Howard County Public Schools: Strategic Use of Data Review

March 2013

Executive Summary

As a result of developments in law (e.g., No Child Left Behind) and information systems, over the last 15 years most education systems have been inundated with new data on student achievement, student attainment, the district and state workforce, and resource usage. However, the availability of new data arising from accountability, operational, and compliance tasks often has not translated into the use of this new data to support management decisions and planning. If education systems are better able to analyze the data they already have and to use this information appropriately to inform policy and management decisions, student outcomes could be improved.

In July 2012 Dr. Renee Foose, incoming superintendent for the Howard County Public Schools System (HCPSS) in Maryland, engaged the Strategic Data Project (SDP) at the Center for Education Policy Research at Harvard University to evaluate the strategic use of data by HCPSS and gain an understanding of how HCPSS currently uses data at the system level. In this report, we examine the strengths and challenges in data use, highlight critical gaps, and provide suggestions for actions that the organization can take to better leverage data in its strategy and management.

Project Rationale and Methods

Although Howard County is a high-performing, well-financed district with strong community support, HCPSS faces several challenges that will require improved internal use of data and analysis. These include a changing population with potentially new needs; implementation of the Common Core State Standards; the new PARCC assessment in Maryland and the changes in expectations of students that the new assessment and standards imply; and an overall increase in data-dependency across all sectors of the economy.

To assess how data are used in HCPSS, the SDP team conducted interviews with HCPSS staff and leadership, held a focus group with principals to discuss their data use and needs, and reviewed numerous HCPSS documents and systems. The SDP team used a structured framework for the analysis to help identify gaps and provide guidance on what the organization might do to use data and analysis more strategically.

Overview of Strategic Data Use in Howard County

The achievement levels in Howard County Public School System have consistently been among the highest in Maryland, yet many interviewees feel that HCPSS is capable of performing at an even higher level. Below are the highlights of HCPSS's main strengths, promising opportunities and important challenges that can enable Howard County's superintendent, board, and leadership team to set a path to help the district use data more effectively.

Strengths
- There are processes of data use already in place that are working well, and opportunities to replicate or scale some of these across the district. There are committed and talented staff, many of whom have independently developed good practices of data use and performance management, particularly in using data to manage school-level performance.
- The appetite for data and analysis is increasing in the district, and employees are interested in using data more actively and accessing data systems that can provide predictive or diagnostic information.

Opportunities
- Although the district does not have a strategic plan, the Bridge to Excellence (BTE) plan, a 300+ page compliance document, has helped focus district management on specific outcomes. It is a good foundation for a stronger, more comprehensive strategy.
- While the School Improvement Plans (SIPs) serve as a basis for performance management with individual schools, central office departments do not have a similar performance management process in place. Departmental leaders see the value in the SIPs, and are open to developing similar management metrics for their areas.
- The adoption of a strategic plan and improved use of data to support policy recommendations can result in increased trust and more effective collaboration between the HCPSS board and staff.

Challenges
- Howard County has both data system and personnel capacity obstacles that currently hinder its ability to use data more strategically. Current systems are homegrown, siloed and relatively inflexible and are not designed for system-wide, real-time uses for a wide set of users. Further, gaps in staffing for critical functions such as budget, program evaluation and technical systems limit the ability of HCPSS to support the needs of a more data-driven organization
- Howard County's historical success and high overall performance may have created a "culture of complacency" that has kept the district from digging too deeply into rising issues.

Points of Interest and Specific Observations by Rubric Category

The observations and recommendations above were based on specific items identified within four main focus areas of data use: major initiatives and programs; performance management; budgeting; and governance. The following are the points of interest and observations from each area of investigation.

Organizational Strategy, Major Initiatives and Programs
- The main document used to illustrate district strategy is the BTE, which is a compliance document, not a strategic plan. Its guiding principles, however, are not clear enough to establish S.M.A.R.T. goals and outcomes.
- The lack of an agreed-upon vision and strategy limits the ability of district leadership and board members to systematically prioritize and monitor goals and outcomes.
- Data are beginning to be stored centrally and standardized, and access to this data is improving.

- Multiple data systems are used to track central operations, and these data are very often isolated in silos.
- Data from school operations that are important to drive decision-making in the central office, however, are not always accessible in a standard way.
- Data can also be hard to assemble across the silos, and some issues remain with data accuracy and overall use and familiarity with systems.
- Most current programs and initiatives are not explicitly nor clearly connected to an overall strategy or set of expected outcomes, and little to no program evaluation is currently done.

Performance Management
- Tools such as the School Improvement Plans are effectively building a performance management culture for schools, creating a foundation for a data-driven approach to target setting, and driving regular use of data in management by school leaders.
- Central office departments are not held to same performance management standards as schools, and strategic alignment across areas is only beginning to emerge.
- Data systems and internal support structures are not yet adequate for effective strategic data use and performance management. Gaps in data storage, real-time access, and reporting limit current system effectiveness.
- Use of data systems like InRoads is increasing, particularly by central office leadership staff.
- Schools rely less on InRoads data than central office staff, leading to discrepancies and time lags.
- Human resource data and systems are a particular area of challenge, especially for principals.

Budget
- The current budget is compliance-oriented and not easily aligned with district goals.
- Connections between finance and student data are not regularly made.
- Structural issues make it challenging to link funding levels and the allocation of resources.
- Without a built-in process to weigh relative costs and benefits to budget items, the district cannot easily make major strategic adjustments and reallocations in the budgets.
- There are not enough staff members in the budget office to adequately handle the type of analysis work that would be needed to support a more flexible and strategically aligned budget process.

Governance
- Proposals and recommendations made to the board are largely considered independently from each other, resulting in little comparison and prioritizing.
- There is a growing demand for data across the board but not yet an accompanying agreement on what the relevant data is and how to use it. Inconsistent processes to request and obtain data have hampered effective communication and trust building.
- Historically, staff presentations highlight "good news" and favorable information to support staff recommendations.
- Presenting board members with relevant evidence and appropriate alternatives earlier in the process is beginning to build stronger buy-in with decision making. Regular reports to the board have varied in effectiveness, but HCPSS staff are making progress in devising new, effective ways to communicate data to the board on a timely and relevant basis.

Recommended Actions and Goals

Based on the assessment of HCPSS's current data use, the following are key actions and goals for HCPSS leadership to consider to make progress in the district's use of data for management and policy-making. Some of these may be implementable in the near-term, while others may take longer to achieve.

★ Create an actionable strategic plan with clear strategic priorities and measurable process, output, and outcome goals.
★ Build a process for central office performance management
★ Focus on improving the real-time analysis and reporting capacity functions for HSCPSS data, including data dashboards and a central data warehouse.
★ Address staff capacity issues by expanding research and evaluation functions, increasing the number of staff on the budget team and building a team with high-level technical and system skills.
★ Strengthen the accountability systems built into the performance management processes.
★ Restructure budgeting process to encourage critical thinking about resource allocation decisions.

Conclusion

Howard County Public School System is a top-performing district, and it has clear reasons to take pride in its accomplishments. At the same time, there is an opportunity to consider the ways in which it could do better and to perform with higher levels of quality and effectiveness, particularly in how it uses and consumes data to drive decision making.

As one staff member stated, "In the past, we didn't really focus on data. We are a high-achieving school system, so it wasn't considered particularly important. With the increasing scrutiny and higher standards in place, . . . this is a great time to bring about the level of data consciousness that is needed now."

By following the recommendations above and considering how the organization can use data more strategically, Howard County has the opportunity and, most importantly, the ability to build upon its successes to deliver value to all of its students.