DATA VISUALIZATION
can help educators address chronic absence

Use data to create a detailed picture of your chronically absent students in order to customize student supports

What is chronic absence?

10%

Students are typically considered chronically absent when they miss 10% of school/class time for any reason (excused or unexcused).[1]

How prevalent is it?

Almost 1 in 6 (roughly 8 million) students in grades K–12 nationwide is chronically absent, with even higher rates for racial/ethnic-minority, low-income, and high school students.[2]

Why is it important?

Chronic absence is associated with:
• Reading difficulties in grade 3
• Lower math proficiency in middle school
• Higher dropout rates in high school

Missing learning time negatively impacts outcomes more for low-income students.[3]

Over two-thirds of states have prioritized chronic absence as a critical issue, including it as an accountability indicator in their ESSA plans.[4]

What can you do to identify and support chronically absent students?

Chronically absent students are a diverse group with varied reasons for missing school. To target relevant supports to the students who need them, educators can take the following actions:

• **Start by examining local data to identify attendance patterns and groups of students who are chronically absent.**

• Then look for potential root causes of chronic absence and barriers to attendance among the identified students (such as transportation issues, academic struggles, school climate, family responsibilities, lack of engagement).

• Based on this information, provide targeted interventions and make improvements to the school's culture and practices to meet the needs of identified student groups.

• Then regularly monitor effectiveness of interventions.

VISUALIZE YOUR DATA

Creating visual displays from these data can help teams make meaning from the information more easily than by looking at lists of numbers in spreadsheets.
For example, *bar charts*, *line graphs*, *maps*, and *scatter plots* can be created using Microsoft Excel or Google Sheets. These displays can point to attendance problems and inform prioritization of interventions.

See example data visualizations on the next page.

DISAGGREGATE YOUR DATA

Disaggregating data in multiple ways can help educators identify attendance patterns and groups of chronically absent students. It can be informative to look at chronic absence rates by:

• School

• Grade level

• Class period

• Teacher or subject

• Student demographics

• English learner and special education status

• Geographic location (such as a map of chronically absent students' home addresses)

• Time of year (such as by week, near holidays)

• Level of absenteeism (such as "at risk for chronic absence" [5–9%], "chronically absent" [10–19%], and "extremely chronically absent" [20+%])
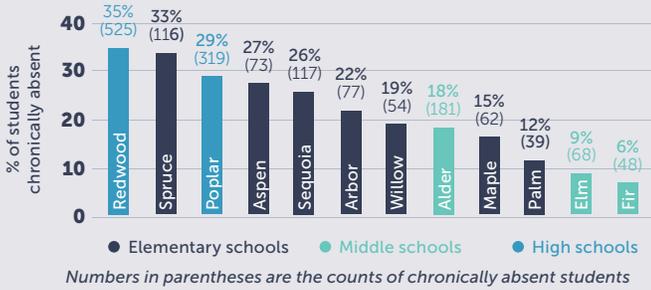
Example Data Visuals

The following are a few ways to visually display and analyze chronic absence data. The data are drawn from the hypothetical Oak School District, which has 12 schools, spanning elementary to high school. The district leaders want to better understand patterns of chronic absence to identify systemic problems and provide supports to struggling schools, groups of students, and communities.

Note: The *chronic absence rate* refers to the percent of students who are chronically absent.

1 Chronic absence rates by school in Oak District, 2016/17

% of students chronically absent

- Redwood 35% (525)
- Spruce 33% (116)
- Poplar 29% (319)
- Aspen 27% (73)
- Sequoia 26% (117)
- Arbor 22% (77)
- Willow 19% (54)
- Alder 18% (181)
- Maple 15% (62)
- Palm 12% (39)
- Elm 9% (68)
- Fir 6% (48)

● Elementary schools ● Middle schools ● High schools

Numbers in parentheses are the counts of chronically absent students

What the data show: Chronic absence is a bigger concern in Oak's elementary and high schools than in its middle schools. Note that schools with low chronic absence rates still can have large numbers of chronically absent students.

