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WHITE PAPER:
Reforming Data-Driven Reform

Reforming Data-Driven Reform:

Recently, the U.S. Department of Education released a report on the use of data in local education authorities (LEAs) across the United States. The purpose of the study was to determine how data was being used in schools and districts. The study was timely, given the rapid rise in policy talk about the use of data and data systems as catalysts for school reform.

Many findings are encouraging to data-driven reform enthusiasts: A majority of districts have adopted sophisticated data systems; schools are collecting increasing amounts of data through interim and formative assessments; and school personnel are becoming increasingly data and assessment literate.

However, even data enthusiasts must face the reality that despite the explosion in data use, NAEP scores (our most reliable national yardstick for measuring learning) have only marginally improved in recent years.

At least three conclusions can be drawn from the increase in data use coupled with minimal system-wide improvements in student achievement. First, data-driven reform might be a flop, another in a long list of education innovations that comes and goes without having its intended impact. Second, perhaps insufficient time has passed to witness the impact of data-driven reforms. Or, finally, there could be something flawed in the way that U.S. public schools are implementing data systems and data-driven reform that limits the effectiveness of such efforts.

Digging deeper into the DOE study provides some support for the third conclusion. The study indicates that while teaching is in fact often influenced by the data (teachers are more frequently re-teaching and re-grouping students with the additional data systems), "neither the type of assessment for which data are available nor the time frame of assessment activities serves the needs of classroom teachers making decisions on a daily basis." The DOE report also sheds light on our national obsession with using data as a tool for accountability. Accountability and data are certainly familiar bedfellows. However, in order for LEAs to fully leverage their data for deep pedagogical improvements for scalable and sustainable improvement, using data solely (or even mostly) for accountability purposes will never suffice.

We have found that several key elements of data-driven reform efforts determine the extent to which deep pedagogical improvements can occur. Most of these key elements require school leaders to reframe data use from the macro-level (using data for accountability) to the micro-level (using data for improving classroom instruction). The shift in purpose from accountability to pedagogical improvement is most likely to occur through providing data that teachers can easily integrate into the 'rhythm' of their existing curricular and teaching patterns.

Education Direction

230 West 200 South, Ste. 3000
Salt Lake City, UT 84101
USA

tel: 800.370.8210
email: contact@eddirection.com
www.eddirection.com

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The following key elements are not meant to represent an exhaustive or even prioritized list; we do not, for example, elaborate on the value of effective formative assessments, whose importance is paramount to achieve the ultimate goal of improving pedagogy and student learning. Instead, the examples below are relatively simple suggestions that can be implemented by school leaders to lay the foundation for more robust data work over time.

As teachers look at student work together, particularly common assignments, they can identify and address standards and sub-standards with which students struggle.

Broaden the definition of data.

Student data extend beyond state test scores, and school leaders need to embody this belief. Often, the most relevant and timely source of student data include student class work and homework. School leaders should encourage teachers to allocate specific time in staff and department meetings to analyze student work. This should be done in teacher teams through the use of protocols that help teachers uncover the core learning that propels some students to success and holds others back. As teachers look at student work together, particularly common assignments, they can identify and address standards and sub-standards with which students struggle. Additionally, looking at student work with other teachers, more so than looking at traditional assessment results, creates the environment for colleagues to make pedagogical adjustments based on the experiences of others whose teaching may have caused enhanced student understanding.

Make reports intellectually and physically accessible.

Intellectually Accessible

Teachers should not have to spend significant time trying to understand data reports. Many reports we have seen include pages of tabular data with unfamiliar headings, references, and notations. Reports should instead be comprised of simple graphs and charts from which insights can be quickly gleaned.

Physically Accessible

Data portals that require multiple, non-intuitive mouse clicks to find reports go underutilized. PowerPoint presentations and other software used to disseminate data are real obstacles for many teachers and are often poorly stored and difficult to retrieve. In many cases, the most effective reports (those that are leveraged by teachers to make instructional decisions) are one-page, physical copies that are proactively distributed to individual teachers and teacher teams.

Collaborative data analysis should foster objective conversations about practice.

Most teachers work hard and are passionate about their work. Examining data with an eye toward teaching improvement can easily feel judgmental and cause teachers to become defensive. School leaders should encourage those

examining data collaboratively to use protocols as a way to incorporate descriptive language rather than normative language, in their work together. For example, one can observe that scores were lower for one standard than for others, or that a specific group of students reported higher scores than another. Observing that similar groups of students performed differently, or that certain standards were more readily mastered in another classroom should be a conversation starter, not stopper! Staying descriptive can initially feel uncomfortable, but teachers quickly realize that it helps them see beyond their own experiences and enables them to have professional, productive, and non-defensive conversations about student learning and their instructional practices.

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Give timely feedback.

In most schools, despite recent advancements in technology, test scores from common interim assessments are still not reported until well after teachers have moved on to a different instructional unit or , in some cases, school year. Formative assessment systems at the classroom level can certainly help, but common interim data returned quickly, on a predictable timetable, can also be relevant to a teacher's current students and content. This allows teachers to make pedagogical adjustments to improve student learning before moving on to the next instructional unit. Or, at the very least, it enables teachers to remediate and differentiate instruction throughout the next unit of study. Finally, when data are returned on a predictable timetable, leaders can schedule to allow for collaborative discussions before moving on to other material.

The elements listed above are powerfully simple, but they are often ignored in schools and districts across the US. We recommend school and district leaders begin small, with policies—such as the ones above—that allow teachers to quickly experience success in using data. As teachers experience these 'quick wins,' seeing the value of using data to improve instruction, they will be more likely to commit to more substantial data practices in the long run.

Using data to hold schools accountable can be a useful endeavor and will likely be a part of American public schools for the foreseeable future. However, when district and school leaders make data more useful and relevant for teachers to use individually and collaboratively, they take an important first step toward creating the kind of data system and data culture that will enable deep instructional improvement and sustainable, scalable gains in student learning.

About Education Direction:

Education Direction is a school reform consultation firm that specializes in data-informed school improvement (www.EdDirection.com). Education Direction partners with over 50 LEAs in the U.S. and abroad on strategic planning, professional development, and school turnaround.

Authors:

Dr. Trent Kaufman, Ed.D. (Harvard University), Contributing author, *Datawise in Action* (Harvard Education Press, 2007), President, Education Direction

Samuel Wright, B.S. (Brigham Young University), Managing Director, Education Direction

Allison Miller M.A. (Harvard University), Analyst, Education Direction

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