

Reclaimed Opportunity: Using Nudge Letters to Reduce Chronic Absenteeism in an Improvement Network

For students receiving two nudge letters, chronic absenteeism declined 29 percent.

Communities and parents understand that attendance plays a crucial role in a student's academic success. However, chronic absenteeism—when a student misses 10% or more of the instructional days in an academic year—has become a growing concern in recent years. Chronic absenteeism has numerous causes, including reasons associated with health and well-being, socioeconomic issues, school climate and bullying, and lack of engagement. Each of these factors combined or individually can severely impact a student's academic progress and overall well-being.

At the end of SY21-22, chronic absenteeism reached a record 28% for students in San Diego County, meaning that nearly three in ten students missed 10% or more of school days. Some groups have higher rates of chronic absenteeism, including students who are African-American (33%), American-Indian (39%), Hispanic (36%), and Pacific Islander (39%). When 30% or more of students are missing a significant amount of school, it has adverse effects on learning for these students and others. Every instructional minute is important.

In response to this challenge, the San Diego County Office of Education unveiled the Improving Chronic Absence Network (ICAN), which has supported the school-based implementation of several evidence-based interventions to address the problem, including identifying students at risk of chronic absenteeism, building stronger relationships with students and families, more closely tracking and monitoring attendance, and increasing awareness of the importance of consistent attendance.

In SY22-23, 18 schools in five school districts joined the ICAN Network's 3rd cohort and partnered with leaders at the San Diego County Office of Education to implement attendance interventions that have proven to be effective at reducing chronic absenteeism in schools. These 18 schools implemented interventions that included sending letters to families of students who were at risk of becoming chronically absent and enacted relationship-building strategies that strengthened students' sense of belonging.

A **nudge letter** is a type of communication sent to parents with the aim of informing them about their child's absences compared to the typical or average student absences. Instead of imposing strict penalties or punishments, these letters are designed to influence decision-making and avert future absences.

Pre- and Post-Treatment Outcomes

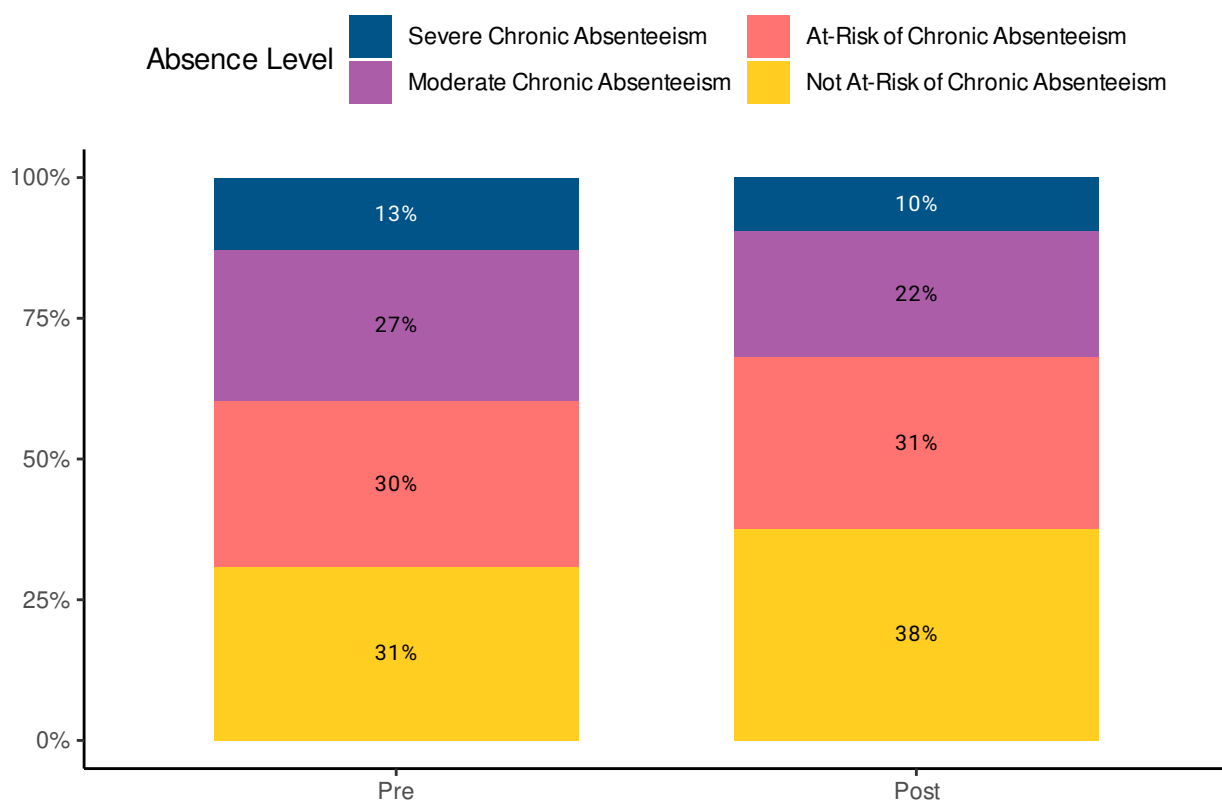
Before turning our attention to the impact of the nudge letter, it is important to examine overall changes in chronic absenteeism from SY21-22 to SY22-23. In SY21-22, 8,997 total students were enrolled in these 18 network schools and 3,649 of these students were chronically absent, resulting in a 41% chronic absenteeism rate. In SY22-23, there were 8,882 students enrolled in network schools with 2,849 who were chronically absent, a rate of 32%. The difference in chronic absenteeism across the two years was a net decline of nearly 9%, a decline to which