Possible next steps: To get a fuller picture, the district could look at additional chronic absence metrics by student subgroup, and learn from schools with lower chronic absence rates.

2 Map of Oak District schools, 2016/17 shaded by chronic absence rate

Chronic absence rate

Dot size reflects school enrollment

What the data show: Schools with the largest percentage of chronically absent students are concentrated on the west side of Oak District.

Possible next steps: District leaders may want to better under-stand this pattern — is it a transportation problem, or is it related to hardships of living in high-poverty neighborhoods? Knowing this information can help target resources and family support services.
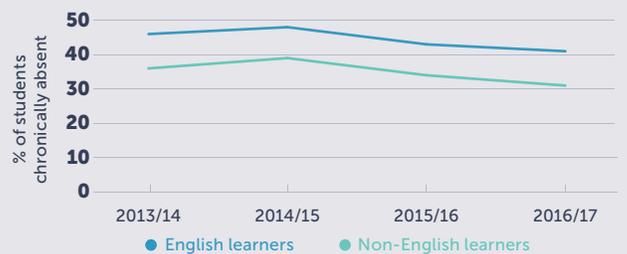
3 Chronic absence rates by grade level in Oak District, 2016/17

% of students chronically absent

Grade levels: K 1 2 3 4 5 6 7 8 9 10 11 12

● Elementary schools ● Middle schools ● High schools

What the data show: The data reflect high chronic absence rates in kindergarten and in high school, particularly in grade 12.

Possible next steps: The district could communicate with parents about the importance of kindergarten to children's later academic success. High schools could analyze grades 9 and 12 data to identify patterns (by time of year, class period, or student group, for example) in order to tailor appropriate interventions.

4 Differences in chronic absence rates between student groups in Redwood High School, 2013/14–2016/17

% of students chronically absent

2013/14 2014/15 2015/16 2016/17

● English learners ● Non-English learners

What the data show: While the percentage of students that are chronically absent has decreased (i.e., improved), English learner (EL) students have consistently higher rates over time.

Possible next steps: Redwood High may want to learn more about this gap. Are EL students also struggling academically or socially? What do these students and their families say about their needs and experiences at school? Make action decisions based on findings.

1 Attendance Works. (2016, Spring). *Reporting on chronic absence.* http://www.attendanceworks.org/wp-content/uploads/2017/06/Reporting-on-Chronic-Absence-1-pager4.28.16.pdf

2 Office for Civil Rights. (2018). *Civil rights data collection (CRDC), 2015–16.* Washington, DC: Author.

3 Allensworth, E. M., & Easton, J. Q. (2007). *What matters for staying on-track and graduating in Chicago public high schools: A close look at course grades, failures, and attendance in the freshman year.* Chicago, IL: University of Chicago, Consortium on Chicago School Research. https://consortium.uchicago.edu/sites/default/files/publications/07%20What%20Matters%20Final.pdf

Balfanz, R., & Byrnes, V. (2012). *The importance of being in school: A report on absenteeism in the nation's public schools.* Baltimore, MD: Johns Hopkins University, Center for Social Organization of Schools. https://new.every1graduates.org/wp-content/uploads/2012/05/FINALChronicAbsenteeismReport_May16.pdf

Chang, H., & Romero, M. (2008). *Present, engaged & accounted for: The critical importance of addressing chronic absence in the early grades.* New York: National Center for Children in Poverty, Columbia University. http://www.nccp.org/publications/pdf/text_837.pdf

4 Jordan, P. W., & Miller, R. (2017, September). *Who's in: Chronic absenteeism under the Every Student Succeeds Act.* Washington, DC: FutureEd at Georgetown University. https://www.future-ed.org/wp-content/uploads/2017/09/REPORT_Chronic_Absenteeism_final_v5.pdf