

## Introduction: Data and School Design

This is a guide to using data in school design so that good ideas, put to the test, become great plans. The steps outlined here could be a years-long process. These modules focus on enabling you to thoughtfully deploy research principles to “kick the tires” on your design and improve it before the doors have even opened. As your school develops, you can continue to apply these principles to further refine and modify your design and improve practice and structures.

The principles of design thinking ask that you test your designs with students (or teachers or parents) and then modify them based on these pilot tests. Through this approach, innovation occurs not as the result of a dramatic epiphany, but rather by iteratively rethinking what works in a real context. Adopting this approach allows you to learn how students, teachers, parents, and other stakeholders respond to the elements of your school design, and to adjust those elements to create a better school.

As you test your designs, it is critical to ensure decisions are made from data that is as accurate as possible. To do this, research principles ask that you focus on finding convergence—that is, putting your trust in “truths” that arise when insights from multiple people and multiple inquiries converge on the same findings. To capture and measure a goal as multifaceted as positive student growth, for example, we might utilize multiple methods (a survey and an observation) and seek insight across multiple stakeholders (teachers and students).

Without the innovation that comes from good design, we are slaves to old ideas, but without rigorous testing that comes from seeking convergence, we can end up pursuing bad ones. The combined practices of research and design help you make quick alterations to practices to continually improve what you do.

## Learning appropriate practices for data-informed design

Drive data instead of letting it drive you. For many in schools, the term “data-driven” has become a catch phrase. Often it seems that being data-driven means that we should look at the numbers on our test scores and our Annual Yearly Progress, and put a plan together to, say, increase a passing rate from 50% to 60%. It is certainly valuable to know these numbers, and we recommend incorporating them into your research and design process. However, most district data tell you only a little: how students performed on a once-a-year test or how they have been identified according to their race or language. These data do not tell you very much about who your students are, what they believe, what skills they have, or how they interact with adults. This guide focuses on helping you drive the data that you will systematically collect and understand so that you are not beholden solely to test scores, but instead are instead carefully understanding the students, staff, and community who will form the lifeblood of your school.

How you use data will vary depending on your needs, resources, and demands on your time. The eight learning modules that follow are designed to support the effective use of research practices in the design process. We have sought to provide a detailed and thorough picture of this process to enable educators to tackle it for any size project. At times, this may seem overwhelming. The steps outlined here can take two days to complete or two hundred, depending in large part on how much information you need to gather, how deep and complex your question is, and the time you have available. As we said earlier, what is important is that you take some time to learn more to know who your students are and how to serve them before moving forward. The eight learning modules that follow outline that research process:

- **Module #1:** Develop a research plan. The first module outlines methods of defining the key research priorities for your school model and how you plan to investigate these.
- **Modules #2-3:** Collect research data. The next two modules provide guidance on how to use focus groups, interviews, and surveys in your research.

- **Modules #4-6:** Analyze research data. This is followed by modules that address how to engage in qualitative and quantitative analysis to make sense of what you have collected, and to plumb the accuracy of your data through a variety of methods.
- **Modules #7-8:** Compile findings. Finally, the last two modules provide guidance on how to compile and share findings from multiple sources in order to inform future work.

Figure 1: An overview of a research path