ICAN interventions contributed. While there is no way for us to determine the changes in chronic absenteeism for students not receiving these interventions, these results are similar to other changes reported in areas that have implemented nudge letters and other attendance interventions (Robinson, C., Lee, M., Dearing, E., & Rogers, T. (2018); Rogers, T., & Feller, A (2018); Mac Iver, M.A., Wills, K., Cruz, A., & Mac Iver, D.J. (2020)). Additionally, ICAN is an improvement network and uses evidence-based strategies to address chronic absenteeism versus a research study proving the efficacy of these interventions.

Figure 1 illustrates the percentages of students in each attendance level prior to the interventions, and the percentages of students at each attendance level at the conclusion of ICAN in SY22-23. Attendance levels include (1) students who are not at risk of chronic absenteeism, (2) students at-risk of chronic absenteeism, (3) students with moderate chronic absenteeism, and (4) students with severe chronic absenteeism. Combining the categories of moderate and severe chronic absenteeism would equal the percentage of students chronically absent in the network.

As evidenced in the graph, the percentage of students who experienced moderate or severe chronic absenteeism declined from 41% prior to the intervention to 32% after the intervention. Conversely, the percentage of students who were not at risk or at-risk grew from 61% to 69% after the intervention.

FIGURE 1
Pre- and Post-Intervention Evidence Show Important Reductions in Chronic Absenteeism



