

Connecting Attendance and Academic Outcomes

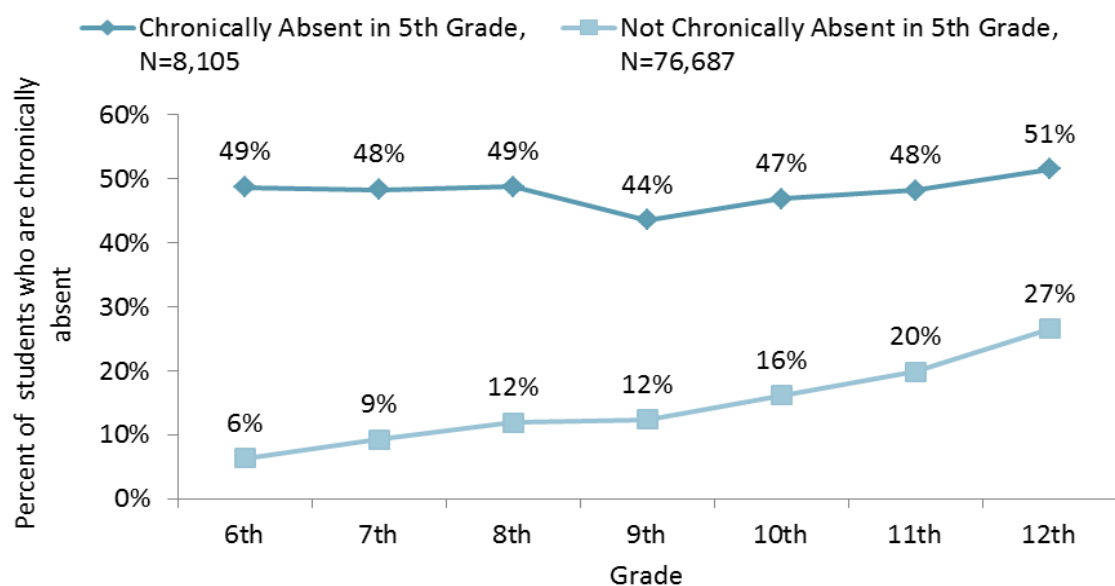
Many national research studies have connected early attendance patterns to academic outcomes. Chang and Romero (2008) found that students who were chronically absent in kindergarten had the lowest academic performance outcomes in 1st grade.ⁱ In addition, those students had the lowest performance on reading and math tests in 5th grade.ⁱⁱ Similarly, ECONorthwest found that students with the highest rates of absenteeism in kindergarten and 1st grade in Oregon had the lowest test scores in 5th grade.ⁱⁱⁱ Other researchers find that test scores and GPA decline with poorer attendance and rise with better attendance (Hancock et al, 2013; Balfanz, 2012).^{iv,v}

The following section highlights several trends in Oregon that show the correlation between chronic absenteeism and various academic outcomes. Oregon student patterns follow the national trend in that students with better attendance have better outcomes.

Fifth-grade chronic absenteeism is a moderately powerful indicator of future chronic absenteeism

Fifth-grade chronic absenteeism is a moderately strong predictor of chronic absenteeism in subsequent grades, particularly 6th, 7th and 8th grades.^{vi} Figure 1 shows combined data from three intact cohorts of students from 5th through 12th grade. The figure shows that, in any given year, about half of the students who were chronically absent in 5th grade were chronically absent in 6th through 12th grade. This suggests the importance of developing good attendance habits early in a student's academic career as these rates are much higher than their peer's rates. The figure also illustrates that chronic absenteeism tends to become a more common issue in later grades even for those students who were frequent attenders in 5th grade.^{vii}

Figure 1: Fifth-Grade Chronic Absenteeism is Significantly Correlated with Chronic Absenteeism in Subsequent Grades, particularly 5th, 6th and 7th grade

