How to Conduct a Successful Data Analysis

Step 1. Find Out What Data is Available

Consult with the school district or districts to find out:

a) Do you collect attendance data electronically?

b) Do you track just average daily attendance for the school or look at the number of absences for each students?

c) Do you analyze patterns of attendance?

d) Does your data system track the attendance for each student using a unique student identifier? (Note: Using data maintained for each student by the district vs. individual schools is important for tallying up the absences for mobile students as they move across schools.)

Step 2. Crunch the Data

If the data and the capacity exists, then district staff should be able to generate an analysis that shows the number and percentage of students who are chronically absent (missing 10 percent or more of school including all absences, excused and unexcused) at each school and for each grade. A suggested approach is to first complete this school data template (see attachment A) for each school and then compile this into this district data template (see attachment B).

Once the school levels are calculated, the data can be compiled into a chart (Figure 1) that shows prevalence of chronic absence across the entire district. This information can then easily be turned into a summary table (Figure 2) showing the range of chronic absence levels across schools as well as the level of chronic absence district wide by grade. If possible, portray data on achievement and level of poverty alongside data on chronic absence for each school to provide more context using this template (see attachment C).
If the school district can’t do the analysis itself:

- Use the city’s information office to crunch the data
- Invite the local university to participate using students and professors
- Use philanthropic support to pay for a professional research firm.

When using outside sources, take care to vet the preliminary findings with the school district leadership before public release to ensure the results appear valid.

**Step 3. Consider a More Extensive Analysis**

If the capacity exists, in house or externally, consider producing a more complex analysis, which includes some or all of the following additional elements:

- The percentage and number of students who are severely chronically absent (missing 20 percent or more of school), indicating the number of students requiring intensive supports
- The percentage and number of students with satisfactory attendance (missing 5 percent or less of school). If few students have satisfactory attendance, then it suggests that the school community may not have a culture of attendance where going to school is considered the norm
- Attendance patterns by sub-populations including for student on free and reduced price lunch, English Language Learners and ethnic groups
- Mapping of neighborhoods most affected by chronic absence by using student address information. **Figure 3** is a map of attendance patterns by census tracks in Oakland, Calif.
- If you are interested in pursuing this more complex analysis, here is a memo that provides direction, guidance and additional data templates. It can be used to ensure all stakeholders involved in the analysis have a common understanding of why this matters, what needs to happen and how the data can be used.