SDCOE

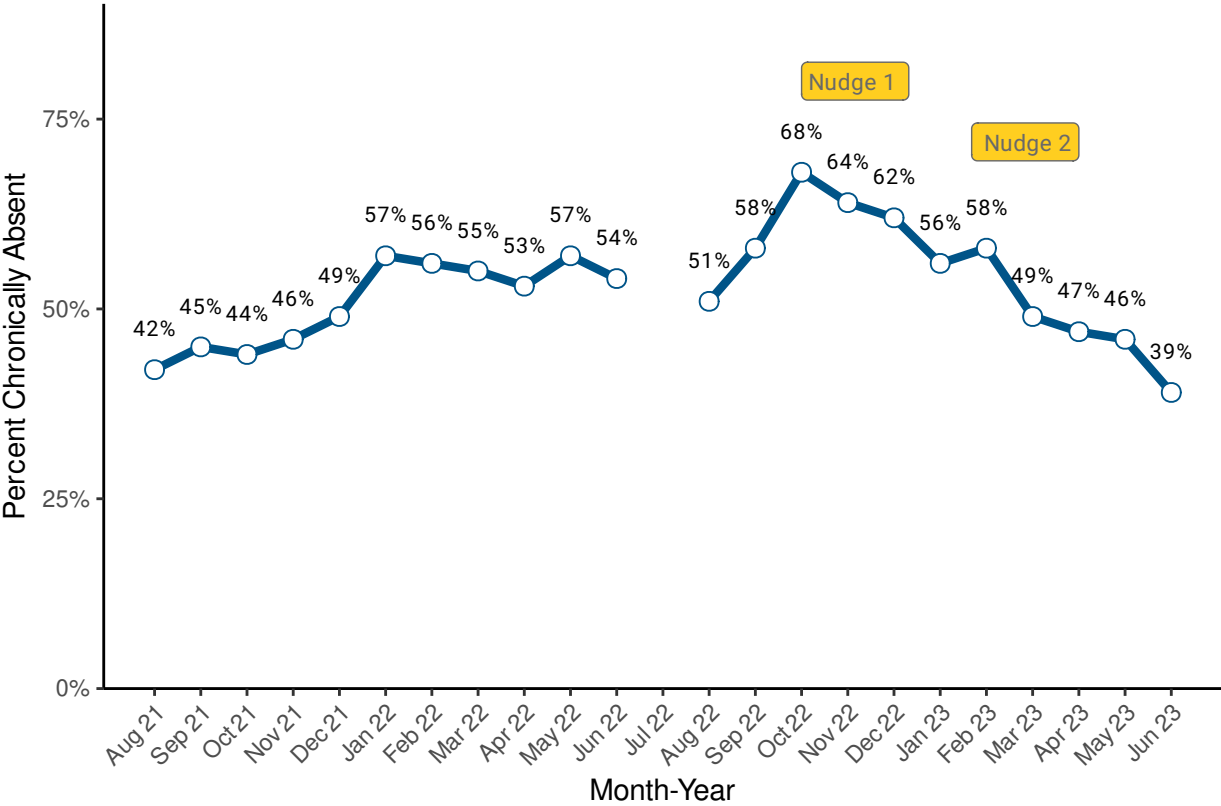
Source: ICAN Dashboard

Note: We gathered data from school districts on chronic absenteeism to examine differences in rates before and after ICAN interventions. These data are arrayed by chronic absenteeism levels using two stacked bar charts. These charts can be compared by looking across similar colors for changes in percentages.

A net decline of 9% is comparable to the declines in chronic absenteeism other large cities such as Orlando, Philadelphia, and Los Angeles have experienced.

These overall findings are promising. However, findings are more compelling when we look at attendance patterns for students receiving nudge letters. In Figure 2, we can observe monthly attendance trends across two years for the 577 students who received two nudge letters. ICAN schools sent the first nudge letter to families in November of 2022 and the second in March of 2023. Present in these data is a noticeable downward trend following each letter in addition to a year-over-year decline in chronic absenteeism for these students. In October 2022, 68% of these students had missed 10% or more of the school year. We see a steady decline to 56% three months later. This means that 12% of the students who had missed 10% of the school year moved back across threshold to missing less than 10% by January, a time frame coinciding with the first nudge letter. Similarly, in February 2023, 58% of these students had missed 10% of the school year, and again, that rate declined to 39% by the end of the SY22-23. Overall, we observed a 29% decline in chronic absenteeism for students receiving both nudge letters. Additionally, we observed a 15% decline in year-over-year chronic absenteeism for this group, where 54% of these students were chronically absent in June of 2022 to a reduction of 39% in June of 2023.

FIGURE 2
Trends for Students Receiving Nudge Letters Show Immediate Declines in Chronic Absenteeism