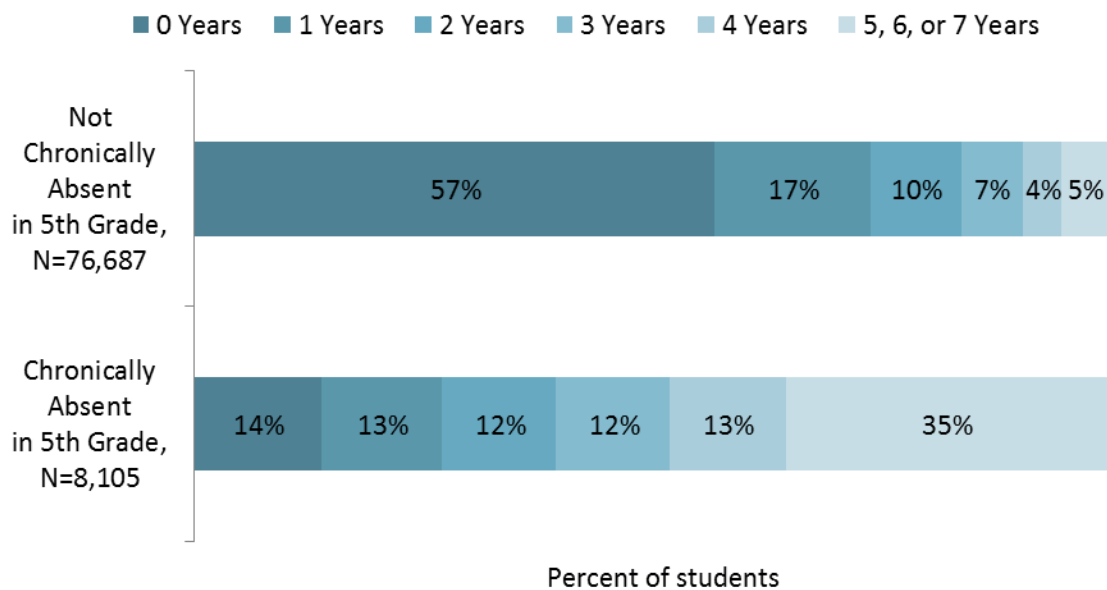


Source: Oregon Department of Education, statewide averages, using three intact 5th grade cohorts from the SY 2004-05, 2005-06, and 2006-07 school years

Students who are chronically absent in one year are often chronically absent in subsequent years

Figure 2 shows the total number of years students are chronically absent, conditional on whether they were considered chronically absent in 5th grade. For students who were not chronically absent in 5th grade, about 57 percent were never chronically absent in 6th-12th grade. For students who were chronically absent in 5th grade, only 14 percent were never chronically absent again in their academic careers. Nearly 10 percent of students who were chronically absent in 5th grade were chronically absent every year after. This illustration suggests that students struggling to make it to school in late elementary will likely struggle in future years.

Figure 2: Number of years students are chronically absent in 6th-12th grades grouped by their 5th grade chronic absenteeism status

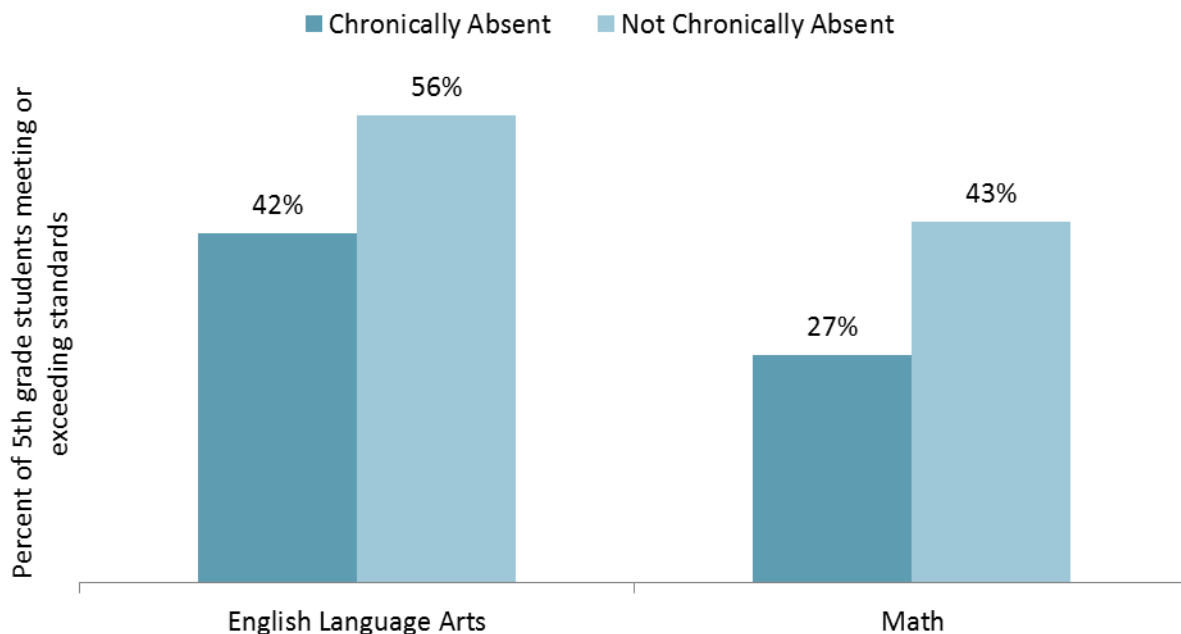


Source: Oregon Department of Education, statewide data using three intact 5th grade cohorts from the 2004-05, 2005-06, and 2006-07 school years.

