Which Came First: The Data or the Decision?

Like the age-old chicken and egg scenario, discussing which came first causes varied opinions. However, the answer to which came first with regard to the data or the decision is easy: neither. What must come first is collaboration. Without it, a decision that is made or data that is gathered in isolation will be misguided or at least narrow in scope.

Decisions

For years, leaders (whether school, government or industry) have made decisions with minimal or no collaboration and absent from data. A prime example is when the founder of Digital Research in 1980 was asked to meet with IBM to discuss the possibility of Digital Research creating the operating system for IBM's first personal computer. Digital Research's founder chose to not attend the meeting and sent another person in his place who in turn decided to pass on the idea. IBM then went to Bill Gates, and the rest is history. Had the leader of Digital Research researched the data on the need for a personal computer operating system, and if he and a collaborative team from his company had been part of the initial meeting, the outcome may have been much different for Digital.

"Schools that explore data and take action collaboratively provide the most fertile soil in which a culture of improvement can take root and flourish."
"The Collaborative Advantage." <u>Educational Leadership</u> Dec/Jan (2009)

Collaboration

In today's world, collaboration is essential in order for continuous improvement efforts to flourish and take root. Who should collaborate? Anyone interested in student success. Specifically, curriculum, technology and pupil accounting leaders of a school district or education service agency must join together across department boundaries to lead district and regional projects. In addition, building principals must work together to share proven school improvement strategies, and building level professional learning communities must work together to use data to identify classroom interventions that make a positive difference on student success.

Many districts and educational service agencies are embarking on data warehousing initiatives. If the leaders of these initiatives are anything less than collaboration between curriculum, technology and pupil accounting, the initiative runs the risk of failure. Why? Curriculum leaders are focused on the essential questions necessary to focus school improvement efforts, not necessarily the data or tools to analyze the answers. Technology leaders are focused on data systems and their efficiencies, not necessarily the school improvement questions to ask of the data. And pupil accounting leaders are focused on collecting the data accurately, not necessarily on collecting all the school improvement data necessary for helping to answer the questions.

"A successful face-to-face team is more than just collectively intelligent. It makes everyone work harder, think smarter, and reach better conclusions than they would have on their own."
(James Surowieki, as quoted in Results Now by Schmoker, 2006)

Leadership
The leader must encourage collaboration by modeling and supporting it. Modeling collaboration includes asking the essential questions and encouraging and empowering collaborative teams to find the answers using quality data systems. The answers to those questions will naturally lead to more questions. The leader's critical role is to support an environment that supports this type of collaborative dialogue. At an education service agency, that means providing professional development and consultation services to local school districts on how to implement data driven decision making through professional learning communities. In school districts, that means superintendents supporting and encouraging the same across their departments and in their school buildings.

"Schools won't improve until the average building leader begins to work collaboratively with teachers to truly, meaningfully oversee and improve instructional quality."
(Schmoker, Results Now, 2006)

Professional Development
Most educators today have not had significant experience in how to analyze data. However, educators are passionate about identifying strategies that will help students to succeed. In order to help focus that passion, professional development designed to provide experiences in analyzing a variety of timely data is critical. The availability of data is primarily in two categories: statewide and local. Professional development must focus on helping educators understand and identify which data to analyze and when, what questions to ask of the data, and how to collaborate with others to define strategies based on data driven decisions. When educators have done this, and can work collaboratively to analyze the impact of those implemented strategies in order to make necessary adjustments in curriculum and instruction, students will succeed.

Data for Student Success is a collaborative project in Michigan that is focused on providing educators with quality professional development models and access to a data mining tool that is grounded in the essential questions approach used in professional learning communities. The project, lead by Calhoun ISD and in partnership with Michigan Department of Education and the Center for Education Performance and Information, works with Michigan's educational service agencies in a train the trainer approach by empowering them with professional development models and data resources. The agencies will then use these resources to work with their local school districts and help them learn to use collaboration, leadership, professional development and quality data for student success. (For more information on how to get involved, visit www.data4ss.org.)

Quality Data
In order for the teacher and any educator to make data driven decisions, they must have access to quality data. 'Quality' implies that the data has been collected accurately and completely. Answers to essential questions require access to quality data that is readily available in quality data tools. Many educators have turned to data warehousing and mining tools to help answer their essential questions. Through these tools, educators spend significantly less time in gathering data and much more time in analyzing the data in order to focus their instructional strategies. However, quality data and tools alone are not the answer. Collaboration, leadership, professional development and quality data all lead to data driven decisions.

"Data-driven decision making does not simply require good data; it also requires good decisions."
"The New Stupid." Educational Leadership Dec/Jan (2009)

In order to analyze data, quality tools are crucial. Data mining tools provide a starting point for schools to research answers to the essential questions; however, data mining tools alone will not provide the level of specificity that is necessary to fully answer the essential questions. A data warehouse is the most critical tool in data driven decision making. A data mining tool provides analysis of static data that is historical in nature. A data warehouse is a dynamic tool that not only has historical data, but current classroom level assessment data that can be managed by a teacher. When a teacher is able to load formative assessment data into a data warehouse, the teacher can immediately adjust instruction based on data.

"Instead of overloading teachers, let's give them the data they need to conduct powerful, focused analysis and to generate a sustained stream of results for students."
Schmoker, "First Things First: Demystifying Data Analysis" Educational Leadership Feb 2003"

Closing
So what comes first: the decision or the data? The answer is clear that neither can be addressed without collaboration and that collaboration requires leadership and quality professional development based on essential questions. When that happens, the results that come from the decisions will be powerful.

Mike Oswalt
Assistant Superintendent
Regional Technology Services, Calhoun ISD
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