SDCOE

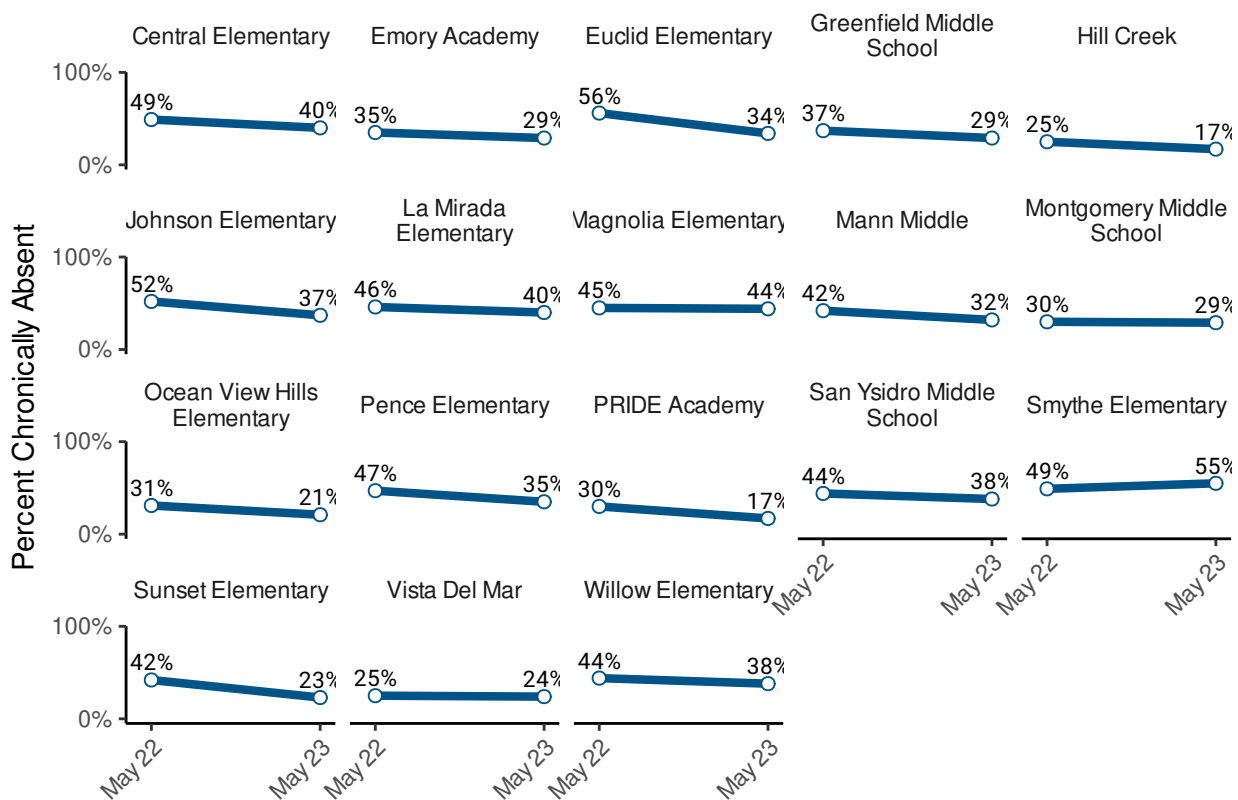
Source: ICAN Dashboard

Note: We gathered data one year prior to the ICAN interventions and compared trends to the current year’s chronic absenteeism rates using a single non-connected line chart. Letters were sent in November and March, which coincided with declines in chronic absenteeism in addition to an overall decline from year to year.

Attendance Outcomes by Site

While chronic absenteeism declined by 9% overall, we observed variation across school sites. The 8,882 students enrolled in these schools were nested in 18 elementary and middle schools. Here we are examining overall changes in chronic absenteeism at each school site versus changes for students who received nudge letters due to the small number of students receiving nudge letters. Overall, variations in year-over-year changes in chronic absenteeism ranged from a high of a 22% decline at Euclid Elementary to a 6% increase at Smythe Elementary. Seventeen of the 18 sites showed a decline in chronic absenteeism. These outcomes resulted while sites implemented these attendance interventions. While some sites focused primarily on using the nudge letters, others complemented nudge letters with other interventions including relationship-building strategies.

FIGURE 3
Year-Over-Year Changes in Chronic Absenteeism for Schools in the ICAN Network Suggest Important Reductions in Absenteeism



SDCOE

Source: ICAN Dashboard

Note: We gathered data from May 2022 to May 2023 to compare differences in chronic absenteeism rates at the end of two school years for each elementary school. Differences in chronic absenteeism rates are shown using a single slope chart. End-of-year data for two schools were missing at the time of publication.

What's Next?

Chronic absenteeism poses significant challenges to the educational landscape, jeopardizing the academic success and overall well-being of students. By recognizing the underlying causes and implementing targeted strategies, schools and communities can make substantial progress in combating chronic absenteeism. Getting more students to attend school and returning to pre-pandemic levels of chronic absenteeism requires a transformational shift in the ways we address this problem. Preliminary findings suggest that ICAN could help San Diego County schools return to pre-pandemic chronic absenteeism rates. Nudge letters and relationship-building strategies represent a valuable tool for schools seeking to improve attendance rates. Using these strategies allowed ICAN schools to recapture nearly 9% of students who were on track to be chronically absent in SY22-23, resulting in more than 7,000 fewer instructional days missed. These additional days represent reclaimed opportunities and have the potential of unlocking the path to educational success for these and other students, ensuring that they have the opportunity to thrive and reach their full potential.

References

- Mac Iver, M.A., Wills, K., Cruz, A., & Mac Iver, D.J. 2020. "The Impact of Nudge Letters on Improving Attendance in an Urban District." *Education and Urban Society* 54: 164–85. <https://doi.org/10.1177/00131245211004561>.
- Robinson, C., Lee, M., Dearing, E., & Rogers, T. 2018. "Reducing Student Absenteeism in the Early Grades by Targeting Parental Beliefs." *American Educational Research Journal* 55: 1163–92. <https://doi.org/doi:10.3102/0002831218772274>.
- Rogers, T., & Feller, A. 2018. "Reducing Student Absences at Scale by Targeting Parents' Misbeliefs." *Nature Human Behavior* 2: 335–42.

This report was developed by SDCOE's Assessment, Accountability, and Evaluation department. Further information on SDCOE's mission is available at sdcoe.net/mission.

Copyright June 2023. San Diego County Office of Education. Permission is granted for reproduction of this report, with attribution to SDCOE.