Fewer chronically absent 5th grade students met or exceeded state standards on Reading and Math standardized tests than not chronically absent students

This section examines student outcomes within 5th grade itself, not across time as seen in the previous sections. Figure 3 compares the percent of chronically absent 5th graders meeting or exceeding standards on the statewide summative assessment known as Smarter Balanced in 2014-15. About 42 percent of chronically absent 5th graders met the English language arts standards, while more than 55 percent of their not chronically absent peers met the standard. Similarly, only 27 percent of chronically absent 5th graders met the Math standards, compared to 43 percent of their not chronically absent peers.

Figure 3: Chronically absent 5th graders do not perform as well as their not chronically absent peers on standardized tests



Source: Oregon Department of Education, statewide averages, 5th grade students, 2014-15, Statewide summative assessment known as Smarter Balanced.

Long-term observed outcomes for chronically absent students are significantly worse than for students who are not chronically absent.

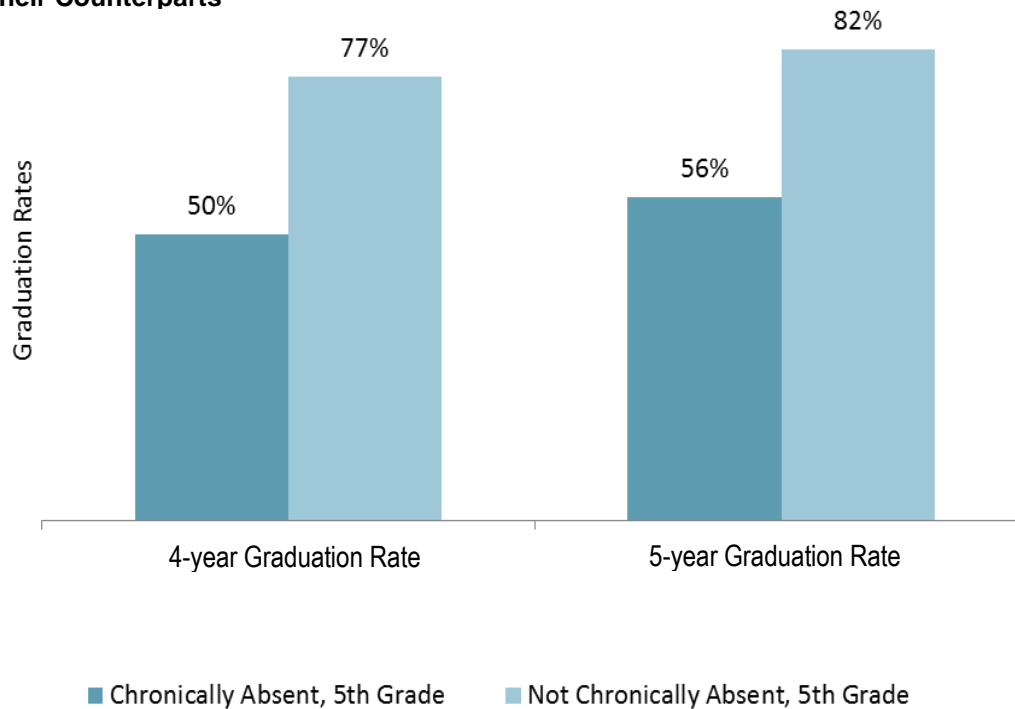
In this section, students who were chronically absent in 5th grade are compared to their peers using high school graduation rates.

Figure 4 shows statewide comparisons of students who were chronically absent and not chronically absent in 5th grade. Chronically absent 5th graders averaged a 50 percent four-year graduation rate, which was 27 percentage points lower than students who were not chronically absent in 5th grade. Similarly, chronically absent 5th graders averaged a 56

percent five-year graduation rate, which was 26 percentage points lower than their peers.

While this descriptive comparison of student groups does not show a causal relationship between chronic absenteeism and graduation, it does suggest that chronic absenteeism as early as 5th grade may be an early indicator that students need extra supports to graduate from high school.

Figure 4: Chronically Absent Fifth Graders have Significantly Lower Graduation Rates than their Counterparts



Source: Oregon Department of Education, statewide averages using 5th grade cohorts from 2004-05, 2005-06, and 2006-07.

