved Oregon from 48th to 6th among states in ELA on the 8th grade NAEP had the scenario been fully realized by 2024. Given the noted uncertainties, however, a reasonable conclusion would be that Scenario 3 could move Oregon from bottom-tier performance (in a relative sense) to top tier.

In addition to acknowledging these uncertainties, considering the relative costs of increasing instructional time, improving attendance, and other educational interventions is critical to charting an efficient and effective path forward for Oregon's public K-12 system.

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