**Economically Disadvantaged Students
Encounter Additional Challenges**

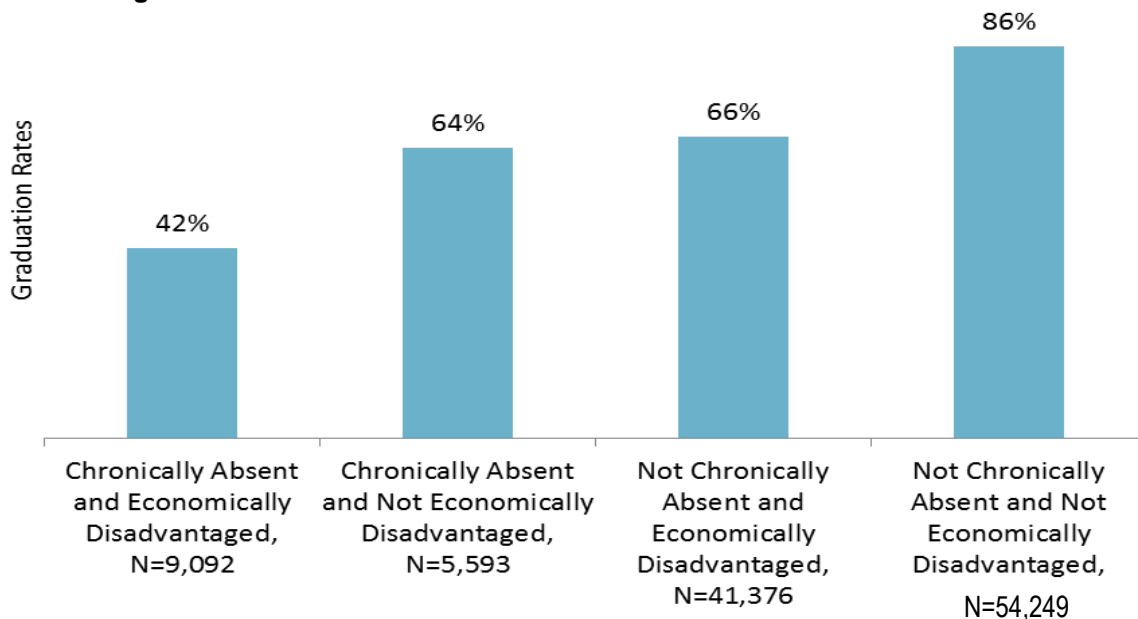
Results regularly indicate that chronically absent 5th graders have lower graduation rates than their counterparts. However, this simple analysis fails to account for any student characteristic beyond attendance.

A more complete analysis using statewide longitudinal data grouped students first by whether they were economically disadvantaged and then by chronic absenteeism. The four-year graduation rates for each of these groups reveal several notable facts. First, graduation outcomes were the highest for students who were not chronically absent and not economically disadvantaged in 5th grade. As shown in Figure 5, the graduation rate for this student group was 86 percent. Students who were chronically absent in fifth grade, but not economically disadvantaged, had the second highest

graduation rate of 66 percent. Similarly, graduation rates for students who were economically disadvantaged, but not chronically absent in fifth grade, were 64 percent. Students who were both chronically absent and economically disadvantaged in 5th grade had a graduation rate of only 42 percent, the lowest graduation rate of the four comparison groups.

National research suggests that students in poverty are most at risk of being chronically absent. Ready (2010) makes the argument that, while all students regardless of socioeconomic status perform better academically when they have higher attendance, students coming from a lower socioeconomic background have the most to gain from improved attendance.^{viii} Figure 5 suggests that there is a particularly high payoff to helping students in poverty make it to school consistently.

Figure 5: Students who were both chronically absent and economically disadvantaged in 5th grade had a graduation rate of 42%



Source: Oregon Department of Education, statewide averages using 5th grade cohorts from 2004-05, 2005-06, and 2006-07.

The following briefs in this series will explore how daily attendance data can be used to identify attendance trends in schools.

ⁱ Chronically absent students are defined as students who missed more than 10 percent of school days. See Brief 1 of this series for a more detailed discussion of this measure.

ⁱⁱ Chang, Hedy and Romero, Mariajose. *Present, Engaged and Accounted For: The Critical Importance of Addressing Chronic Absence in the Early Grades*, National Center for Children in Poverty, New York, NY, September 2008.

ⁱⁱⁱ ECONorthwest. 2011. *Chronic Absenteeism in Oregon: Data Exploration*. Portland, OR.

^{iv} Balfanz, Robert, and Vaughan Byrnes. *The Importance of Being in School: A Report on Absenteeism in the Nation's Public Schools*. Baltimore: Johns Hopkins University Center for Social Organization of Schools. May 2012.

^v Hancock, Kristen J. et. al. *Student Attendance and Educational Outcomes: Every Day Counts*. Report prepared for the Dept of Education, Employment and Workplace Relations (Australia). Telethon Institute for Child Health Research, Center for Child Health Research, University of Western Australia, May 2013.

^{vi} For example, the Pearson's Correlation Coefficient between 5th and 6th grade chronic absenteeism is 0.44.

^{vii} In this brief, 'frequent attenders' are students who are 'not chronically absent.'

^{viii} Ready, Douglas D., *Socioeconomic Disadvantage, School Attendance, and Early Cognitive Development, The Differential Effects of School Exposure*, Sociology of Education, October 2010.